

OIL ANALYSIS REPORT

Sample Rating Trend ISO

Machine Id

KAESER ASD 40 7094725 (S/N 1174)

Component Compressor

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

DIAGNOSIS

Recommendation

Oil and 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

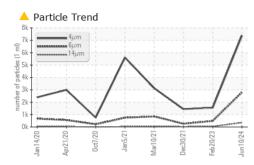
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

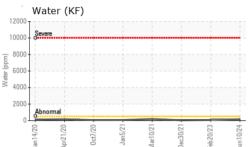
Sample Date Client Info 10 Jun 2024 20 Feb 2023 30 Dec 21 Machine Age hrs Client Info 39169 28238 18740 Oil Age hrs Client Info 9000 9498 7496 Oil Changed Client Info Changed Chand Ch	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 39169 28238 18740 Qil Age hrs Client Info 9000 9498 7496 Qil Anged Client Info Changed Changed Changed Sample Status Image Client Info ABNORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history1 for ppm ASTM D5185m >50 0 0 0 Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >2 0 0 0 Aduminum ppm ASTM D5185m >10 <1	Sample Number		Client Info		KC131512	KC05776083	KC95795
Oil Age hrs Client Info 9000 9498 7496 Oil Changed Client Info Changed NORMAL	Sample Date		Client Info		10 Jun 2024	20 Feb 2023	30 Dec 2021
Oil Changed Sample Status Client Info Changed ABNORMAL Changed NORMAL Changed NORMAL Changed NORMAL Changed NORMAL Changed NORMAL Changed NORMAL Changed NORMAL Changed NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history1 history1 Iron ppm ASTM D5185m >50 0 0 0 Nickel ppm ASTM D5185m >10 <1	Machine Age	hrs	Client Info		39169	28238	18740
Sample Status method limit/base current history1 NORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >50 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >10 <1	Oil Age	hrs	Client Info		9000	9498	7496
WEAR METALS method limit/base current history1 histo Iron ppm ASTM D5185m >50 0 0 0 Chromium ppm ASTM D5185m >3 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >2 0 0 0 Lead ppm ASTM D5185m >10 <1	Oil Changed		Client Info		Changed	Changed	Changed
Iron ppm ASTM D5185m >50 0 0 0 Chromium ppm ASTM D5185m >10 <1	Sample Status				ABNORMAL	NORMAL	NORMAL
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Nickel ppm ASTM D5185m >3 0 0 0 Titanium ppm ASTM D5185m >3 <1	Iron	ppm	ASTM D5185m	>50	0	0	0
Titanium ppm ASTM D5185m >3 <1 0 0 Silver ppm ASTM D5185m >10 2 0 0 Aluminum ppm ASTM D5185m >10 2 0 0 Lead ppm ASTM D5185m >10 <1	Chromium	ppm	ASTM D5185m	>10	<1	0	0
Titanium ppm ASTM D5185m >3 <1 0 0 Silver ppm ASTM D5185m >10 2 0 0 Aluminum ppm ASTM D5185m >10 <1	Nickel		ASTM D5185m	>3	0	0	0
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 2 0 0 Lead ppm ASTM D5185m >10 <1	Titanium			>3	<1	0	0
Aluminum ppm ASTM D5185m >10 2 0 0 Lead ppm ASTM D5185m >10 <1	Silver		ASTM D5185m	>2	0	0	0
Lead ppm ASTM D5185m >10 <1 0 0 Copper ppm ASTM D5185m >50 6 14 6 Tin ppm ASTM D5185m >10 <1	Aluminum		ASTM D5185m	>10		0	0
Copper ppm ASTM D5185m >50 6 14 6 Tin ppm ASTM D5185m >10 <1							
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Manganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 90 <1		ppm	ASTM D5185m	90	-	0	
Magnesium ppm ASTM D5185m 90 <1 2 0 Calcium ppm ASTM D5185m 2 0 0 0 Phosphorus ppm ASTM D5185m 2 0 0 0 Zinc ppm ASTM D5185m 0 1 2 0 CONTAMINANTS method limit/base current history1 histor Silicon ppm ASTM D5185m >25 0 0 0 Sodium ppm ASTM D5185m >25 0 0 0 Potassium ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m		-		
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Phosphorus ppm ASTM D5185m 0 1 2 Zinc ppm ASTM D5185m 0 0 0 0 CONTAMINANTS method limit/base current history1 histor Silicon ppm ASTM D5185m >25 0 0 0 Sodium ppm ASTM D5185m >25 0 0 0 Sodium ppm ASTM D5185m >20 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D6304 >0.05 0.016 0.007 0.003 ppm Water ppm ASTM D6304 >500 165 75.5 36.1 FLUID CLEANLINESS method limit/base current history1 histor Particles >4µm ASTM D7647 7388 1557 1446 Particles >6µm ASTM D7647 >80 354 40 21 <t< td=""><td>Magnesium</td><td>ppm</td><td>ASTM D5185m</td><td>90</td><th></th><td></td><td></td></t<>	Magnesium	ppm	ASTM D5185m	90			
Zinc ppm ASTM D5185m 0 0 0 0 CONTAMINANTS method limit/base current history1 histor Silicon ppm ASTM D5185m<>25 0 0 0 0 Sodium ppm ASTM D5185m >25 0 0 0 0 Potassium ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m	2	0	0	0
CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 0 0 0 Sodium ppm ASTM D5185m >20 <1	Phosphorus	ppm	ASTM D5185m		0	1	
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Sodium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m >20 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D6304 >0.05 0.016 0.007 0.003 ppm ASTM D6304 >500 165 75.5 36.1 FLUID CLEANLINESS method limit/base current history1 histo Particles >4µm ASTM D7647 7388 1557 1446 Particles >6µm ASTM D7647 >1300 2797 487 262 Particles >14µm ASTM D7647 >20 122 10 8 Particles >21µm ASTM D7647 >20 122 10 8 Particles >38µm ASTM D7647 >3 0 0 0 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 20/19/16 18/16/12 15/12	Silicon	ppm	ASTM D5185m	>25	0	0	0
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ppm Water ppm ASTM D6304 >500 165 75.5 36.1 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647 7388 1557 1446 Particles >6µm ASTM D7647 >1300 2797 487 262 Particles >14µm ASTM D7647 >80 354 40 21 Particles >21µm ASTM D7647 >20 122 10 8 Particles >38µm ASTM D7647 >4 10 0 0 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 20/19/16 18/16/12 15/12	Potassium	ppm	ASTM D5185m	>20	<1	0	0
FLUID CLEANLINESSmethodlimit/basecurrenthistory1history1Particles >4 μ mASTM D7647738815571446Particles >6 μ mASTM D7647>13002797487262Particles >14 μ mASTM D7647>803544021Particles >21 μ mASTM D7647>20122108Particles >38 μ mASTM D7647>41000Particles >71 μ mASTM D7647>3000Oil CleanlinessISO 4406 (c)>/17/1320/19/1618/16/1215/12	Water	%	ASTM D6304	>0.05	0.016	0.007	0.003
Particles >4 μ mASTM D7647738815571446Particles >6 μ mASTM D7647>13002797487262Particles >14 μ mASTM D7647>803544021Particles >21 μ mASTM D7647>20122108Particles >38 μ mASTM D7647>41000Particles >71 μ mASTM D7647>3000Oil CleanlinessISO 4406 (c)>/17/1320/19/1618/16/1215/12	ppm Water	ppm	ASTM D6304	>500	165	75.5	36.1
Particles >6µm ASTM D7647 >1300 ▲ 2797 487 262 Particles >14µm ASTM D7647 >80 ▲ 354 40 21 Particles >21µm ASTM D7647 >20 ▲ 122 10 8 Particles >38µm ASTM D7647 >4 ● 10 0 0 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 20/19/16 18/16/12 15/12	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >14µm ASTM D7647 >80 ▲ 354 40 21 Particles >21µm ASTM D7647 >20 ▲ 122 10 8 Particles >38µm ASTM D7647 >4 10 0 0 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 20/19/16 18/16/12 15/12	Particles >4µm		ASTM D7647		7388	1557	1446
Particles >21μm ASTM D7647 >20 ▲ 122 10 8 Particles >38μm ASTM D7647 >4 ● 10 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oli Cleanliness ISO 4406 (c) >/17/13 ▲ 20/19/16 18/16/12 15/12	Particles >6µm		ASTM D7647	>1300	<u> </u>	487	262
Particles >38μm ASTM D7647 >4 10 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 20/19/16 18/16/12 15/12	Particles >14µm		ASTM D7647	>80	A 354	40	21
Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 20/19/16 18/16/12 15/12	Particles >21µm		ASTM D7647	>20	<u> </u>	10	8
Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 20/19/16 18/16/12 15/12	Particles >38µm		ASTM D7647	>4	— 10	0	0
	Particles >71µm		ASTM D7647	>3	0	0	0
FLUID DEGRADATION method limit/base current history1 histo	Oil Cleanliness		ISO 4406 (c)	>/17/13	20/19/16	18/16/12	15/12
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045 0.4 0.40 0.37 0.479	Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.40		0.479

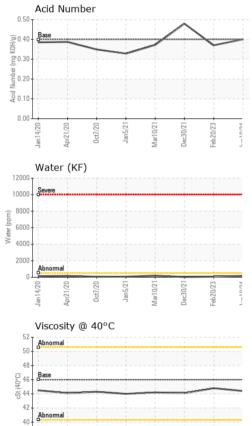
Contact/Location: Service Manager - POLSPA Page 1 of 2



OIL ANALYSIS REPORT





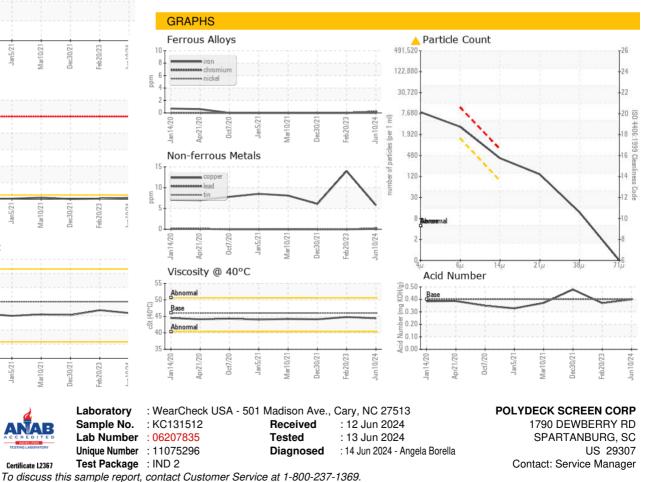


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Apr21/70

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	NONE	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	44.4	44.79	44.1
SAMPLE IMAGES	6	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) T: F:

Aar10/2

Certificate 12367

ar20/7

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