

# **OIL ANALYSIS REPORT**

## Sample Rating Trend





Compressor

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

### DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

## Fluid Condition

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

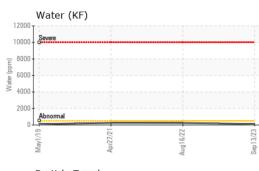
		May201	9 Apr2021	Aug2022 Se	Sep2023		
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2	
Sample Number		Client Info		KCPA004806	KCP51639	KCP33573	
Sample Date		Client Info		13 Sep 2023	16 Aug 2022	27 Apr 2021	
Machine Age	hrs	Client Info		21046	19681	15369	
Oil Age	hrs	Client Info		0	4312	4649	
Oil Changed		Client Info		N/A	Changed	Changed	
Sample Status				NORMAL	NORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	2	2	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	<1	
Titanium	ppm	ASTM D5185m		0	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	0	
Aluminum		ASTM D5185m		1	<1	0	
Lead	ppm	ASTM D5185m	>10	0	<1	0	
	ppm			-	4		
Copper	ppm	ASTM D5185m		13		<1	
Tin	ppm	ASTM D5185m	>10	0	0	0	
Antimony	ppm	ASTM D5185m				0	
Vanadium	ppm	ASTM D5185m		0	0	0	
Cadmium	ppm	ASTM D5185m		0	0	0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0	<1	
Barium	ppm	ASTM D5185m	90	9	0	76	
Molybdenum	ppm	ASTM D5185m	0	0	0	0	
Manganese	ppm	ASTM D5185m		0	<1	<1	
Magnesium	ppm	ASTM D5185m	100	37	50	82	
Calcium	ppm	ASTM D5185m	0	0	0	3	
Phosphorus	ppm	ASTM D5185m	0	2	4	4	
Zinc	ppm		0	- 18	14	0	
Sulfur	ppm	ASTM D5185m	23500	24893	19143	16652	
CONTAMINANTS							
		method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<1	0	0	
Sodium	ppm	ASTM D5185m		9	17	3	
Potassium	ppm	ASTM D5185m		1	0	<1	
Water	%	ASTM D6304	>0.05	0.011	0.024	0.026	
ppm Water	ppm	ASTM D6304	>500	110.9	249.7	263.6	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2	
Particles >4µm		ASTM D7647		1707	1073	31927	
Particles >6µm		ASTM D7647	>1300	429	302	<b>A</b> 9339	
Particles >14µm		ASTM D7647	>80	49	37	<b>1</b> 031	
Particles >21µm		ASTM D7647	>20	16	9	<b>A</b> 291	
Particles >38µm		ASTM D7647	>4	0	1	<b></b> 7	
Particles >71µm		ASTM D7647	>3	0	0	0	
Oil Cleanliness		ISO 4406 (c)	>/17/13	18/16/13	17/15/12	▲ 20/17	
FLUID DEGRADA		method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.39	0.33	0.359	
:25:10) Rev: 1	manonig	. 10 1 11 200-10	Contact/Location: Service Manager - VOEBIRAL				

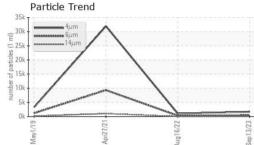
Report Id: VOEBIRAL [WUSCAR] 05967088 (Generated: 10/04/2023 14:25:10) Rev: 1

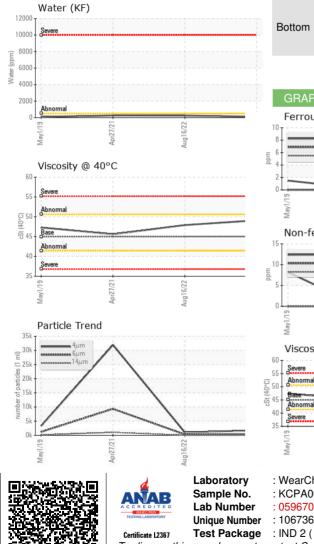
Contact/Location: Service Manager - VOEBIRAL



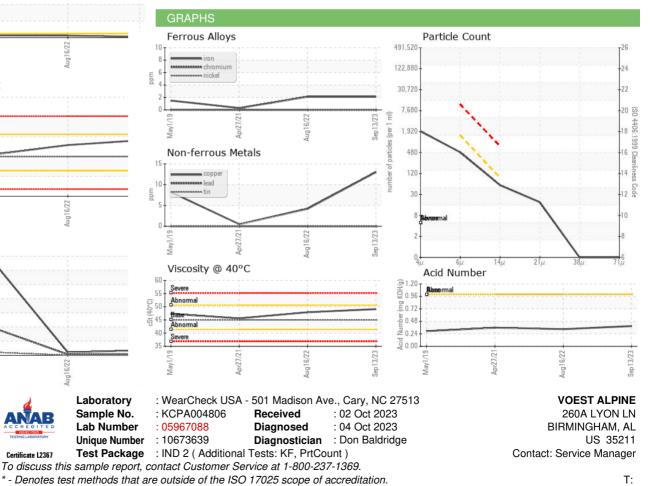
**OIL ANALYSIS REPORT** 







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	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	49.1	47.9	45.6
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color						



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

Contact/Location: Service Manager - VOEBIRAL

F: