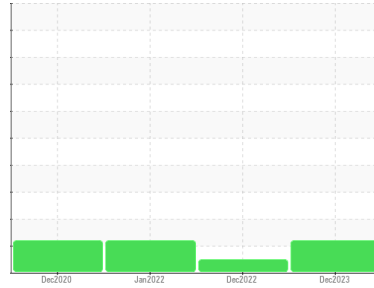




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
6081148 (S/N 1029)
 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	KCPA010192	KCP49372	KCP43403
Sample Date	Client Info	18 Dec 2023	07 Dec 2022	07 Jan 2022
Machine Age	hrs	7345	5711	4198
Oil Age	hrs	0	1538	1651
Oil Changed	Client Info	N/A	Changed	Changed
Sample Status		ATTENTION	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	0	0	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	0	0	<1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	3	<1	<1
Tin	ppm	ASTM D5185m >10	0	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	23
Barium	ppm	ASTM D5185m 90	19	23	38
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 100	24	79	82
Calcium	ppm	ASTM D5185m 0	0	<1	3
Phosphorus	ppm	ASTM D5185m 0	4	5	3
Zinc	ppm	ASTM D5185m 0	0	4	8
Sulfur	ppm	ASTM D5185m 23500	18308	18926	17646

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	0	0	<1
Sodium	ppm	ASTM D5185m	<1	12	15
Potassium	ppm	ASTM D5185m >20	<1	7	9
Water	%	ASTM D6304 >0.05	0.014	0.007	0.007
ppm Water	ppm	ASTM D6304 >500	142	77.2	78.4

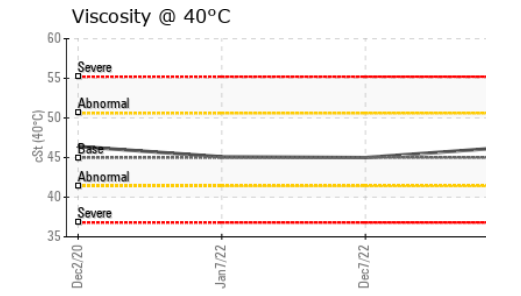
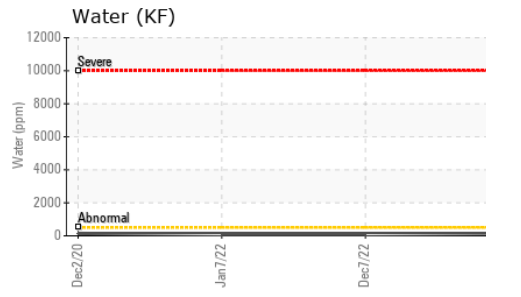
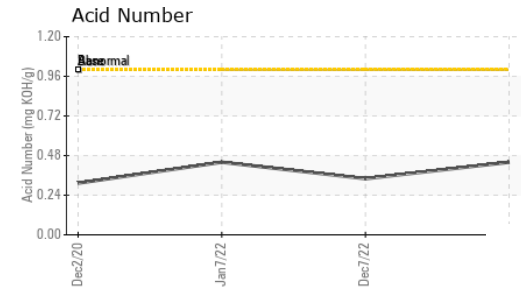
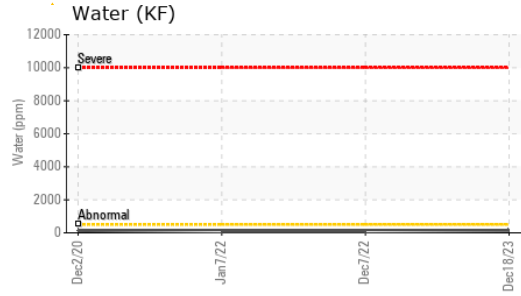
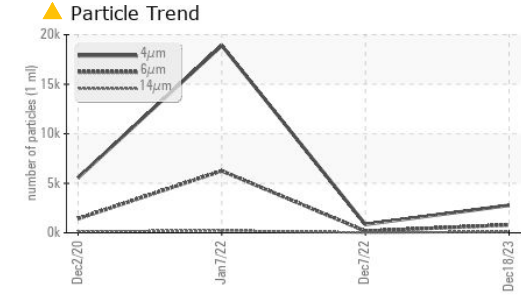
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	2778	843	18904
Particles >6µm	ASTM D7647 >1300	799	173	▲ 6254
Particles >14µm	ASTM D7647 >80	▲ 86	21	▲ 226
Particles >21µm	ASTM D7647 >20	▲ 27	11	▲ 35
Particles >38µm	ASTM D7647 >4	0	2	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 19/17/14	17/15/12	▲ 20/15

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.44	0.34	0.44

OIL ANALYSIS REPORT

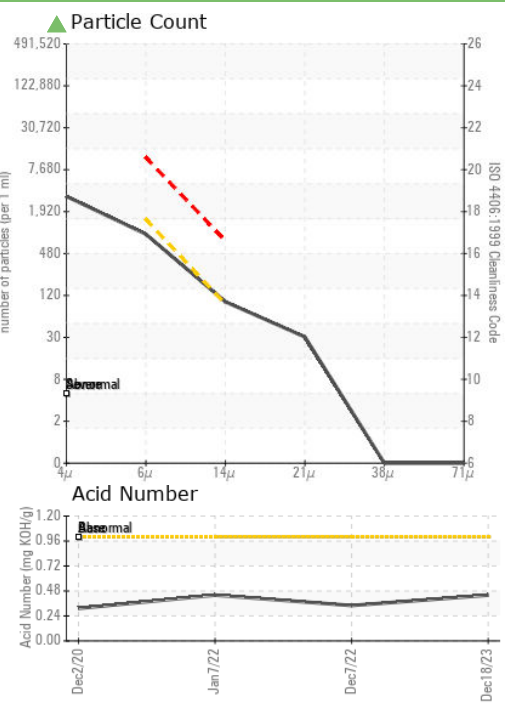
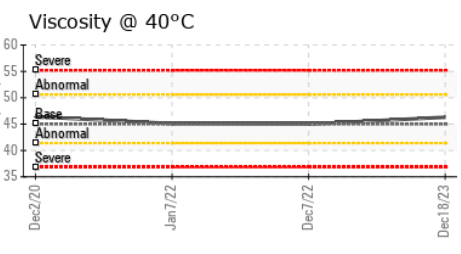
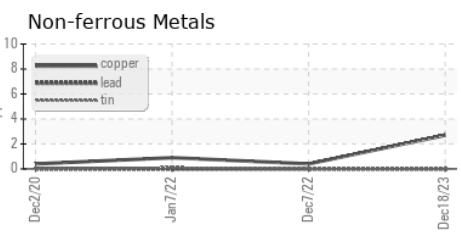
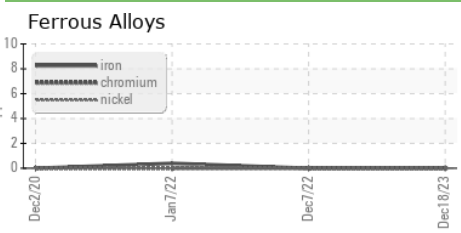


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46.3	45.0	45.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA010192 **Received** : 10 Jan 2024
Lab Number : 06056714 **Diagnosed** : 11 Jan 2024
Unique Number : 10822663 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

RUPES USA INC
 531 S TAYLOR AVE
 LOUISVILLE, CO
 US 80027
 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)

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