

OIL ANALYSIS REPORT



Machine Id 9038525 (S/N 1335) Component

Compressor Fluid KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

A 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. 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 suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA015231		
Sample Date		Client Info		16 Feb 2024		
Machine Age	hrs	Client Info		3361		
Oil Age	hrs	Client Info		3361		
Oil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>3	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>10	1		
Lead	ppm	ASTM D5185m	>10	<1		
Copper	ppm	ASTM D5185m	>50	26		
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 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 0 0 <1 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 0 <1 2 <1	 	
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 90	0 0 <1 2 <1 5	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 0 <1 2 <1 5 14	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm 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 0 <1 2 <1 5 14 17559		
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 0 2 3 3 4 5 14 17559 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	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 0 2 3 4 1 5 5 14 17559 current 3	 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 method ASTM D5185m	90 90 2 limit/base >25	0 0 2 <1 2 <1 5 14 17559 current 3 <1	 history1	 history2
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 ASTM D5185m	90 90 2 limit/base >25 >20	0 0 2 <1 2 <1 5 14 17559 current 3 <1 <1	 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 0 2 <1 2 <1 5 14 17559 current 3 <1 <1 <1 0.004	history1	 history2



12000

10000

8000 Water (ppm)

6000

4000

2000

12000

10000

8000

6000 Water 4000

> 2000 0

> > 52.

01

OIL ANALYSIS REPORT

mit/base

current

NONE

NONE

NONE

NONE

MODER

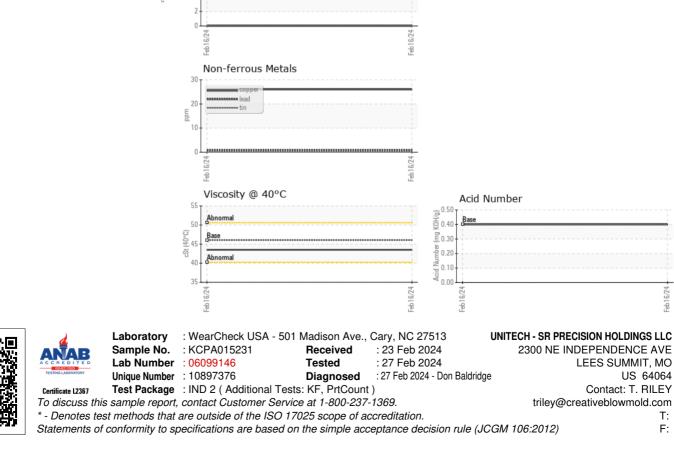
NONE

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Water (KF)		VISUAL		method	limit/ba
Severe		White Metal	scalar	*Visual	NONE
		Yellow Metal	scalar	*Visual	NONE
		Precipitate	scalar	*Visual	NONE
		Silt	scalar	*Visual	NONE
		Debris	scalar	*Visual	NONE
Abnormal	_	Sand/Dirt	scalar	*Visual	NONE
Feb 16/24 -		Appearance	scalar	*Visual	NORM
Feb 1		Odor	scalar	*Visual	NORM
		Emulsified Water	scalar	*Visual	>0.05
Water (KF)		Free Water	scalar	*Visual	
Severe					
		FLUID PROPERT	IES	method	limit/ba
		Visc @ 40°C	cSt	ASTM D445	46
		SAMPLE IMAGES	S	method	limit/ba
Abnormal					
	-	Color			
Feb16/24					
Viscosity @ 40°C					
Abnormal		Bottom			
G		DOLLOITI			
Base					
		GRAPHS			
Abnormal		Ferrous Alloys			
		8- iron			
- 12	E	contraction and the second sec			
Feb 16/24	bpm	4			
		2-			
		0			4
		Feb 16/24			Feb 16/24
		—			a.
		Non-ferrous Metal	S		
		copper			_
		20 - tin			
	bpm	10			
		Feb16/24			Feb 16/24
		≞ Viscosity @ 40°C			ů.
		55 T			1
		50 - Abnormal			
	cSt (40°C)	45 Base			
		40 - Abnormal			
		10			

ORML NORML DRML NORML NEG NEG nit/base current history history2 43.5 mit/base history1 history2 current no image no image no image no image

history1

history2



6/24

-8

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