

# **OIL ANALYSIS REPORT**

# Sample Rating Trend





Compressor

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

# **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

		May2018	Jan2019	May2019 Jun2020	Jul2021	
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		KC90016	KC84356	KC74859
Sample Date		Client Info		06 Jul 2021	23 Jun 2020	29 May 2019
Machine Age	hrs	Client Info		7256	5374	3469
Oil Age	hrs	Client Info		1882	1905	847
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	1	1
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	1	2
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m		3	3	7
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m	210	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium		ASTM D5185m		0	0	0
	ppm		line it //e e e e			
ADDITIVES		method	limit/base		history1	history2
Boron	ppm	ASTM D5185m	00	16	<1	0
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	90	34	25	18
Calcium	ppm	ASTM D5185m	2	0	0	0
Phosphorus	ppm	ASTM D5185m		5	8	0
Zinc	ppm	ASTM D5185m		14	18	27
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	6	4
Sodium	ppm	ASTM D5185m		14	14	5
Potassium	ppm	ASTM D5185m	>20	5	6	5
Water	%	ASTM D6304	>0.05	0.021	0.017	0.015
ppm Water	ppm	ASTM D6304	>500	214.4	177.7	150
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		567	166	367
Particles >6µm		ASTM D7647	>1300	112	26	113
Particles >14µm		ASTM D7647	>80	9	4	10
Particles >21µm		ASTM D7647	>20	3	1	4
Particles >38µm		ASTM D7647	>4	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>/17/13	14/10	12/9	14/10
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.403	0.400	0.416
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12000

10000

8000 Water (ppm)

6000

4000

2000

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3k

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40

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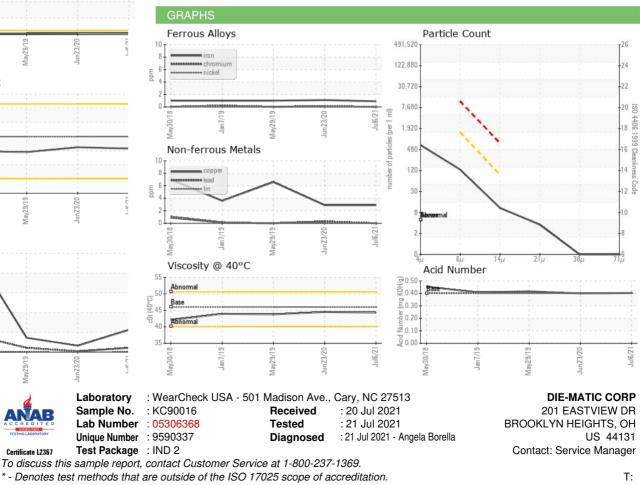
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# **OIL ANALYSIS REPORT**

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Water	(KF)			VISUAI	<u>_</u>		m		
Severe				White Me	tal	scalar	*Vi		
				Yellow M	etal	scalar	*Vi		
				Precipitat	e	scalar	*Vi		
				Silt		scalar	*Vi		
				Debris		scalar	*Vi		
Abnormal				Sand/Dirt		scalar	*Vi		
May30/18	Jan 7/19	May29/19	Jun23/20	Appearar	ICe	scalar	*Vi		
May3	Jar	May2	Juni	- → Odor		scalar	*Vi		
Darticl	e Trend			Emulsifie	d Water	scalar	*Vi		
				Free Wat	er	scalar	*Vi		
	4μm 6μm 14μm			FLUID	PROPERT	IES	m		
		$\backslash$		Visc @ 4	0°C	cSt	AST		
				SAMPL	E IMAGES	3	m		
	5		2						
May30/18	Jan7/19	May29/19	Jun23/20	Color					
Water	(KF)								
Severe				Bottom					
Abnormal				GRAPH					
		19	20 <b>-</b>	Ferrous	Alloys				
May30/18	Jan 7/19	May29/19	Jun23/20	9	chromium				
<b>T</b>	ity @ 40°C			2					
Abnormal			1	0					
Base				May30/18	Jan 7/19	May29/19			
					rous Metals	5			
Abnormal					copper lead	~			
<u></u>	6	6	20 -	8.4	tin				
May30/18	Jan 7/19	May29/19	Jun23/20	2					
	e Trend	W	7	May30/18	Jan 7/19	May29/19			
	-4μm				у @ 40°С	May			
	6μm 14μm			55					





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

Contact/Location: Service Manager - DIEBRO

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