

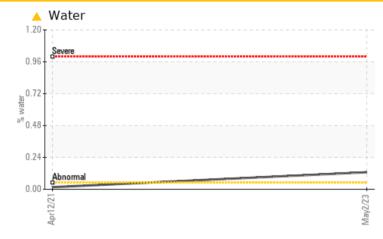
PROBLEM SUMMARY

Sample Rating Trend WATER

KAESER 7511926 Component

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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.

PROBLEMATIC TEST RESULTS Sample Status ABNORMAL ABNORMAL ASTM D6304 >0.05 Water % 0.128 0.016 ppm Water ASTM D6304 >500 1280 169.1 ppm Debris NONE scalar *Visual MODER MODER Appearance scalar *Visual NORML HAZY NORML **Emulsified Water** >0.05 ▲ 0.2% scalar *Visual NEG

Customer Id: OLDIRW Sample No.: KCP52401 Lab Number: 05855583 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						
Action	Status	Date	Done By	Description		
Change Fluid			?	Oil and filter change at the time of sampling has been noted.		
Change Filter			?	Oil and filter change at the time of sampling has been noted.		
Alert			?	We were unable to perform a particle count due to a high concentration of particles present in this sample.		

HISTORICAL DIAGNOSIS



12 Apr 2021 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. 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.





OIL ANALYSIS REPORT

Sample Rating Trend

WATER

KAESER 7511926

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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.

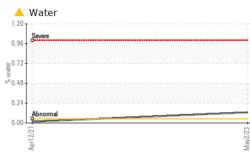
Fluid Condition

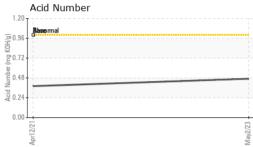
The AN level is acceptable for this fluid.

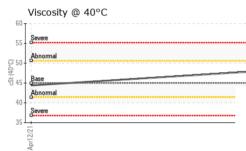
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCP52401	KCP32038	
Sample Date		Client Info		02 May 2023	12 Apr 2021	
Machine Age	hrs	Client Info		15105	1173	
Oil Age	hrs	Client Info		15105	1173	
Oil Changed		Client Info		Changed	Not Changd	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	1	
Chromium	ppm	ASTM D5185m	>10	<1	0	
Nickel	ppm	ASTM D5185m	>3	<1	0	
Titanium	ppm	ASTM D5185m	>3	<1	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	<1	0	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>50	7	3	
Tin	ppm	ASTM D5185m	>10	<1	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history1	 history2
	ppm ppm		limit/base	-	-	
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 0	history1 9	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0 90	Current O O	history1 9 0	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0 90	current 0 0 <1	history1 9 0 0	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0	current 0 0 <1 <1	history1 9 0 0 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100	Current 0 0 <1 <1 23	history1 9 0 0 <1 18	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0	current 0	history1 9 0 0 <1 18 0	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0 0	current 0	history1 9 0 0 <1 18 0 3	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0 0 0	current 0	history1 9 0 0 9 0 0 <1 18 0 3 4	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0 0 0 23500	current 0	history1 9 0 0 2 1 18 0 3 4 15385	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0 0 23500 limit/base	current 0 0 <1 <1 23 0 3 65 22083 current	history 1 9 0 0 <1 18 0 3 4 15385 history 1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 90 0 100 0 0 23500 limit/base	current 0 0 -1 -23 0 3 65 22083 current <1	history1 9 0 0 <1 18 0 3 4 15385 history1 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 90 0 100 0 0 23500 limit/base >25	current 0 0 <1 <1 23 0 3 65 22083 current <1 5	history 1 9 0 0 <1 18 0 3 4 15385 history1 <1 4	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	0 90 0 100 0 0 23500 limit/base >25	current 0 -0 -1 -23 0 3 65 22083 current <1 5 2	history1 9 0 0 <1 18 0 3 4 15385 history1 <1 4 0 <1 4 0	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	0 90 0 100 0 0 23500 limit/base >25 >20 >20	current 0 0 <1 <1 23 0 3 65 22083 current <1 5 2 ▲ 0.128	history1 9 0 <1 18 0 3 4 15385 history1 <1 4 0 <1 4 0 0.016	history2 history2



OIL ANALYSIS REPORT







Color no image Bottom no image GRAPHS Ferrous Alloys Ferrous Alloys Mon-ferrous Metals Uscostity @ 40°C Uscostity		VISUAL		method	limit/base	current	history1	history2
Precipitate scalar Visual NONE NONE NONE		White Metal	scalar	*Visual	NONE	NONE	NONE	
Siti scalar Visual NONE NONE NONE ADDR before scalar Visual NONE NONE NONE ADDR MODER MONE ADDR MODER MONE		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Debris scalar Visual NONE A MODER A MODER - MONE		Precipitate	scalar	*Visual	NONE	NONE	NONE	
SandDirt sealar Visual NONE NONE NONE NONE		Silt	scalar	*Visual	NONE	NONE	NONE	
Appearance scalar Visual NORML HAZY NORML Oddr scalar Visual NORML NORML NORML Emulsified Water scalar Visual NORML NORML NORML Free Water scalar Visual NORML NORML NORML Free Water scalar Visual NORML NORML Free Water scalar Visual NORML NORML Free Water scalar Visual NORML Free Water SAMPLE IMAGES method InnUbase current Nistoryl Nistoryl Color Order Bottom		Debris	scalar	*Visual	NONE	A MODER	MODER	
Emulsified Water scalar Visual 0.00 muc NCG Free Water scalar Visual 0.02% NEG Free Water scalar Visual 0.02% NEG NEG FLUID PROPERTIES method imit/base current history1 history2 Vise @ 40°C cSt ASTM D445 45 47.8 44.4 SAMPLE IMAGES method imit/base current history1 history2 Color roimage Color roimage GRAPHS Ferrous Alloys 		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Emulsified Water scalar Visual 0.00 muc NCG Free Water scalar Visual 0.02% NEG Free Water scalar Visual 0.02% NEG NEG FLUID PROPERTIES method imit/base current history1 history2 Vise @ 40°C cSt ASTM D445 45 47.8 44.4 SAMPLE IMAGES method imit/base current history1 history2 Color roimage Color roimage GRAPHS Ferrous Alloys 		Same Appearance	scalar	*Visual	NORML	🔺 HAZY	NORML	
Free Water scalar Visual NEG NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C c.St ASTM D445 45 47.8 44.4 SAMPLE IMAGES method limit/base current history1 history2 Color color no image Bottom color no image GRAPHS Ferrois Alloys 		Odor	scalar	*Visual	NORML	NORML	NORML	
FLUID PROPERTIES method limitbase current history1 history1 Visc @ 40°C cSt ASTM D445 45 47.8 44.4 SAMPLE IMAGES method Imitbase current history1 history1 history1 Color Imitbase current history1 history2 history1 history2 Bottom Imitbase current history1 history2 no image Ocior Imitbase Imitbase current history1 history2 Bottom Imitbase Imitbase imitbase imitbase imitbase Imitbase Imitbase Imitbase imitbase imitbase imitbase Imitbase Color Imitbase Imitbase imitbase imitbase imitbase Imitbase Imitbase Imitbase Imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase imitbase		Emulsified Water	scalar	*Visual	>0.05	6.2%	NEG	
Visc @ 40°C CSI ASTM D445 45 47.8 44.4 SAMPLE IMAGES method limit/base current history1 history2 Color no image Botom Color no image GRAPHS Ferrous Alloys GRAPHS Ferrous Metals Viscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Color Color Col		Free Water	scalar	*Visual		NEG	NEG	
SAMPLE IMAGES method limitbase current history1 history2 Color no image Bottom GRAPHS Ferrous Alloys GRAPHS Ferrous Alloys Uscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Uscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Comment Sample No. : KCP52401 Received :: 24 May 2023 Sample No. : KCP52401 Received :: 24 May 2023 Diagnoset :: 25 May 2023		FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Color no image Bottom no image GRAPHS Ferrous Alloys Ferrous Alloys Mon-ferrous Metals Uscostity @ 40°C Uscostity		Visc @ 40°C	cSt	ASTM D445	45	47.8	44.4	
Bottom CRAPHS Ferrous Alloys Ferrous Alloys 0 0		SAMPLE IMAG	ES	method	limit/base	current	history1	history2
SRAPHS Ferrous Alloys 0		Color						no image
Ferrous Alloys Image: Second		Bottom						no image
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 OLD DOMINION FREIGHT LINE Sample No. : KCP52401 Received :24 May 2023 600 LIVE 04 Lab Number : : : : : : : Sample No. : <		Non-ferrous Me	tals		May223			
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : KCP52401 Received : 24 May 2023 600 LIVE OA Lab Number : 05855583 Diagnosed : 25 May 2023 IRWINDALE, O Unique Number : 10484938 Diagnostician : Don Baldridge US 9176 Sicuss this sample report, contact Customer Service at 1-800-237-1369. Penotes test methods that are outside of the ISO 17025 scope of accreditation.		Viscosity @ 40°	с			Acid Number		
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : KCP52401 Received : 24 May 2023 600 LIVE OA Lab Number : 05855583 Diagnosed : 25 May 2023 IRWINDALE, O Unique Number : 10484938 Diagnostician : Don Baldridge US 9176 Sicuss this sample report, contact Customer Service at 1-800-237-1369. Penotes test methods that are outside of the ISO 17025 scope of accreditation.		तु 45 - Abnormal	****		ی 0.72 aq سال سال سال سال	3		
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : KCP52401 Received : 24 May 2023 600 LIVE OA Lab Number : 05855583 Diagnosed : 25 May 2023 IRWINDALE, O Unique Number : 10484938 Diagnostician : Don Baldridge US 9176 Sicuss this sample report, contact Customer Service at 1-800-237-1369. Penotes test methods that are outside of the ISO 17025 scope of accreditation.		Severe						
Sample No. : KCP52401 Received : 24 May 2023 600 LIVE OA Lab Number : 05855583 Diagnosed : 25 May 2023 IRWINDALE, O Unique Number : 10484938 Diagnostician : Don Baldridge US 9176 Incerte 12367 Test Package : IND 2 (Additional Tests: KF, PrtCount) Contact: Service Manage Viscuss this sample report, contact Customer Service at 1-800-237-1369. enotes test methods that are outside of the ISO 17025 scope of accreditation. Output		Apri 2/21			May2/23	Apr12/21		60°C-14
enotes test methods that are outside of the ISO 17025 scope of accreditation.	Sample No. Lab Numbe Unique Numb ficate 12367 Test Packag	: KCP52401 r : 05855583 per : 10484938 ge : IND 2 (Additional	Received Diagnose Diagnosti I Tests: KF, F	: 24 d : 25 cian : Dor PrtCount)	May 2023 May 2023 n Baldridge	3 OLD	IF	600 LIVE OAK WINDALE, CAU US 9170
	Denotes test methods that	at are outside of the ISC) 17025 scop	ne of accrea	litation.			T

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