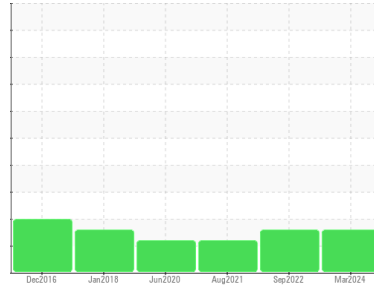




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SK 19 2029192 (S/N 1515)

Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

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		KCP49106	KCP41314	KCP35635
Sample Date	Client Info		18 Mar 2024	07 Sep 2022	09 Aug 2021
Machine Age	hrs	Client Info	25096	23094	22051
Oil Age	hrs	Client Info	1832	1043	1683
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	16
Barium	ppm	ASTM D5185m 90	4	7	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 100	67	65	50
Calcium	ppm	ASTM D5185m 0	2	<1	0
Phosphorus	ppm	ASTM D5185m 0	0	2	0
Zinc	ppm	ASTM D5185m 0	5	4	2
Sulfur	ppm	ASTM D5185m 23500	23207	18023	19380

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	<1	0
Sodium	ppm	ASTM D5185m	23	22	16
Potassium	ppm	ASTM D5185m >20	4	0	<1
Water	%	ASTM D6304 >0.05	0.010	0.015	0.020
ppm Water	ppm	ASTM D6304 >500	108	150.3	206.6

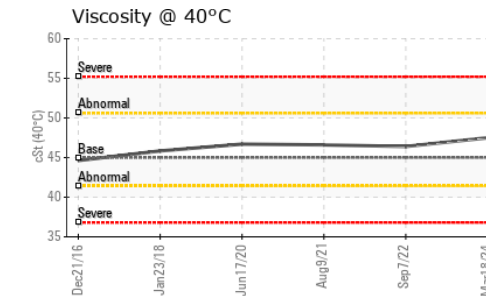
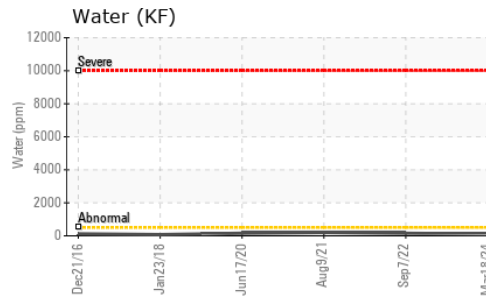
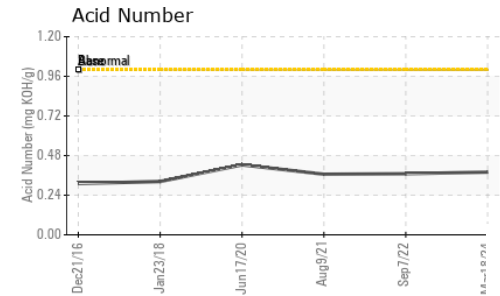
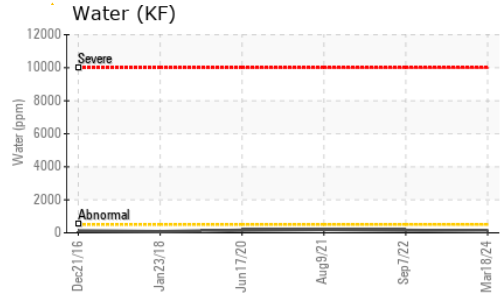
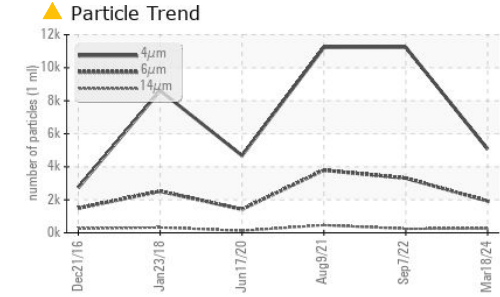
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		5065	11235	11227
Particles >6µm	ASTM D7647	>1300	1921	3311	3794
Particles >14µm	ASTM D7647	>80	259	243	465
Particles >21µm	ASTM D7647	>20	67	45	108
Particles >38µm	ASTM D7647	>4	2	1	2
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	20/18/15	21/19/15	19/16

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.38	0.37	0.367

OIL ANALYSIS REPORT

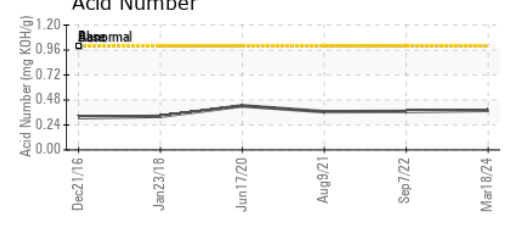
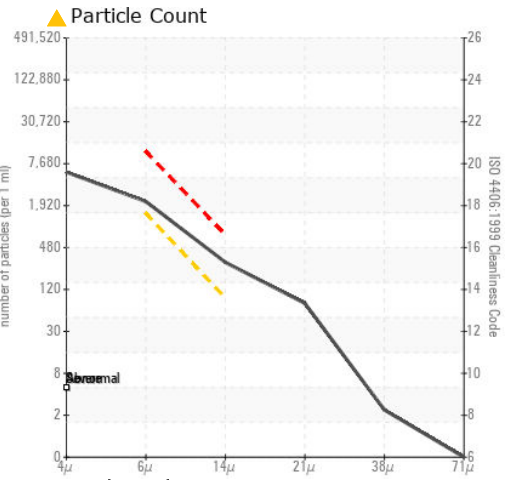


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.5	46.4	46.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP49106 **Received** : 28 Mar 2024
Lab Number : 06132012 **Tested** : 29 Mar 2024
Unique Number : 10951477 **Diagnosed** : 02 Apr 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

SAI DENVER B INC
 2201 S WABASH ST
 DENVER, CO
 US 80231
 Contact: SERVICE MANAGER

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)