

Sample Rating Trend

VIS DEBRIS



KAESER 5249621

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate 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 acceptable for the time in service.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA012641		
Sample Date		Client Info		10 May 2024		
Machine Age	hrs	Client Info		40872		
Oil Age	hrs	Client Info		3457		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>3	<1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>10	2		
Lead	ppm	ASTM D5185m	>10	<1		
Copper	ppm	ASTM D5185m	>50	8		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm		limit/base 90			
Boron		ASTM D5185m		0		
Boron Barium	ppm	ASTM D5185m ASTM D5185m		0 <1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 <1		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90	0 <1 <1 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 <1 <1 0 2		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 <1 <1 0 2 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	90 90	0 <1 <1 0 2 0 10	 	
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	90 90	0 <1 <1 0 2 0 10 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	90 90 2	0 <1 <1 2 0 10 5 10884		
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	90 90 2 limit/base	0 <1 <1 0 2 0 10 5 10884 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	90 90 2 limit/base	0 <1 <1 0 2 0 10 5 10884 current 1	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm 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 90 2 limit/base >25	0 <1 <1 0 2 0 10 5 10884 <u>current</u> 1 <1		 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	90 90 2 limit/base >25 >20	0 <1 <1 0 2 0 10 5 10884 <u>current</u> 1 <1 2	 history1	 history2
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 ASTM D5185m	90 2 2 limit/base >25 >20 >20 >0.05	0 <1 <1 0 2 0 10 5 10884 current 1 <1 2 0.012	history1	history2



12000

12000

10000.

8000 Water (ppm) 6000 4000

2000

50 48 cSt (40°C)

OIL ANALYSIS REPORT

	Water (KF)	VISUAL		method	limit/base	e current
2000 0000 -	Severe	White Metal	scalar	*Visual	NONE	NONE
8000-		Yellow Metal	scalar	*Visual	NONE	NONE
6000-		Precipitate	scalar	*Visual	NONE	NONE
4000-		Silt	scalar	*Visual	NONE	NONE
2000-		Debris	scalar	*Visual	NONE	
0000	Abnormal	Sand/Dirt	scalar	*Visual	NONE	NONE
	May10/24	Appearance	scalar	*Visual	NORML	NORML
	May'	Odor	scalar	*Visual	NORML	NORML
	Water (KF)	Emulsified Water	scalar	*Visual	>0.05	NEG
²⁰⁰⁰ T		Free Water	scalar	*Visual		NEG
0000-	Severe	FLUID PROPERT	IES	method	limit/base	e current
8000 - 6000 -		Visc @ 40°C	cSt	ASTM D445	46	46.4
4000-		SAMPLE IMAGES	6	method	limit/base	e current
	Abnormal 10201/veW	Color				a.
52 50 48	Viscosity @ 40°C Abnormal Base	Bottom				
(n. 46 - (1. 46 - 15 44 -		GRAPHS				
42	Abnomal	Ferrous Alloys				
40	Abnormal	8 - iron				
381	1/24 -	E 6+				
	Mayl 0/24					
		2				
		0/24			124	
		May10			May10/24	
		– Non-ferrous Metal	s		_	
		10 copper				
		0 - execution lead				
		2				
		0		****	5	
		May10/24			May10/24	
		≥ Viscosity @ 40°C			×	
		⁵⁵			-0	Acid Number
		50 - Abnormal			KOH	.40 Base
		(2) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Acid Number (mg KOH/g)	.30
		Abnormal			tumbe	.20
		35			Acid P	.10
						1.00
		May10/24			May10/24	May10/24
		: WearCheck USA - 50 : KCPA012641	1 Madiso Recei	i ved : 30	, NC 27513 May 2024	

GE FIRST LAUNDRY - TRI VOLTAGE US 3040 QUEBEC ST DALLAS, TX US 75247 : 31 May 2024 - Angela Borella Contact: Service Manager

Test Package : IND 2 (Additional Tests: KF, PrtCount) Certificate 12367 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.

Lab Number : 06195432

Unique Number : 11057555

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Tested

Diagnosed

: 31 May 2024

Report Id: IMADAL [WUSCAR] 06195432 (Generated: 05/31/2024 20:18:57) Rev: 1

Contact/Location: Service Manager - IMADAL

T:

F:

May10/24

history2

history2

history2

no image

no image

history1

history1

history1

no image

no image