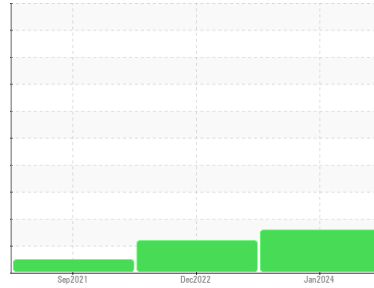




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
5547597 (S/N 1962)
 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 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		KCPA010237	KCP52766	KCP37960
Sample Date	Client Info		23 Jan 2024	19 Dec 2022	07 Sep 2021
Machine Age	hrs	Client Info	23670	20378	16584
Oil Age	hrs	Client Info	0	0	900
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			ABNORMAL	ATTENTION	NORMAL

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	0	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	0	0	0
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	5	5	3
Tin	ppm	ASTM D5185m >10	<1	0	<1
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	0
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 100	4	12	11
Calcium	ppm	ASTM D5185m 0	0	0	0
Phosphorus	ppm	ASTM D5185m 0	0	2	24
Zinc	ppm	ASTM D5185m 0	<1	18	2
Sulfur	ppm	ASTM D5185m 23500	18646	21750	19410

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	9	8	2
Sodium	ppm	ASTM D5185m	2	2	2
Potassium	ppm	ASTM D5185m >20	<1	0	<1
Water	%	ASTM D6304 >0.05	0.010	0.012	0.010
ppm Water	ppm	ASTM D6304 >500	110	124.9	101.4

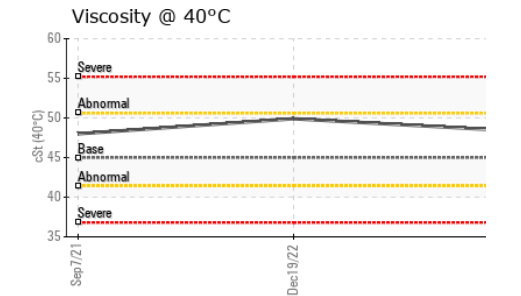
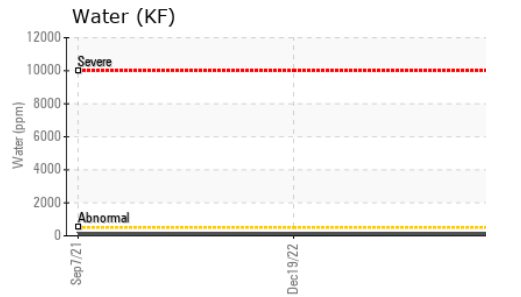
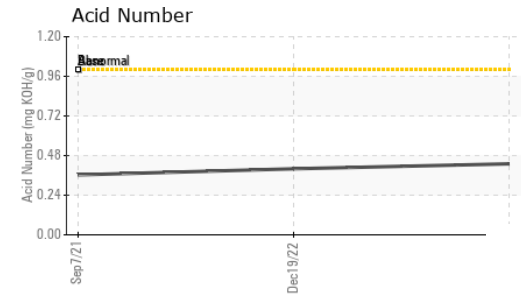
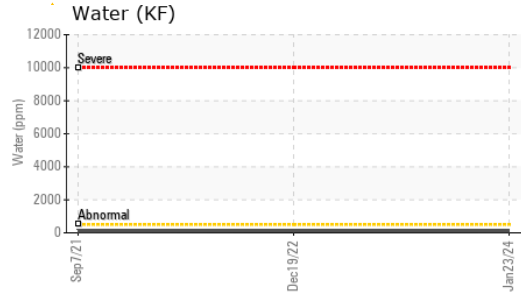
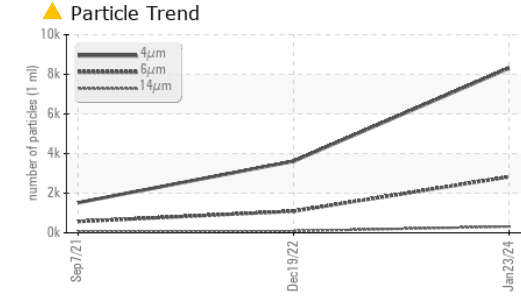
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		8309	3614	1521
Particles >6µm	ASTM D7647 >1300		▲ 2825	1089	568
Particles >14µm	ASTM D7647 >80		▲ 317	▲ 87	68
Particles >21µm	ASTM D7647 >20		▲ 79	▲ 23	11
Particles >38µm	ASTM D7647 >4		1	2	0
Particles >71µm	ASTM D7647 >3		0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		▲ 20/19/15	▲ 19/17/14	16/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.43	0.40	0.363

OIL ANALYSIS REPORT



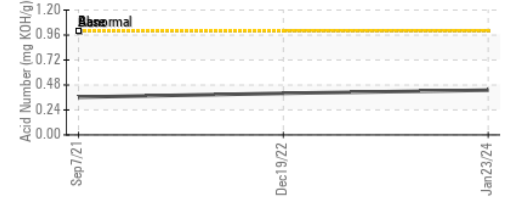
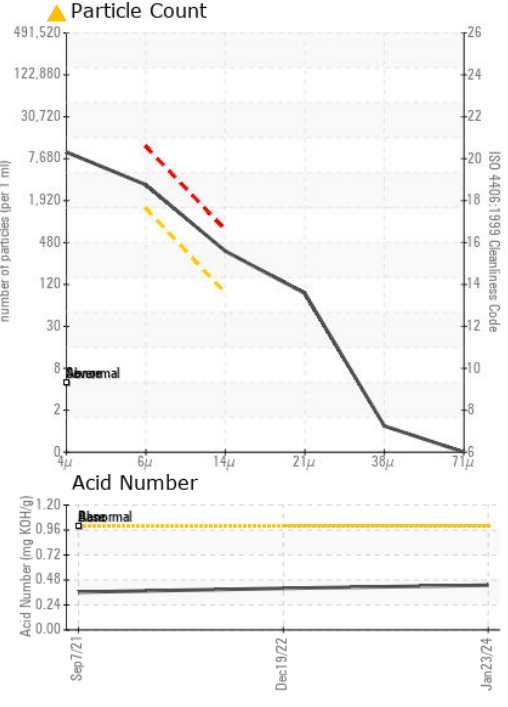
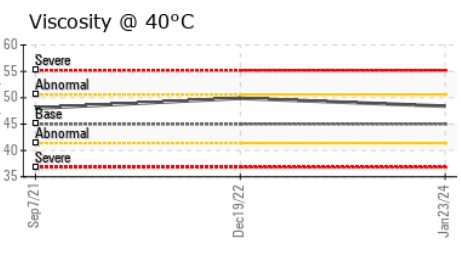
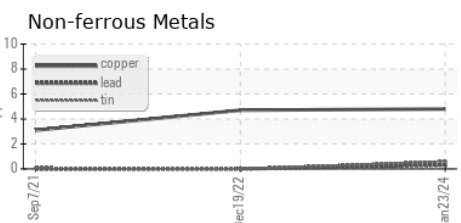
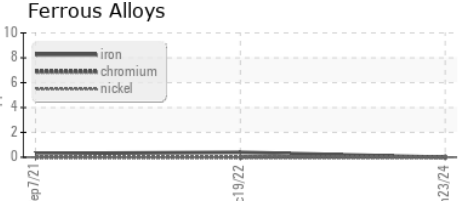
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	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	48.4	49.9	48.0

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				
Bottom				

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA010237 **Received** : 01 Feb 2024
Lab Number : 06076854 **Diagnosed** : 02 Feb 2024
Unique Number : 10858945 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

ELLIS AND ELLIS SIGN SYSTEMS - ILLUMINATED CREATIONS
 1111 JOELLIS WAY
 SACRAMENTO, CA
 US 95815
 Contact: K. NEW
 knew@ellissigns.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)