

### **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# 8011824 (S/N 1181)

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

#### DIAGNOSIS

#### Recommendation

Oil and 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 recommend an early resample in 500 hours to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

Moderate concentration of visible dirt/debris present in the oil. 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 acceptable for the time in service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA019170	KCPA001347	
Sample Date		Client Info		13 Jun 2024	21 Mar 2023	
Machine Age	hrs	Client Info		5586	2557	
Oil Age	hrs	Client Info		5586	0	
Oil Changed		Client Info		Changed	N/A	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m	>3	<1	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	0	1	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>50	9	7	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		<1	0	
Magnesium	ppm	ASTM D5185m	90	0	<1	
Calcium	ppm	ASTM D5185m	2	0	0	
Phosphorus	ppm	ASTM D5185m		<1	8	
Zinc	ppm	ASTM D5185m		1	8	
Sulfur	ppm	ASTM D5185m		19341	17886	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	
Sodium	ppm	ASTM D5185m		-	<1	
				2	< 1	
Potassium	ppm	ASTM D5185m	>20	2	0	
Potassium Water	ppm %	ASTM D5185m ASTM D6304				
			>0.05	0	0	
Water	% ppm	ASTM D6304	>0.05	0 <b>0</b>	0 0.006	
Water ppm Water	% ppm	ASTM D6304 ASTM D6304	>0.05 >500	0	0 0.006 61.1	
Water ppm Water FLUID CLEANLIN	% ppm	ASTM D6304 ASTM D6304 method	>0.05 >500 limit/base	0 ▲ 0.096 ▲ 960 current	0 0.006 61.1 history1	
Water ppm Water FLUID CLEANLIN Particles >4µm	% ppm	ASTM D6304 ASTM D6304 method ASTM D7647	>0.05 >500 limit/base	0 ▲ 0.096 ▲ 960 current	0 0.006 61.1 history1 27418	
Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	% ppm	ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647	>0.05 >500 limit/base >1300 >80	0 ▲ 0.096 ▲ 960 current 	0 0.006 61.1 <u>history1</u> 27418 ▲ 8416	
Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	% ppm	ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	>0.05 >500 limit/base >1300 >80	0 ▲ 0.096 ▲ 960 current  	0 0.006 61.1 27418 ▲ 8416 ▲ 496	  history2  
Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	% ppm	ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	>0.05 >500 limit/base >1300 >80 >20 >4	0 ▲ 0.096 ▲ 960 <u>current</u>  	0 0.006 61.1 27418 ▲ 8416 ▲ 496 ▲ 94	  history2   
Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	% ppm	ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>0.05 >500 limit/base >1300 >80 >20 >4	0 ▲ 0.096 ▲ 960 Current    	0 0.006 61.1 27418 ▲ 8416 ▲ 496 ▲ 94 1	 history2    
Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	% ppm ESS	ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>0.05 >500 limit/base >1300 >80 >20 >4 >3	0 ▲ 0.096 ▲ 960 Current       	0 0.006 61.1 27418 ▲ 8416 ▲ 496 ▲ 94 1 0	 history2     

Contact/Location: JAMES ROBERTS - ALACAL Page 1 of 2



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10000

8000

6000 Water

4000

2000

0.50

(B)0.40 Hoy

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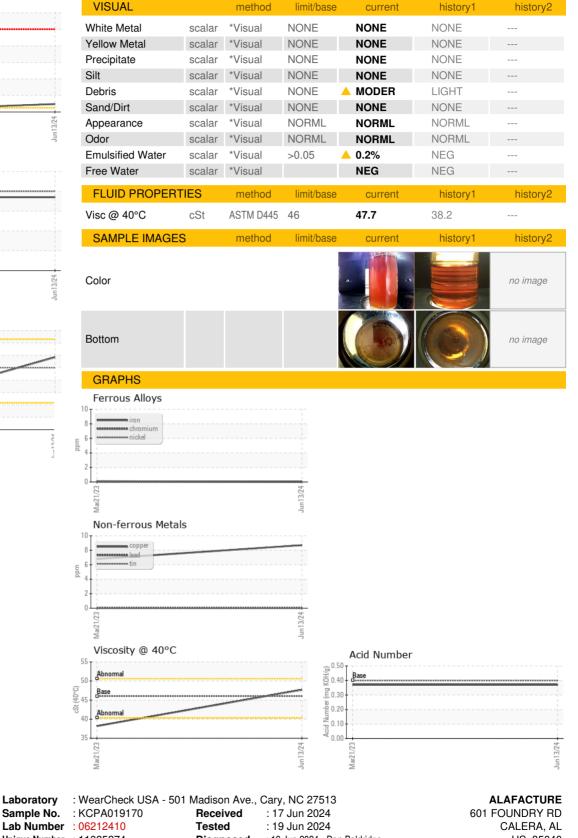
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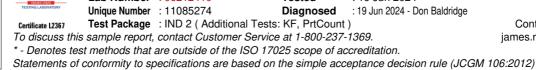
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## **OIL ANALYSIS REPORT**

Water (KF)	VISUAL		
Severe	White Metal	scalar	*
	Yellow Metal	scalar	*
	Precipitate	scalar	*
	Silt	scalar	*
	Debris	scalar	*
Abnormal	Sand/Dirt	scalar	*
Mar21/23 Jun 13/24	Appearance	scalar	*
Mar2 Jun1	Odor	scalar	*
Acid Number	Emulsified Water	scalar	*
	Free Water	scalar	*
Base	FLUID PROPER	TIES	
	Visc @ 40°C	cSt	ŀ
	SAMPLE IMAGE	S	
Mar21/23 +	Color		
Viscosity @ 40°C Abnormal	Bottom		
Base	GRAPHS		
Abnormal	Ferrous Alloys		
Mar 21/23	and a constraint of the second		
	Non-ferrous Meta	ıls	





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50 (40°C)

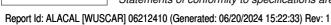
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Laboratory

Sample No.

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