

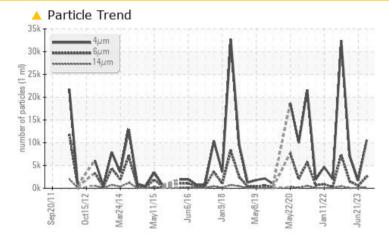
PROBLEM SUMMARY

KAESER ASD 40 4018527 (S/N 1397)

Compressor Fluid

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

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.

Sample Rating Trend

PROBLEMATIC TES	T RESULTS			
Sample Status		ABNORMAL	NORMAL	ATTENTION
Particles >6µm	ASTM D7647 >13	300 🔺 2540	510	<u> </u>
Particles >14µm	ASTM D7647 >80) 🔺 227	28	52
Particles >21µm	ASTM D7647 >20) 🔺 81	6	17
Particles >38µm	ASTM D7647 >4	<u> </u>	0	1
Oil Cleanliness	ISO 4406 (c) >	/17/13 🔺 21/19/15	18/16/12	a 20/18/13

Customer Id: PERHOU Sample No.: KC05964633 Lab Number: 05964633 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

21 Jun 2023 Diag: Angela Borella



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. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

10 Mar 2023 Diag: Don Baldridge



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.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report





16 Aug 2022 Diag: Don Baldridge

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. 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.





OIL ANALYSIS REPORT

KAESER ASD 40 4018527 (S/N 1397)

Compressor

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

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

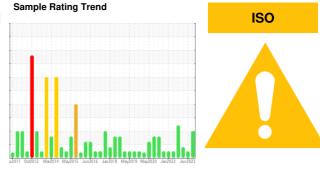
All component wear rates are normal.

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.

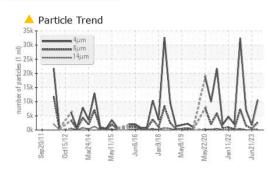


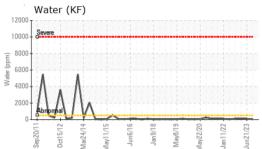
Machine Age hrs Client Info 63137 62014 60147 Oil Age hrs Client Info 0 5000 3000 Oil Anged Client Info N/A Changed NORMAL ATTENTION WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 0 <1 Silver ppm ASTM D5185m >50 0 0 <1 Silver ppm ASTM D5185m >3 0 0 <1 Silver ppm ASTM D5185m >10 0 0 <1 Cadmium ppm ASTM D5185m >10 0 0 <1 Cadmium ppm ASTM D5185m >10 0 0 <1 Cadmium ppm ASTM D5185m >0 0 <1 0 Astm D5185m 90 <1 0 0 <1 0	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 63137 62014 60147 Oil Age hrs Client Info 0 5000 3000 Sample Status Image NIA Changed NORMAL ADTENTION WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185m >50 0 0 <1	Sample Number		Client Info		KC05964633	KC102046	KC108090
Machine Age hrs Client Info 63137 62014 60147 Oil Age hrs Client Info N/A Changed Not Changed Sample Status n n ABNORMAL NORMAAL ATTENTION WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185n >50 0 0 <1	Sample Date		Client Info		19 Sep 2023	21 Jun 2023	10 Mar 2023
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Iron 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 Aluminum ppm ASTM D5185m >10 0 0 0 Lead ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 1 Marganesium ppm ASTM D5185m 0 0 0 1 Magnesium ppm ASTM D5185m 2 2 0 0 <td>-</td> <td></td> <td></td> <td></td> <td>ABNORMAL</td> <td></td> <td>ATTENTION</td>	-				ABNORMAL		ATTENTION
Ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >3 0 0 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >3 0 0 0 Titanium ppm ASTM D5185m >3 0 0 <1	Iron	ppm	ASTM D5185m	>50	0	0	<1
Titanium ppm ASTM D5185m >3 0 0 <1 Silver ppm ASTM D5185m >2 0 0 0 Auminum ppm ASTM D5185m >10 0 0 <1	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 0 0 <1	Nickel	ppm	ASTM D5185m	>3	0	0	0
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 0 0 <1	Titanium		ASTM D5185m	>3	0	0	<1
Aluminum ppm ASTM D5185m >10 0 0 <11 Lead ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m >10 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Maganese ppm ASTM D5185m 0 0 <1					0	0	0
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ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 90 <1					-		
Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 90 <1		PPIII			-	-	-
Barium ppm ASTM D5185m 90 <1 0 0 Molybdenum ppm ASTM D5185m 0 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 <1 Manganese ppm ASTM D5185m 0 0 <1	Boron	ppm	ASTM D5185m			0	
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Magnesium ppm ASTM D5185m 90 34 3 44 Calcium ppm ASTM D5185m 2 2 0 0 Phosphorus ppm ASTM D5185m 2 2 <1 2 Zinc ppm ASTM D5185m 2 41 22 28 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 1 Sodium ppm ASTM D5185m >25 0 0 1 Sodium ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m				<1
Calcium ppm ASTM D5185m 2 2 0 0 Phosphorus ppm ASTM D5185m 2 2 0 0 Phosphorus ppm ASTM D5185m 2 2 <1	Manganese	ppm	ASTM D5185m		0	0	<1
Phosphorus ppm ASTM D5185m 2 <1 2 Zinc ppm ASTM D5185m 41 22 28 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 1 Sodium ppm ASTM D5185m >20 <1 1 3 Potassium ppm ASTM D5185m >20 <1 1 3 Water % ASTM D6304 >0.05 0.005 0.007 0.012 ppm ASTM D6304 >500 59.7 79.4 122.3 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >1300 2540 510 1517 Particles >14µm ASTM D7647 >20 81 6 17 Particles >21µm ASTM D7647 >20 81 6 17 Particles	Magnesium	ppm	ASTM D5185m	90	-	3	44
Zinc ppm ASTM D5185m 41 22 28 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 1 Sodium ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m	2	2	0	0
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 0 0 1 Sodium ppm ASTM D5185m >20 <1	Phosphorus	ppm	ASTM D5185m		2	<1	2
Silicon ppm ASTM D5185m >25 0 0 1 Sodium ppm ASTM D5185m 10 0 13 Potassium ppm ASTM D5185m >20 <1	Zinc	ppm	ASTM D5185m		41	22	28
Sodium ppm ASTM D5185m 10 0 13 Potassium ppm ASTM D5185m >20 <1	CONTAMINANTS	6	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 1 3 Water % ASTM D6304 >0.05 0.005 0.007 0.012 ppm ASTM D6304 >500 59.7 79.4 122.3 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 10568 1702 7129 Particles >6µm ASTM D7647 >1300 2540 510 1517 Particles >14µm ASTM D7647 >80 227 28 52 Particles >21µm ASTM D7647 >20 81 6 17 Particles >38µm ASTM D7647 >3 0 0 1 Particles >71µm ASTM D7647 3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 18/16/12 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Silicon	ppm	ASTM D5185m	>25	0	0	1
Water % ASTM D6304 >0.05 0.005 0.007 0.012 ppm Water ppm ASTM D6304 >500 59.7 79.4 122.3 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 10568 1702 7129 Particles >6µm ASTM D7647 >1300 2540 510 1517 Particles >14µm ASTM D7647 >80 227 28 52 Particles >21µm ASTM D7647 >20 81 6 17 Particles >38µm ASTM D7647 >3 0 0 1 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 18/16/12 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m		10	0	13
Water % ASTM D6304 >0.05 0.005 0.007 0.012 ppm Water ppm ASTM D6304 >500 59.7 79.4 122.3 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 10568 1702 7129 Particles >6µm ASTM D7647 >1300 2540 510 1517 Particles >14µm ASTM D7647 >80 227 28 52 Particles >21µm ASTM D7647 >20 81 6 17 Particles >38µm ASTM D7647 >3 0 0 0 Particles >71µm ASTM D7647 >3 0 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 18/16/12 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	<1	1	3
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 10568 1702 7129 Particles >6µm ASTM D7647 >1300 2540 510 1517 Particles >6µm ASTM D7647 >80 227 28 52 Particles >14µm ASTM D7647 >20 81 6 17 Particles >21µm ASTM D7647 >20 81 6 17 Particles >38µm ASTM D7647 >4 10 0 1 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 18/16/12 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Water		ASTM D6304	>0.05	0.005	0.007	0.012
Particles >4μm ASTM D7647 10568 1702 7129 Particles >6μm ASTM D7647 >1300 2540 510 1517 Particles >14μm ASTM D7647 >80 227 28 52 Particles >21μm ASTM D7647 >20 81 6 17 Particles >38μm ASTM D7647 >4 10 0 1 Particles >38μm ASTM D7647 >3 0 0 0 Oli Cleanliness ISO 4406 (c) >/17/13 21/19/15 18/16/12 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	ppm Water	ppm	ASTM D6304	>500	59.7	79.4	122.3
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Particles >14μm ASTM D7647 >80 ▲ 227 28 52 Particles >21μm ASTM D7647 >20 ▲ 81 6 17 Particles >38μm ASTM D7647 >4 ▲ 10 0 1 Particles >38μm ASTM D7647 >3 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 18/16/12 ▲ 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >4µm		ASTM D7647		10568	1702	7129
Particles >21μm ASTM D7647 >20 ▲ 81 6 17 Particles >38μm ASTM D7647 >4 ▲ 10 0 1 Particles >37μm ASTM D7647 >3 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 18/16/12 ▲ 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300	<u> </u>	510	1 517
Particles >38μm ASTM D7647 >4 10 0 1 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 18/16/12 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>80	<u> </u>	28	52
Particles >38μm ASTM D7647 >4 10 0 1 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 18/16/12 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>20	<mark>/</mark> 81	6	17
Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 18/16/12 ▲ 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >38μm		ASTM D7647	>4			
Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 18/16/12 ▲ 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	-			>3		0	0
			ISO 4406 (c)			18/16/12	▲ 20/18/13
Acid Number (AN) mg KOH/g ASTM D8045 0.4 0.33 0.35 0.33	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/a	ASTM D8045	0.4	0.33	0.35	0.33

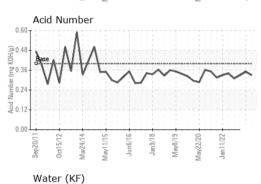


OIL ANALYSIS REPORT

method







1000

6000 Water (

4000

200

52

5

4 cSt (40°C) 4

43

Abno 4(

n20/1

Pu20/

Aar24/

Viscosity @ 40°C

muu

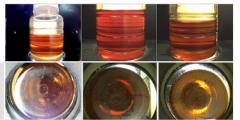


limit/base

current

Color

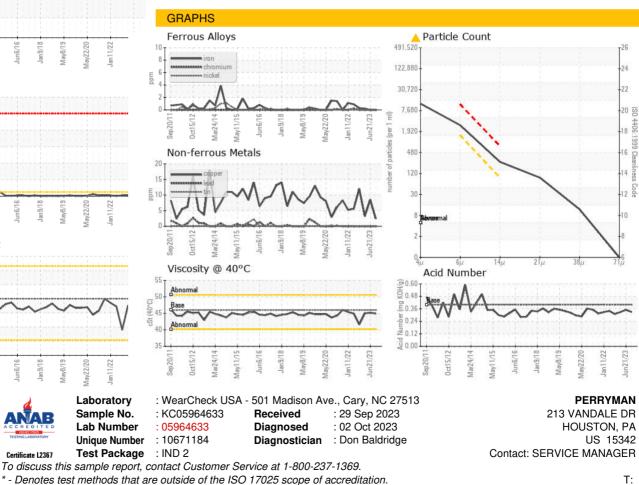
VISUAL



history1

history2

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)

Contact/Location: SERVICE MANAGER - PERHOU