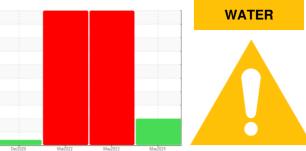


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KAESER SX 5 5884628 (S/N 1630)

Compressor

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

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

All component wear rates are normal.

Contamination

There is a light concentration of water present in the oil. High concentration of visible dirt/debris 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 INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA012941	KCP53886	KCP44161
Sample Date		Client Info		30 May 2024	02 May 2023	08 Mar 2022
Machine Age	hrs	Client Info		3586	2719	2088
Oil Age	hrs	Client Info		4000	3000	470
Oil Changed		Client Info		Not Changd	Changed	Changed
Sample Status				ABNORMAL	SEVERE	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	290	▲ 742
Chromium	ppm	ASTM D5185m	>10	<1	2	<1
Nickel	ppm	ASTM D5185m	>3	0	<1	2
Titanium	ppm	ASTM D5185m	>3	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	2	<1	1
Lead	ppm	ASTM D5185m	>10	<1	0	1
Copper	ppm	ASTM D5185m	>50	5	10	11
Tin	ppm	ASTM D5185m	>10	<1	0	4
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	39
	ppm		0 90	0	0	39 0
Boron		ASTM D5185m	-			
Boron Barium	ppm	ASTM D5185m ASTM D5185m	90	0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	90	0 <1	0	0 <1
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90	0 <1 0	0 0 <1	0 <1 3
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 0 100	0 <1 0 28	0 0 0 <1 0	0 <1 3 0 2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 0 100 0	0 <1 0 28	0 0 <1 0	0 <1 3 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 0 100 0 0	0 <1 0 28 0	0 0 <1 0 1 4	0 <1 3 0 2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 0 100 0 0	0 <1 0 28 0 1	0 0 <1 0 1 4 26	0 <1 3 0 2 8 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 0 100 0 0 0 23500	0 <1 0 28 0 1 12 18811	0 0 <1 0 1 4 26 20847	0 <1 3 0 2 8 5 5231
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 0 100 0 0 0 23500 limit/base	0 <1 0 28 0 1 12 18811 current	0 0 0 <1 0 1 4 26 20847 history1	0 <1 3 0 2 8 5 5231 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	90 0 100 0 0 0 23500 limit/base	0 <1 0 28 0 1 12 18811 current <1	0 0 0 <1 0 1 4 26 20847 history1	0 <1 3 0 2 8 5 5231 history2 22
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	90 0 100 0 0 0 23500 limit/base >25	0 <1 0 28 0 1 12 18811 current <1 8	0 0 0 <1 0 1 4 26 20847 history1 16 <1	0 <1 3 0 2 8 5 5231 history2 22 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	90 0 0 100 0 0 0 23500 limit/base >25	0 <1 0 28 0 1 12 18811 current <1 8 2	0 0 0 <1 0 1 4 26 20847 history1 16 <1	0 <1 3 0 2 8 5 5231 history2 22 3 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	90 0 0 100 0 0 23500 limit/base >25 >20 >0.05	0 <1 0 28 0 1 12 18811 current <1 8 2 ▲ 0.166	0 0 0 <1 0 1 4 26 20847 history1 16 <1 0	0 <1 3 0 2 8 5 5231 history2 22 3 4

0.32

Acid Number (AN) mg KOH/g ASTM D8045 1.0

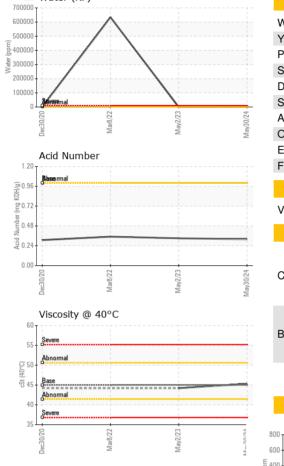
0.33

0.35



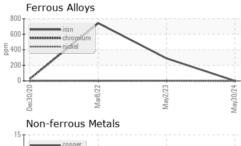
Water (KF)

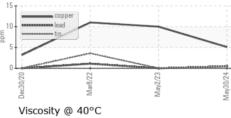
OIL ANALYSIS REPORT

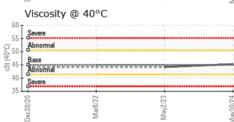


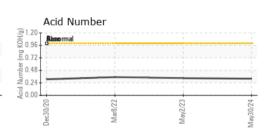
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ MODER	▲ MODER
Debris	scalar	*Visual	NONE	▲ HEAVY	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	HAZY	MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	△ 0.2%	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ >10%	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
FLUID PROPERT Visc @ 40°C	IES cSt	method ASTM D445	limit/base	current 45.3	history1 44.2	history2
	cSt					history2 history2
Visc @ 40°C	cSt	ASTM D445	45	45.3	44.2	

GRAPHS













Certificate 12367

Laboratory

Sample No. Lab Number : 06209237

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : KCPA012941

Unique Number : 11076698

Received **Tested** Diagnosed

: 13 Jun 2024 : 19 Jun 2024

Test Package : IND 2 (Additional Tests: KF, PrtCount)

: 19 Jun 2024 - Jonathan Hester

AMERICAN HONDA 1500 MORRISON PKWY ALPHARETTA, GA US 30009 Contact: MIKE POWELL

mike_powell@ahm.honda.com

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)

Report Id: AMEALPGA [WUSCAR] 06209237 (Generated: 06/22/2024 05:59:59) Rev: 1

Contact/Location: MIKE POWELL - AMEALPGA

T:

F: