

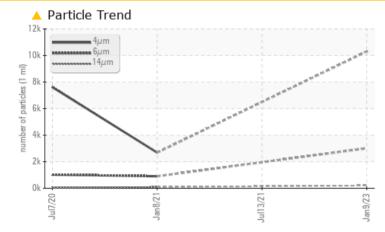
PROBLEM SUMMARY

Sample Rating Trend ISO

Machine Id **3075999 (S/N 1013)** Component

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

COMPONENT CONDITION SUMMARY



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.

PROBLEMATIC TE	EST RESULTS			
Sample Status		ABNORMAL	ABNORMAL	ATTENTION
Particles >6µm	ASTM D7647 >1300) 🔺 3014		902
Particles >14µm	ASTM D7647 >80	A 207		A 89
Particles >21µm	ASTM D7647 >20	A 35		<u> </u>
Oil Cleanliness	ISO 4406 (c) >/17	/13 🔺 21/19/15		🔺 17/14

Customer Id: BACCAN Sample No.: KCP54079 Lab Number: 05758862 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Angela Borella +1 800-237-1369 angela.borella@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

13 Jul 2021 Diag: Jonathan Hester



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.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



08 Jan 2021 Diag: Jonathan Hester

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

07 Jul 2020 Diag: Angela Borella



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







OIL ANALYSIS REPORT

Sample Rating Trend ISO

Machine Id 3075999 (S/N 1013) Component

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

DIAGNOSIS

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.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

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

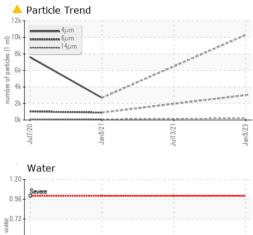
Sample Number Client Info KCP4079 KCP42379 KCP30847 Sample Date Client Info 09 Jan 2023 13 Jul 2021 08 Jan 2021 Machine Age hrs Client Info 171 1300 26800 Oll Age hrs Client Info Not Changd Not Changd Not Changd Sample Status Immethod Immithase current history1 history1 Iron ppm ASTM 05185m >50 0 0 -1 Chromium ppm ASTM 05185m >3 0 0 0 Nickel ppm ASTM 05185m >3 0 0 0 Silver ppm ASTM 05185m >10 0 -1 0 Autimium ppm ASTM 05185m >10 0 0 0 Autimium ppm ASTM 05185m >10 0 0 0 Autimium ppm ASTM 05185m >10 0 0 0 <th>SAMPLE INFORM</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	SAMPLE INFORM		method	limit/base	current	history1	history2
Sample Date Client Info 09 Jan 2023 13 Jul 2021 08 Jan 2021 Machine Age hrs Client Info 28679 28139 26880 Oil Age hrs Client Info 171 13000 3100 Oil Changed Client Info 171 13000 3100 Oil Changed Client Info Not Changd Not Changd Sample Status method limitbase current history1 Mistory2 Iron ppm ASTM 05185m >3 0 0 0 Nickel ppm ASTM 05185m >3 0 0 0 Aluminum ppm ASTM 05185m >10 0 <1	Sample Number		Client Info		KCP54079	KCP42379	KCP30847
Oil Age hrs Client Info 171 1300 3100 Oil Changed Client Info Not Changd Not Changd ABNORMAL ABNORMAL ATTENTION WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185m >50 0 0 <1	Sample Date		Client Info		09 Jan 2023	13 Jul 2021	08 Jan 2021
Oil Changed Sample Status Client Info Not Changd ABNORMAL Not Changd ABNORMAL Not Changd ABNORMAL Not Changd ATTENTION WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185n >50 0 0 0 Okcel ppm ASTM D5185n >33 0 0 0 Mickel ppm ASTM D5185n >33 0 0 0 Muminum ppm ASTM D5185n >33 0 0 0 0 Auminum ppm ASTM D5185n >10 0 <11 <11 0 Autominum ppm ASTM D5185n 10 0 <11 <11 0 Autominum ppm ASTM D5185n 0 0 0 0 0 Autominum ppm ASTM D5185n 0 0 0 0 0 Autominum ppm ASTM D5185n 0 0 <t< td=""><td>Machine Age</td><td>hrs</td><td>Client Info</td><td></td><th>28679</th><td>28139</td><td>26880</td></t<>	Machine Age	hrs	Client Info		28679	28139	26880
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WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 0 <1	Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
ron ppm ASTM D5185m >50 0 0 <1 Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Auminum ppm ASTM D5185m >10 0 <1	Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Chromium ppm ASTM D5165m >3 0 0 0 Nickel ppm ASTM D5165m >3 0 0 0 Silver ppm ASTM D5165m >2 0 0 0 Aluminum ppm ASTM D5165m >10 0 <1 5 Lead ppm ASTM D5165m >10 0 <1 1 Copper ppm ASTM D5165m >10 0 <1 0 Antimony ppm ASTM D5165m 0 0 0 0 Vanadium ppm ASTM D5165m 0 0 0 0 Antimony ppm ASTM D5165m 0 0 0 0 Addium ppm ASTM D5165m 0 0 0 0 Addium ppm ASTM D5165m 0 0 0 0 Barium ppm ASTM D5165m 90 85 7 4	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Auminum ppm ASTM D5185m >10 0 <1	Iron	ppm	ASTM D5185m	>50	0	0	<1
Titanium ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 0 <1	Chromium		ASTM D5185m	>10	0	0	0
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 0 <1	Nickel	ppm	ASTM D5185m	>3	0	0	0
Aluminum ppm ASTM D5185m >10 0 <1 5 Lead ppm ASTM D5185m >10 0 <1	Titanium	ppm	ASTM D5185m	>3	0	0	0
Lead ppm ASTM D5185m >10 0 <1 <1 Copper ppm ASTM D5185m >50 <1	Silver	ppm	ASTM D5185m	>2	0	0	0
Copper ppm ASTM D5185m >50 <1 5 2 Tin ppm ASTM D5185m >10 0 <1	Aluminum	ppm	ASTM D5185m	>10	0	<1	5
Copper ppm ASTM D5185m >50 <1 5 2 Tin ppm ASTM D5185m >10 0 <1	Lead		ASTM D5185m	>10	0	<1	<1
Tin ppm ASTM D5185m >10 0 <1 0 Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 15 <1 Barium ppm ASTM D5185m 0 82 76 74 Molybdenum ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 2 6 3 3 Phosphorus ppm ASTM D5185m 2 7 4 Zinc ppm ASTM D5185m 2 7 4 Zinc ppm ASTM D5185m >2 2 16593 16134 15846 CONTAMINANTS	Copper		ASTM D5185m	>50	<1	5	2
Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history1 history2 Boron ppm ASTM D5185m 0 15 <1			ASTM D5185m	>10	0	<1	
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m Imit/base current history1 history2 Boron ppm ASTM D5185m 0 15 <1 Boron ppm ASTM D5185m 90 82 76 74 Molybdenum ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 2 6 3 3 Phosphorus ppm ASTM D5185m 2 6 3 3 Sulfur ppm ASTM D5185m 2 6 3 3 Sulfur ppm ASTM D5185m 2 6 3 3 Sulfur ppm ASTM D5185m 2 1 0 0 <	Antimony	ppm	ASTM D5185m			0	0
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 15 <1	-		ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 0 15 <1 Barium ppm ASTM D5185m 90 82 76 74 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 9 6 3 3 Phosphorus ppm ASTM D5185m 5 7 4 Zinc ppm ASTM D5185m 5 7 4 Sulfur ppm ASTM D5185m 5 7 4 Sulfur ppm ASTM D5185m 5 21 12 Potassium ppm ASTM D5185m >20 <1	Cadmium		ASTM D5185m		0	0	0
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Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 2 6 3 3 Phosphorus ppm ASTM D5185m 5 7 4 Zinc ppm ASTM D5185m 5 7 4 Sulfur ppm ASTM D5185m <<1	Boron	ppm	ASTM D5185m		0	15	<1
Marganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 2 6 3 3 Phosphorus ppm ASTM D5185m 2 6 3 3 Zinc ppm ASTM D5185m 5 7 4 Zinc ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m	90	82	76	74
Magnesium ppm ASTM D5185m 90 85 96 88 Calcium ppm ASTM D5185m 2 6 3 3 Phosphorus ppm ASTM D5185m 2 6 3 3 Zinc ppm ASTM D5185m 5 7 4 Zinc ppm ASTM D5185m 16593 16134 15846 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Molybdenum	ppm	ASTM D5185m		0	0	0
Calcium ppm ASTM D5185m 2 6 3 3 Phosphorus ppm ASTM D5185m 5 7 4 Zinc ppm ASTM D5185m <1	Manganese	ppm	ASTM D5185m		0	0	0
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Sulfur ppm ASTM D5185m 16593 16134 15846 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Phosphorus	ppm	ASTM D5185m		5	7	4
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Zinc	ppm	ASTM D5185m		<1	0	0
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Sodium ppm ASTM D5185m 5 21 12 Potassium ppm ASTM D5185m >20 <1 2 2 Water % ASTM D6304 >0.05 0.023 0.032 0.025 ppm Water ppm ASTM D6304 >500 237.4 324.0 252.7 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 10302 2688 Particles >6µm ASTM D7647 >1300 3014 902 Particles >14µm ASTM D7647 >80 207 & 89 Particles >21µm ASTM D7647 >20 35 & 23 Particles >38µm ASTM D7647 >3 0 0 Particles >71µm ASTM D7647 >3 0 0 OIl Cleanliness ISO 4406 (c) >/17/13 21/19/15 17/14 FLUID DE	CONTAMINANTS		method	limit/base	current	history1	history2
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Water % ASTM D6304 >0.05 0.023 0.032 0.025 ppm Water ppm ASTM D6304 >500 237.4 324.0 252.7 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 10302 2688 Particles >6µm ASTM D7647 >1300 3014 902 Particles >14µm ASTM D7647 >80 207 ▲ 89 Particles >21µm ASTM D7647 >20 ▲ 35 ▲ 23 Particles >38µm ASTM D7647 >4 0 Particles >71µm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 17/14 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m			21	12
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ppm Water ppm ASTM D6304 >500 237.4 324.0 252.7 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 10302 2688 Particles >6µm ASTM D7647 >1300 3014 902 Particles >14µm ASTM D7647 >80 207 A 89 Particles >21µm ASTM D7647 >20 35 0 Particles >38µm ASTM D7647 >4 4 0 Particles >71µm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) /17/13 21/19/15 17/14 FLUID DEGRADATION method limit/base current history1 history2	Water	%	ASTM D6304	>0.05	0.023	0.032	0.025
Particles >4µm ASTM D7647 10302 2688 Particles >6µm ASTM D7647 >1300 3014 902 Particles >14µm ASTM D7647 >80 207 ▲ 89 Particles >21µm ASTM D7647 >20 ▲ 35 ▲ 23 Particles >38µm ASTM D7647 >4 4 0 Particles >71µm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 17/14 FLUID DEGRADATION method limit/base current history1 history2	ppm Water	ppm					
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Particles >21µm ASTM D7647 >20 ▲ 35 ▲ 23 Particles >38µm ASTM D7647 >4 4 0 Particles >71µm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 ▲ 17/14 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300	A 3014		902
Particles >38μm ASTM D7647 >4 4 0 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 ▲ 17/14 FLUID DEGRADATION method limit/base current history1 history2			ASTM D7647	>80	<u> </u>		<u> </u>
Particles >38μm ASTM D7647 >4 4 0 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 ▲ 17/14 FLUID DEGRADATION method limit/base current history1 history2	•		ASTM D7647	>20	<u> </u>		A 23
Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 ▲ 17/14 FLUID DEGRADATION method limit/base current history1 history2			ASTM D7647	>4	4		0
Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 ▲ 17/14 FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3	0		0
	Oil Cleanliness				A 21/19/15		▲ 17/14
Acid Number (AN) mg KOH/g ASTM D8045 0.4 0.38 0.337 0.299	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
						,	

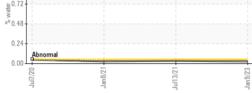
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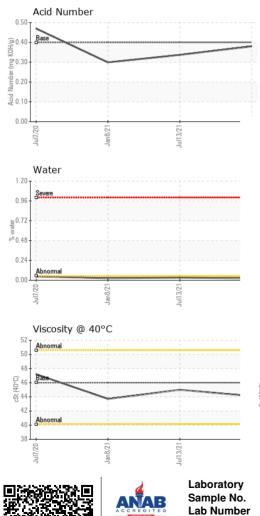
Contact/Location: N SAWYER - BACCAN

ЧĽ-COMPRESSORS Built for a lifetime.

OIL ANALYSIS REPORT

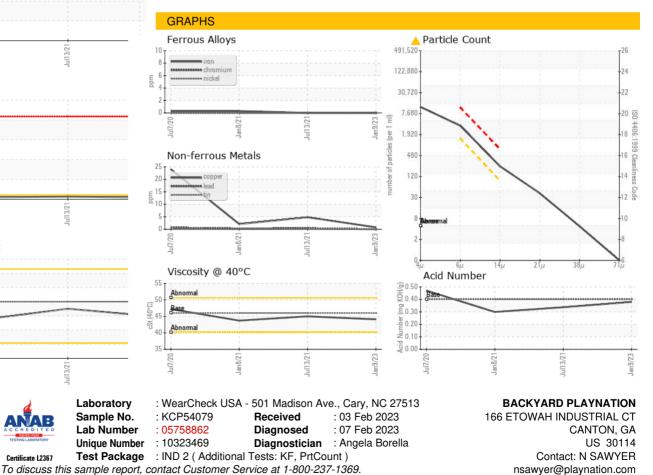






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	🔺 MODER	NONE
Sand/Dirt	scalar	*Visual	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	46	44.1	45.0	43.7
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color						

Bottom



* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

Certificate L2367

T:

F: