

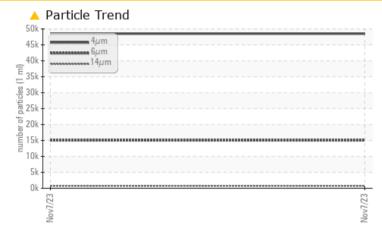
PROBLEM SUMMARY

Sample Rating Trend ISO

Machine Id 5145465 (S/N 4831) Component

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS Sample Status ABNORMAL -- -- Particles >6µm ASTM D7647 >1300 ▲ 15017 -- -- Particles >6µm ASTM D7647 >80 ▲ 735 -- -- Particles >14µm ASTM D7647 >20 ▲ 128 -- -- Particles >21µm ISO 4406 (c) >--/17/13 ▲ 23/21/17 -- --

Customer Id: AMAMORCA Sample No.: KCPA009418 Lab Number: 06016414 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@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



OIL ANALYSIS REPORT



ISO

Machine Id 5145465 (S/N 4831) Component

Compressor

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

DIAGNOSIS

Recommendation

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

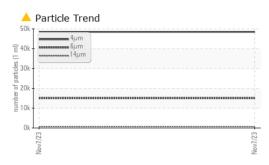
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample NumberClient InfoKCPA009318Sample DateClient Info07 Nov 202Machine AgehrsClient Info0Oil AgehrsClient InfoN/AOil ChangedClient InfoN/AWEAR METALSmethodImitbasecurrenthistoryhistoryIronppmASTM 05158NickelppmASTM 05158SilverppmASTM 05158 <t< th=""><th>SAMPLE INFORM</th><th>IATION</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 52457 Oil Age hrs Client Info N/A Sample Status Image Image current history1 WEAR METALS method Image current history1 WEAR METALS method Image current history1 Nickel ppm ASTM D5185m >50 <1 Nickel ppm ASTM D5185m >3 <1 Silver ppm ASTM D5185m >3 <1 Copper ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 Manganese ppm ASTM D5185m >10 0 ADDITIVES method Imit/base current history1 history2 Barium ppm ASTM D5185m 0 0 <	Sample Number		Client Info		KCPA009418		
Oil Age hrs Client Info N/A Sample Status Client Info N/A WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185m >50 <1	Sample Date		Client Info		07 Nov 2023		
Oli Changed Client Info N/A Sample Status rethod limit/base current history1 history2 WEAR METALS method limit/base current history1 WEAR METALS method limit/base current history1 WEAR METALS method limit/base current history1 Chromium ppm ASTM D5185m >50 <1 Nickel ppm ASTM D5185m >33 <1 Aluminum ppm ASTM D5185m >10 2 Copper ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0	Machine Age	hrs	Client Info		52457		
Sample Status method Imit/base current history1 history2 Iron ppm ASTM D5165m >50 <1	Oil Age	hrs	Client Info		0		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 <1	Oil Changed		Client Info		N/A		
Iron ppm ASTM D5185m >50 <1 Nickel ppm ASTM D5185m >30 <1	-				ABNORMAL		
Chromium ppm ASTM D5185m >10 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >3 <1 Titanium ppm ASTM D5185m >3 <1	Iron	ppm	ASTM D5185m	>50	<1		
Titanium ppm ASTM D5185m >3 <1 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 <1	Chromium	ppm	ASTM D5185m	>10	<1		
Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >10 2 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 <1	Nickel	ppm	ASTM D5185m	>3	<1		
Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >10 2 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 2 Vanadium ppm ASTM D5185m 0 1 Vanadium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Malganese ppm ASTM D5185m 0 -1 Magnesium ppm ASTM D5185m 0 2 Magnesium ppm ASTM D5185m 0 0 Phosphorus ppm ASTM D5185m 0 0 Solicon <	Titanium		ASTM D5185m	>3	<1		
Aluminum ppm ASTM D5185m >10 2 Lead ppm ASTM D5185m >50 2 Copper ppm ASTM D5185m >50 2 Tin ppm ASTM D5185m >10 <1	Silver		ASTM D5185m	>2	0		
Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >50 2 Tin ppm ASTM D5185m >10 <1	Aluminum		ASTM D5185m	>10	2		
Copper ppm ASTM D5185m >50 2 Tin ppm ASTM D5185m >10 <1	Lead		ASTM D5185m	>10	0		
Tin ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 <1							
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m <1					<1		
Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 22 Molybdenum ppm ASTM D5185m 0 <11	Vanadium		ASTM D5185m				
Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 90 22 Molybdenum ppm ASTM D5185m 0 <1					<1		
Barium ppm ASTM D5185m 90 22 Molybdenum ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 0 78 Magnesium ppm ASTM D5185m 100 78 Calcium ppm ASTM D5185m 0 2 Calcium ppm ASTM D5185m 0 0 Phosphorus ppm ASTM D5185m 0 0 Sulfur ppm ASTM D5185m 23500 22230 Sulfur ppm ASTM D5185m >25 1 Sodium ppm ASTM D5185m >20 16 Potassium ppm ASTM D5185m >20 16 Water % ASTM D6304 >0.05 </th <th>ADDITIVES</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	ADDITIVES		method	limit/base	current	history1	history2
Barium ppm ASTM D5185m 90 22 Molybdenum ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	0	0		
Molybdenum ppm ASTM D5185m 0 <1 Manganese ppm ASTM D5185m 100 78 Magnesium ppm ASTM D5185m 0 2 Calcium ppm ASTM D5185m 0 0 Calcium ppm ASTM D5185m 0 0 Zinc ppm ASTM D5185m 0.3500 22230 Sulfur ppm ASTM D5185m 23500 22230 Sodium ppm ASTM D5185m >25 1 Sodium ppm ASTM D5185m >20 16 Potassium ppm ASTM D6185m >20 16 Water % ASTM D6304 >500 230 Particles >4µm ASTM D7647	Barium		ASTM D5185m	90			
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Zinc ppm ASTM D5185m 0 0 Sulfur ppm ASTM D5185m 23500 22230 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 1 Sodium ppm ASTM D5185m >25 1 Potassium ppm ASTM D5185m >20 16 Water % ASTM D6304 >0.05 0.023 ppm Water ppm ASTM D6304 >500 230 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >1300 15017 Particles >14µm ASTM D7647 >80 735 Particles >21µm ASTM D7647 20 128	Phosphorus			0	0		
SulfurppmASTM D5185m2350022230CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>251SodiumppmASTM D5185m>2016PotassiumppmASTM D6304>0.050.023Water%ASTM D6304>500230FLUID CLEANLINESSmethodlimit/basecurrenthistory1history2Particles >4µmASTM D7647>130015017Particles >6µmIASTM D7647>80735Particles >1µmASTM D7647>20128Particles >38µmASTM D7647>30Oil CleanlinessISO 4406 (c)>/17/1323/21/17FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2			ASTM D5185m		0		
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Potassium ppm ASTM D5185m >20 16 Water % ASTM D6304 >0.05 0.023 ppm Water ppm ASTM D6304 >500 230 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 48508 Particles >6µm ASTM D7647 >1300 15017 Particles >14µm ASTM D7647 >80 735 Particles >21µm ASTM D7647 >20 128 Particles >38µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 Gli Cleanliness ISO 4406 (c) /17/13 23/21/17 FLUID DEGRADATION method limit/base current history1 history2 <td>Silicon</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>25</td> <td>1</td> <td></td> <td></td>	Silicon	ppm	ASTM D5185m	>25	1		
Water % ASTM D6304 >0.05 0.023 ppm Water ppm ASTM D6304 >500 230 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 48508 Particles >6µm ASTM D7647 >1300 15017 Particles >14µm ASTM D7647 >80 735 Particles >21µm ASTM D7647 >20 128 Particles >38µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >/17/13 23/21/17 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m		17		
ppm Water ppm ASTM D6304 >500 230 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 48508 Particles >6µm ASTM D7647 >1300 15017 Particles >14µm ASTM D7647 >80 735 Particles >21µm ASTM D7647 >20 128 Particles >38µm ASTM D7647 >4 3 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) /17/13 23/21/17 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	16		
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 48508 Particles >6µm ASTM D7647 >1300 15017 Particles >14µm ASTM D7647 >80 735 Particles >14µm ASTM D7647 >20 128 Particles >21µm ASTM D7647 >4 3 Particles >38µm ASTM D7647 >4 3 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >/17/13 23/21/17 FLUID DEGRADATION method limit/base current history1 history2	Water	%	ASTM D6304	>0.05	0.023		
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Oil Cleanliness ISO 4406 (c) >/17/13 23/21/17 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm		ASTM D7647	>4	3		
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>/17/13	4 23/21/17		
Acid Number (AN) mg KOH/g ASTM D8045 1.0 0.36	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.36		

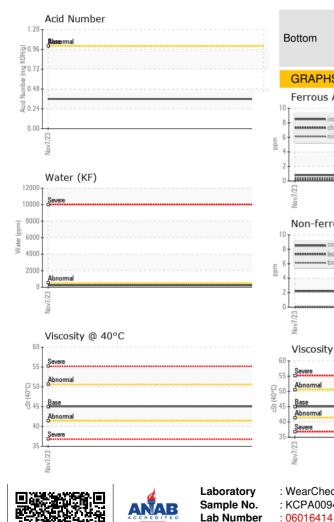


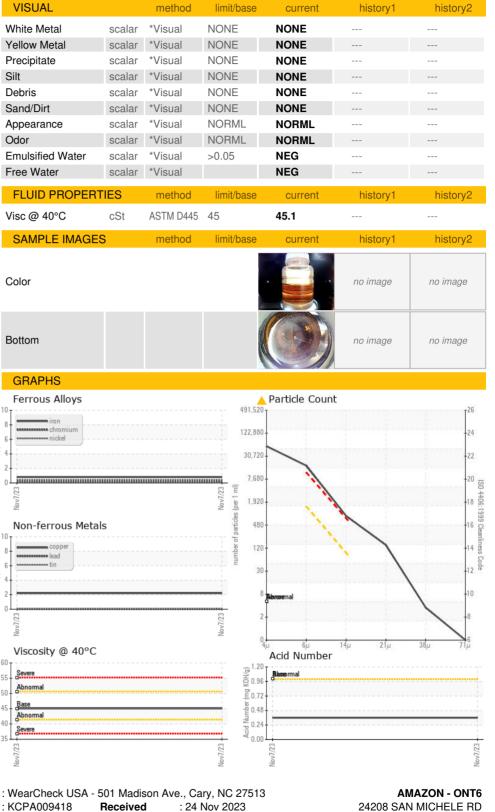
Built for a lifetime

OIL ANALYSIS REPORT









MORENO VALLEY, CA US 92553 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Test Package : IND 2 (Additional Tests: KF, PrtCount)

: 10755558

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

Diagnosed

: 28 Nov 2023

Diagnostician : Jonathan Hester

Certificate L2367

Unique Number

Contact/Location: Service Manager - AMAMORCA

T:

F: