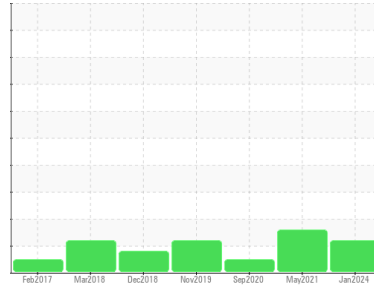




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SX 6 2516426 (S/N 1520)

Component
Compressor

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The 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 moderate 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			KCPA003394	KCP35617	KCP29744
Sample Date	Client Info			18 Jan 2024	24 May 2021	28 Sep 2020
Machine Age	hrs	Client Info		41300	36341	34931
Oil Age	hrs	Client Info		0	1410	3000
Oil Changed	Client Info			N/A	Changed	Not Changed
Sample Status				ATTENTION	ABNORMAL	NORMAL

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

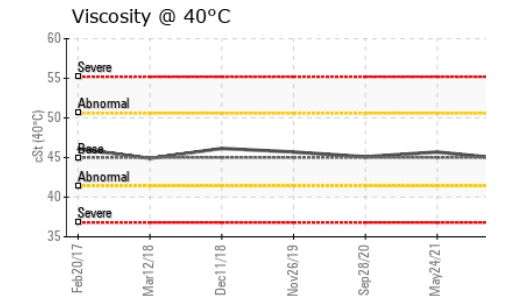
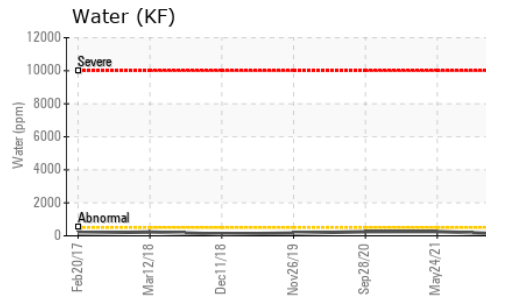
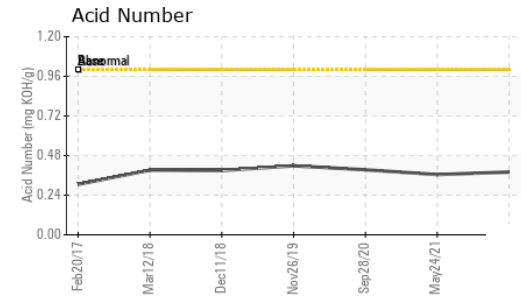
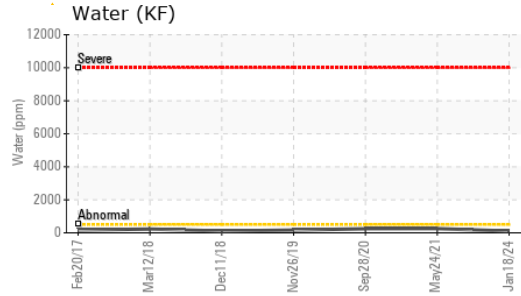
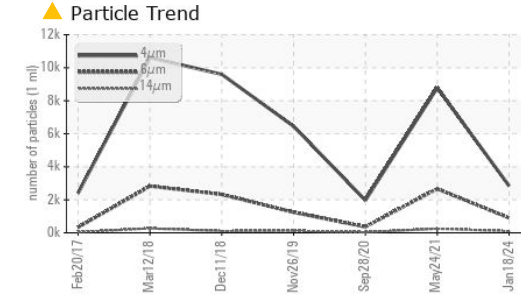
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	13	1
Barium	ppm	ASTM D5185m	90	0	0	2
Molybdenum	ppm	ASTM D5185m	0	<1	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	100	31	47	56
Calcium	ppm	ASTM D5185m	0	<1	1	6
Phosphorus	ppm	ASTM D5185m	0	0	5	6
Zinc	ppm	ASTM D5185m	0	7	16	9
Sulfur	ppm	ASTM D5185m	23500	21329	17617	17601

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	<1	<1
Sodium	ppm	ASTM D5185m		3	10	11
Potassium	ppm	ASTM D5185m	>20	3	<1	2
Water	%	ASTM D6304	>0.05	0.010	0.025	0.024
ppm Water	ppm	ASTM D6304	>500	107	254.8	248.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		2843	8786	1967
Particles >6µm		ASTM D7647	>1300	901	▲ 2665	365
Particles >14µm		ASTM D7647	>80	▲ 94	▲ 248	32
Particles >21µm		ASTM D7647	>20	▲ 25	▲ 80	9
Particles >38µm		ASTM D7647	>4	1	▲ 6	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 19/17/14	▲ 19/15	16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.38	0.365	0.394

OIL ANALYSIS REPORT

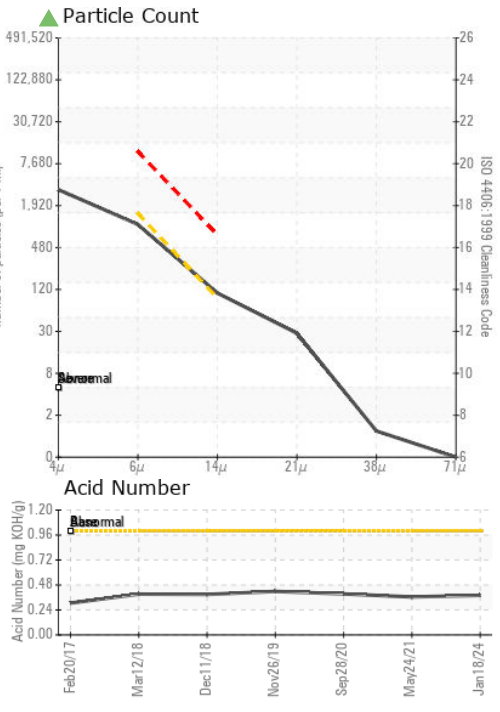
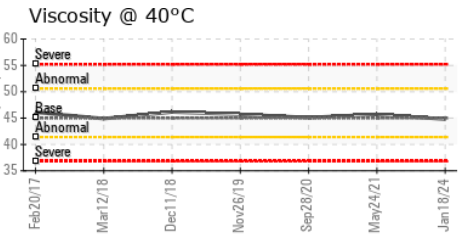
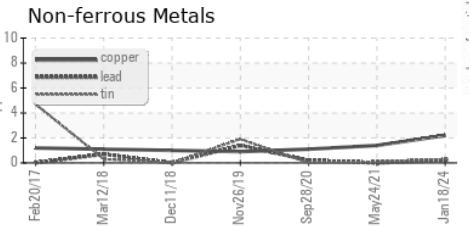
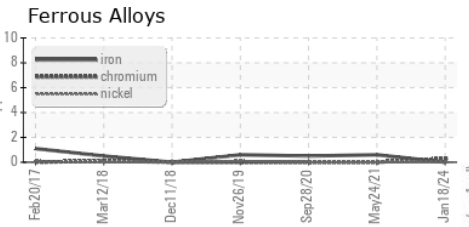


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.8	45.7	45.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA003394 **Received** : 30 Jan 2024
Lab Number : 06074749 **Diagnosed** : 31 Jan 2024
Unique Number : 10856840 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

OLD DOMINION FREIGHT LINE
 2225 BERGDOLT RD
 EVANSVILLE, IN
 US 47711
 Contact: MIKE GILBERT
 mike.gilbert@odfl.com
 T:
 F:

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)