

### **OIL ANALYSIS REPORT**

#### Sample Rating Trend

ISO

## KAESER AS 25T 8809420 (S/N 1971)

Compressor

#### KAESER SIGMA (OEM) M-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 moderate amount of particulates present in the oil.

#### Fluid Condition

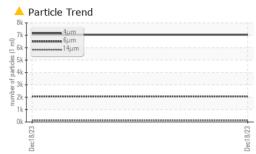
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample Date         Client Info         18 Dec 2023             Machine Age         hrs         Client Info         1172             Oil Age         hrs         Client Info         N/A             Sample Status         Imit/base         current         history1         history2           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM 05155m         >3         0             Nickel         ppm         ASTM 05155m         >3         0             Bilver         ppm         ASTM 05155m         >10         0             Lead         ppm         ASTM 05155m         >10         0             Vanadium         ppm         ASTM 05155m         >10         0             Vanadium         ppm         ASTM 05155m         0         0             Adminum         ppm         ASTM 05155m         0         0             Vana					Dec2023		
Sample Date         Client Info         18 Dec 2023             Machine Age         hrs         Client Info         1172             Oil Age         hrs         Client Info         0             Sample Status         Client Info         N/A             WEAR METALS         method         Imit/base         current         history1         History2           Iron         ppm         ASTM 05185n         >50         0             Nickel         ppm         ASTM 05185n         >3         0             Bard         ppm         ASTM 05185n         >10         0             Aluminum         ppm         ASTM 05185n         >10         0             Copper         ppm         ASTM 05185n         >10         0             Vanadium         ppm         ASTM 05185n         0         0             Admanum         ppm         ASTM 05185n         0         0             Readimim	SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         1172             Oil Age         hrs         Client Info         0             Sample Status         Client Info         N/A             WEAR METALS         method         Init/base         current         history1         history2           Iron         ppm         ASTM 05185m         >50         0             Nickel         ppm         ASTM 05185m         >10         0             Titanium         ppm         ASTM 05185m         >2         0             Aluminum         ppm         ASTM 05185m         >10         <1	Sample Number		Client Info		KCPA011905		
Machine Age         hrs         Client Info         1172             Oil Age         hrs         Client Info         0             Sample Status         Client Info         N/A             WEAR METALS         method         Init/base         current         history1         history2           Iron         ppm         ASTM 05185m         >50         0             Nickel         ppm         ASTM 05185m         >10         0             Titanium         ppm         ASTM 05185m         >2         0             Aluminum         ppm         ASTM 05185m         >10         <1	Sample Date		Client Info		18 Dec 2023		
Oil Changed         Client Info         N/A             Sample Status         Method         Imit/base         current         history1         history2           WEAR METALS         method         Imit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         0             Nickel         ppm         ASTM D5185m         >33         0             Silver         ppm         ASTM D5185m         >32         0             Aluminum         ppm         ASTM D5185m         >10         <1	Machine Age	hrs	Client Info		1172		
Sample Status         ATTENTION             WEAR METALS         method         Imit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         0             Chromium         ppm         ASTM D5185m         >3         0             Titanium         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >3         0             Lead         ppm         ASTM D5185m         >10         <1	Oil Age	hrs	Client Info		0		
WEAR METALS         method         limit/base         current         history1         history2           Kromium         ppm         ASTM D5185m         >50         0             Nickel         ppm         ASTM D5185m         >3         0             Nickel         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >2         0             Aduminum         ppm         ASTM D5185m         >10         0             Lead         ppm         ASTM D5185m         >10         0             ASTM D5185m         >10         0               Vanadium         ppm         ASTM D5185m         0         1             ASTM D5185m         0         0               ASTM D5185m         0         0               ASTM D5185m         0         0           -	Oil Changed		Client Info		N/A		
Iron       ppm       ASTM D5185m       >50       0           Chromium       ppm       ASTM D5185m       >10       0           Nickel       ppm       ASTM D5185m       >3       0           Silver       ppm       ASTM D5185m       >3       0           Auminum       ppm       ASTM D5185m       >10       <1	Sample Status				ATTENTION		
Ppr         ASTM D5185m         >10         0             Nickel         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         <1             Lead         ppm         ASTM D5185m         >10         <1             Vanadium         ppm         ASTM D5185m         >10         <1             Vanadium         ppm         ASTM D5185m         >10         <1             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         0             Galeium         ppm         ASTM D5185m         0         0	WEAR METALS		method	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185m         >3         0             Titanium         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >10         <1	Iron	ppm	ASTM D5185m	>50	0		
Titanium       ppm       ASTM D5185m       >3       0           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	0		
Silver         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         <1	Nickel	ppm	ASTM D5185m	>3	0		
Aluminum       ppm       ASTM D5185m       >10       <1	Titanium	ppm	ASTM D5185m	>3	0		
Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >50         1             Vanadium         ppm         ASTM D5185m         >10         <1	Silver	ppm	ASTM D5185m	>2	0		
Copper         ppm         ASTM D5185m         >50         1             Tin         ppm         ASTM D5185m         >10         <1	Aluminum	ppm	ASTM D5185m	>10	<1		
Tin       ppm       ASTM D5185m       >10       <1           Vanadium       ppm       ASTM D5185m       0           Cadmium       ppm       ASTM D5185m       0           ADDITIVES       method       limit/base       current       history1       history2         Boron       ppm       ASTM D5185m       0       0           Malpdenum       ppm       ASTM D5185m       0       0           Magnese       ppm       ASTM D5185m       0       3           Calcium       ppm       ASTM D5185m       0       4           Phosphorus       ppm       ASTM D5185m       0       4           Sulfur       ppm       ASTM D5185m       0       0           Sulfur       ppm       ASTM D5185m       0       0           Sulfur       ppm       ASTM D5185m       25       <1	Lead	ppm	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       0           Molybdenum       ppm       ASTM D5185m       0       0           Maganese       ppm       ASTM D5185m       0       3           Calcium       ppm       ASTM D5185m       0       4           Zinc       ppm       ASTM D5185m       0       0           Sulfur       ppm       ASTM D5185m       23500       19445           Solicon       ppm       ASTM D5185m       22       <1	Copper	ppm	ASTM D5185m	>50	1		
Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Barium         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         0             Magnese         ppm         ASTM D5185m         100         86             Calcium         ppm         ASTM D5185m         0         3             Calcium         ppm         ASTM D5185m         0         4             Sulfur         ppm         ASTM D5185m         0         0             Sulfur         ppm         ASTM D5185m         23500         19445             Sodium         ppm         ASTM D5185m         225         <1	Tin	ppm	ASTM D5185m	>10	<1		
Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Barium         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         3             Calcium         ppm         ASTM D5185m         0         3             Calcium         ppm         ASTM D5185m         0         4             Sulfur         ppm         ASTM D5185m         0         0             Sulfur         ppm         ASTM D5185m         0         0         0             Sulfur         ppm         ASTM D5185m         23500         19445             Solicon         ppm         ASTM D5185m         20         27 <td>Vanadium</td> <td></td> <td>ASTM D5185m</td> <td></td> <td>0</td> <td></td> <td></td>	Vanadium		ASTM D5185m		0		
Boron         ppm         ASTM D5185m         0         0             Barium         ppm         ASTM D5185m         90         61             Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         100         86             Calcium         ppm         ASTM D5185m         0         3             Calcium         ppm         ASTM D5185m         0         4             Calcium         ppm         ASTM D5185m         0         0             Zinc         ppm         ASTM D5185m         0         0             Sulfur         ppm         ASTM D5185m         23500         19445             Sodium         ppm         ASTM D5185m         >25         <1	Cadmium		ASTM D5185m		0		
Barium         ppm         ASTM D5185m         90         61             Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         100         86             Calcium         ppm         ASTM D5185m         0         3             Calcium         ppm         ASTM D5185m         0         4             Calcium         ppm         ASTM D5185m         0         4             Zinc         ppm         ASTM D5185m         0         0             Sulfur         ppm         ASTM D5185m         23500         19445             Sodium         ppm         ASTM D5185m         225         <1             Sodium         ppm         ASTM D5185m         >20         27             Vater         %         ASTM D6304         >0.05         0.023             Particles >4µm         ASTM D7647         7039 <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
Molybdenum       ppm       ASTM D5185m       0       0           Manganese       ppm       ASTM D5185m       100       86           Calcium       ppm       ASTM D5185m       0       3           Calcium       ppm       ASTM D5185m       0       4           Calcium       ppm       ASTM D5185m       0       4           Zinc       ppm       ASTM D5185m       0       0           Sulfur       ppm       ASTM D5185m       23500       19445           Sodium       ppm       ASTM D5185m       23500       19445           Sodium       ppm       ASTM D5185m       225       <1	Boron	ppm	ASTM D5185m	0	0		
Manganese       ppm       ASTM D5185m       <1           Magnesium       ppm       ASTM D5185m       100       86           Calcium       ppm       ASTM D5185m       0       3           Phosphorus       ppm       ASTM D5185m       0       4           Zinc       ppm       ASTM D5185m       0       0           Sulfur       ppm       ASTM D5185m       23500       19445           Sulfur       ppm       ASTM D5185m       23500       19445           CONTAMINANTS       method       limit/base       current       history1       history2         Silicon       ppm       ASTM D5185m       >20       27           Sodium       ppm       ASTM D6304       >0.05       0.023           Water       %       ASTM D6304       >500       238           Paticles >4µm       ASTM D7647       7039            Paticles >4µm       ASTM D7647       >80       133	Barium	ppm	ASTM D5185m	90	61		
Manganese         ppm         ASTM D5185m         <1             Magnesium         ppm         ASTM D5185m         100         866             Calcium         ppm         ASTM D5185m         0         3             Calcium         ppm         ASTM D5185m         0         4             Zinc         ppm         ASTM D5185m         0         0             Sulfur         ppm         ASTM D5185m         23500         19445             Soliton         ppm         ASTM D5185m         23500         19445             Soliton         ppm         ASTM D5185m         23500         19445             Soliton         ppm         ASTM D5185m         225         <1	Molybdenum	ppm	ASTM D5185m	0	0		
Magnesium       ppm       ASTM D5185m       100       86           Calcium       ppm       ASTM D5185m       0       3           Phosphorus       ppm       ASTM D5185m       0       4           Zinc       ppm       ASTM D5185m       0       0           Sulfur       ppm       ASTM D5185m       23500       19445           Sulfur       ppm       ASTM D5185m       23500       19445           Sodium       ppm       ASTM D5185m       >25       <1	-	ppm	ASTM D5185m		<1		
Phosphorus         ppm         ASTM D5185m         0         4             Zinc         ppm         ASTM D5185m         0         0             Sulfur         ppm         ASTM D5185m         23500         19445             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1	Magnesium	ppm	ASTM D5185m	100	86		
Zinc         ppm         ASTM D5185m         0         0         0             Sulfur         ppm         ASTM D5185m         23500         19445             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1	Calcium	ppm	ASTM D5185m	0	3		
Zinc         ppm         ASTM D5185m         0         0             Sulfur         ppm         ASTM D5185m         23500         19445             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1	Phosphorus	ppm	ASTM D5185m	0	4		
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1	Zinc		ASTM D5185m	0	0		
Silicon       ppm       ASTM D5185m       >25       <1           Sodium       ppm       ASTM D5185m       >20       27           Potassium       ppm       ASTM D5185m       >20       27           Water       %       ASTM D6304       >0.05       0.023           ppm Water       ppm       ASTM D6304       >500       238           FLUID CLEANLINESS       method       limit/base       current       history1       history2         Particles >4µm       ASTM D7647       >1300       2067           Particles >6µm       ASTM D7647       >80       133           Particles >1µm       ASTM D7647       >20       26           Particles >38µm       ASTM D7647       >3       0           Particles >71µm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       20/18/14           FLUID DEGRADATION       method       limit/base       current	Sulfur	ppm	ASTM D5185m	23500	19445		
Sodium         ppm         ASTM D5185m         18             Potassium         ppm         ASTM D5185m         >20         27             Water         %         ASTM D6304         >0.05         0.023             ppm Water         ppm         ASTM D6304         >500         238             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         7039              Particles >6µm         ASTM D7647         >1300         2067             Particles >14µm         ASTM D7647         >80         133             Particles >14µm         ASTM D7647         >20         26             Particles >38µm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         20/18/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	CONTAMINANTS	3	method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         27             Water         %         ASTM D6304         >0.05         0.023             ppm Water         ppm         ASTM D6304         >500         238             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         7039             Particles >6µm         ASTM D7647         >1300         2067            Particles >14µm         ASTM D7647         >80         133            Particles >21µm         ASTM D7647         >20         26            Particles >38µm         ASTM D7647         >3         0             Particles >71µm         ASTM D7647         >3         0              Oil Cleanliness         ISO 4406 (c)         >/17/13         20/18/14	Silicon	ppm	ASTM D5185m	>25	<1		
Potassium         ppm         ASTM D5185m         >20         27             Water         %         ASTM D6304         >0.05         0.023             ppm Water         ppm         ASTM D6304         >500         238             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         7039             Particles >6µm         ASTM D7647         >1300         2067            Particles >14µm         ASTM D7647         >80         133            Particles >21µm         ASTM D7647         >20         26            Particles >38µm         ASTM D7647         >3         0            Particles >71µm         ASTM D7647         >3         0            Oil Cleanliness         ISO 4406 (c)         >/17/13         20/18/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	Sodium		ASTM D5185m		18		
Water         %         ASTM D6304         >0.05         0.023             ppm Water         ppm         ASTM D6304         >500         238             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         7039             Particles >6µm         ASTM D7647         >1300         2067            Particles >14µm         ASTM D7647         >80         133            Particles >21µm         ASTM D7647         >20         26            Particles >38µm         ASTM D7647         >4         1            Particles >71µm         ASTM D7647         >3         0            Oil Cleanliness         ISO 4406 (c)         >/17/13         20/18/14            FLUID DEGRADATION         method         limit/base         current         history1         history2	Potassium		ASTM D5185m	>20	27		
FLUID CLEANLINESS       method       limit/base       current       history1       history2         Particles >4µm       ASTM D7647       7039           Particles >6µm       ASTM D7647       >1300       2067           Particles >14µm       ASTM D7647       >80       133           Particles >14µm       ASTM D7647       >20       26           Particles >21µm       ASTM D7647       >20       26           Particles >38µm       ASTM D7647       >4       1           Particles >38µm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       20/18/14           FLUID DEGRADATION       method       limit/base       current       history1       history2	Water		ASTM D6304	>0.05	0.023		
Particles >4µm       ASTM D7647       7039           Particles >6µm       ASTM D7647       >1300       2067           Particles >14µm       ASTM D7647       >80       133           Particles >14µm       ASTM D7647       >20       26           Particles >21µm       ASTM D7647       >20       26           Particles >38µm       ASTM D7647       >4       1           Particles >71µm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       20/18/14           FLUID DEGRADATION       method       limit/base       current       history1       history2	ppm Water	ppm	ASTM D6304	>500	238		
Particles >6µm       ASTM D7647       >1300       ▲ 2067           Particles >14µm       ASTM D7647       >80       ▲ 133           Particles >21µm       ASTM D7647       >20       ▲ 26           Particles >21µm       ASTM D7647       >20       ▲ 26           Particles >38µm       ASTM D7647       >4       1           Particles >71µm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       ▲ 20/18/14           FLUID DEGRADATION       method       limit/base       current       history1       history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14µm       ASTM D7647       >80       ▲ 133           Particles >21µm       ASTM D7647       >20       ▲ 26           Particles >38µm       ASTM D7647       >4       1           Particles >38µm       ASTM D7647       >4       1           Particles >71µm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       ▲ 20/18/14           FLUID DEGRADATION       method       limit/base       current       history1       history2	Particles >4µm		ASTM D7647		7039		
Particles >21μm         ASTM D7647         >20         26             Particles >38μm         ASTM D7647         >4         1             Particles >37μm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         20/18/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >6µm		ASTM D7647	>1300	<b>2067</b>		
Particles >38μm         ASTM D7647         >4         1             Particles >71μm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         20/18/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >14µm		ASTM D7647	>80	<b>1</b> 33		
Particles >71μm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         ▲ 20/18/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >21µm		ASTM D7647	>20	<b>a</b> 26		
Oil Cleanliness         ISO 4406 (c)         >/17/13         20/18/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >38µm		ASTM D7647	>4	1		
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>20/18/14</b>		
Acid Number (AN) mg KOH/g ASTM D8045 1.0 0.35	FLUID DEGRADA		method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.35		

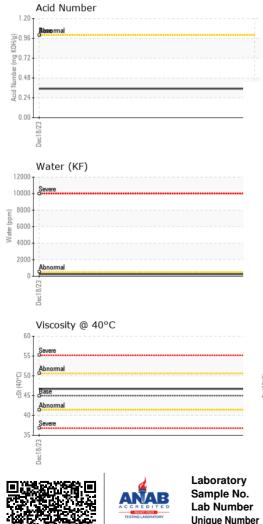


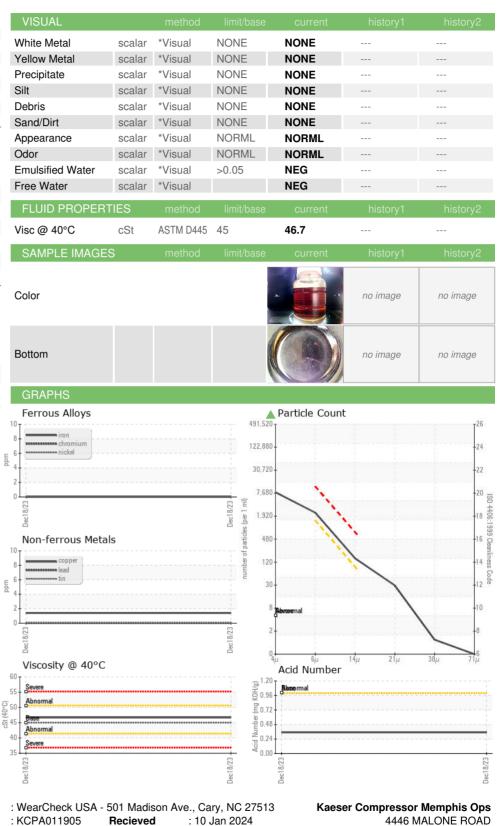
#### Built for a lifetime











#### 4446 MALONE ROAD MEMPHIS, TN US 38118 Contact: SAM COATES Sam.coates@kaeser.com T: (901)795-4884 F: (901)795-4885

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

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

Diagnosed

: 11 Jan 2024

Diagnostician : Don Baldridge

: 06056685

: 10822634

Certificate L2367

Contact/Location: SAM COATES - KAEMEM