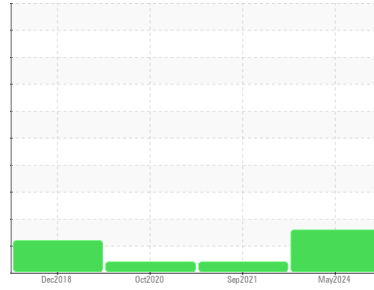




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
5915429 (S/N 3596)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-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 light concentration of water 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			KCPA016772	KCP37658	KCP30495
Sample Date	Client Info			08 May 2024	01 Sep 2021	07 Oct 2020
Machine Age	hrs	Client Info		31720	19847	13061
Oil Age	hrs	Client Info		0	6780	0
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	1	8	1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	<1	2	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>10	2	1	0
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>50	11	12	20
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Antimony	ppm	ASTM D5185m		---	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	18	<1
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m		<1	1	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	90	3	5	<1
Calcium	ppm	ASTM D5185m	2	4	<1	0
Phosphorus	ppm	ASTM D5185m		29	<1	2
Zinc	ppm	ASTM D5185m		28	78	0
Sulfur	ppm	ASTM D5185m		19975	20404	15144

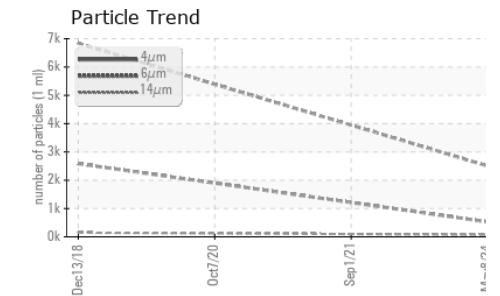
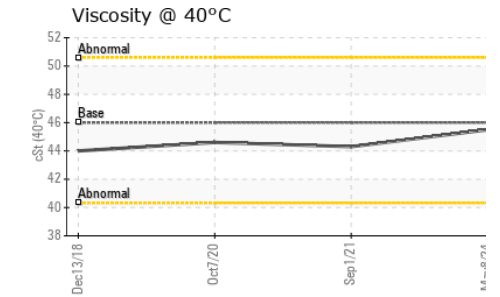
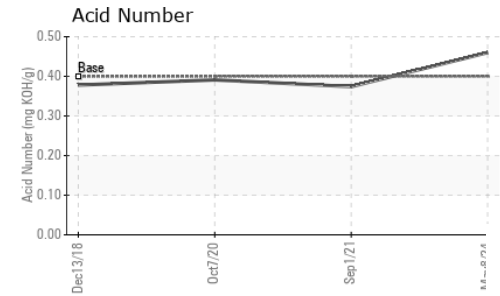
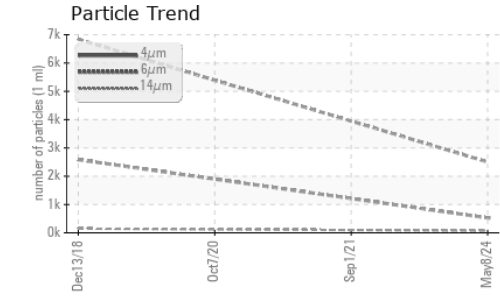
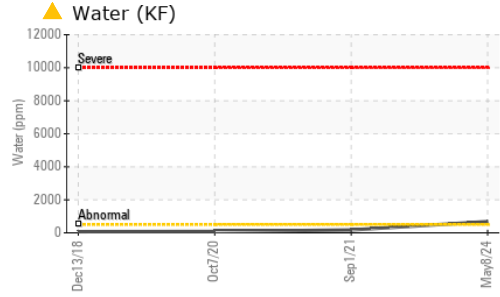
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	<1
Sodium	ppm	ASTM D5185m		0	3	0
Potassium	ppm	ASTM D5185m	>20	2	8	1
Water	%	ASTM D6304	>0.05	▲ 0.068	0.017	0.008
ppm Water	ppm	ASTM D6304	>500	▲ 681	172.7	81.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		2502	---	---
Particles >6µm		ASTM D7647	>1300	527	---	---
Particles >14µm		ASTM D7647	>80	73	---	---
Particles >21µm		ASTM D7647	>20	33	---	---
Particles >38µm		ASTM D7647	>4	4	---	---
Particles >71µm		ASTM D7647	>3	1	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	19/16/13	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
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Acid Number (AN) mg KOH/g ASTM D8045 0.4 **0.46** 0.374 0.391

OIL ANALYSIS REPORT

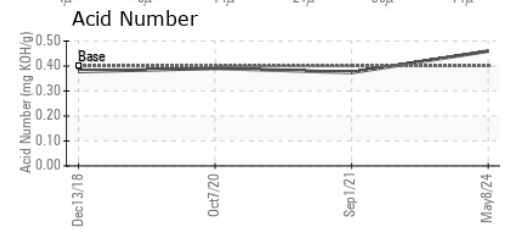
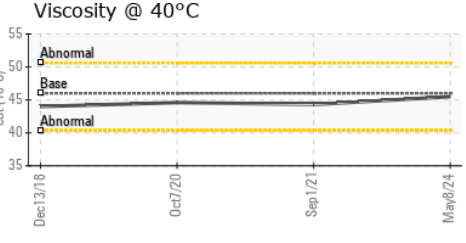
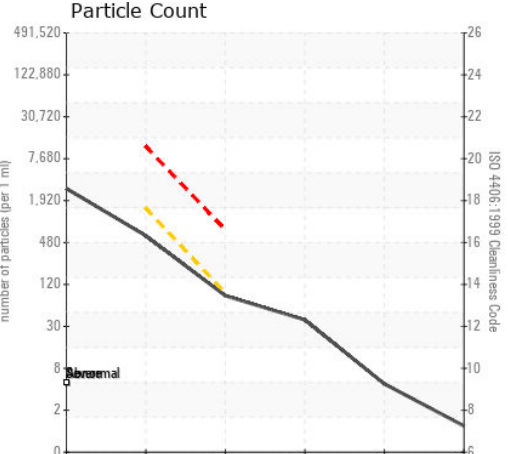
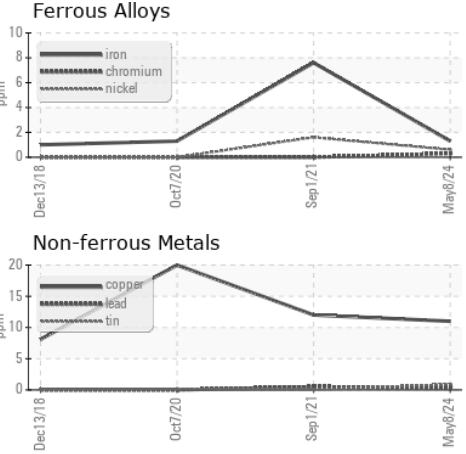


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	45.5	44.3	44.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016772 **Received** : 17 May 2024
Lab Number : 06183348 **Tested** : 21 May 2024
Unique Number : 11034674 **Diagnosed** : 21 May 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

OPEX CORP
 825 HYLTON RD
 PENNSAUKEN, NJ
 US 08110
 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)