

### **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# KAESER 8520187 (S/N 1037)

Compressor

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

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

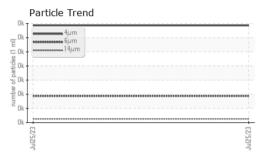
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

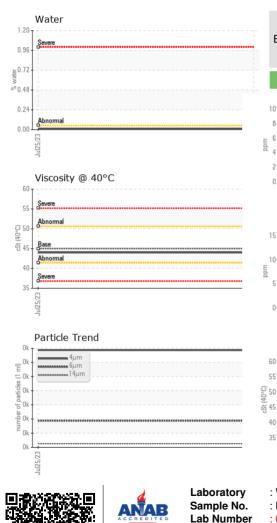
Sample Number         Client Info         KCP46385             Sample Date         Client Info         25 Jul 2023             Machine Age         hrs         Client Info         0             Oil Age         Client Info         0              Oil Changed         Client Info         Changed             Sample Status         Imethod         Imethod         NORMAL             Kornomium         ppm         ASTM 05185m         >10         0             Nickel         ppm         ASTM 05185m         >10         0             Aluminum         ppm         ASTM 05185m         >10         0             Silver         ppm         ASTM 05185m         >10         0             Auminum         ppm         ASTM 05185m         >10         0             Auminum         ppm         ASTM 05185m         >10         0             Auminum         ppm	SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         4798             Oil Age         hrs         Client Info         O             Sample Status         Client Info         Changed             WEAR METALS         method         Imit/base         current         history1         history2           Iron         ppm         ASTM 05185m         >50         <1             WEAR METALS         method         Imit/base         current         history1         history2           Iron         ppm         ASTM 05185m         >3         0             Chromium         ppm         ASTM 05185m         >3         0             Silver         ppm         ASTM 05185m         >10         0             Capper         ppm         ASTM 05185m         >10         0             ADDTIVES         method         Imit/base         current         history1         history2           Barium         ppm         ASTM 05185m         0         0	Sample Number		Client Info		KCP46385		
Oil Age         hrs         Client Info         0             Oil Changed         Client Info         Changed             WEAR METALS         method         imitibase         current         history1         history2           Iron         ppm         ASTM D5185m         >50         <1	Sample Date		Client Info		25 Jul 2023		
Dil Age         hrs         Client Info         0             Sample Status         Client Info         Changed             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         <1	Machine Age	hrs	Client Info		4798		
Oil Changed         Client Info         Changed             Sample Status         method         Imil/base         current         history1         history2           WeAR METALS         method         Imil/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         <1	v	hrs	Client Info		0		
Sample Status         method         Imit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         <1	-		Client Info		Changed		
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         <1	•				-		
Iron         ppm         ASTM D5185m         >50         <1             Chromium         ppm         ASTM D5185m         >10         0             Nickel         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >3         0             Aluminum         ppm         ASTM D5185m         >10         5             Copper         ppm         ASTM D5185m         >10         0             Cadmium         ppm         ASTM D5185m         >50         12             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Magnese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         0         <	· · · ·		method	limit/base	current	history1	history2
Chromium         ppm         ASTM D5185m         >10         0             Nickel         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         5             Lead         ppm         ASTM D5185m         >50         12             Copper         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         >10         0             Astm D5185m         >10         0               ADDITIVES         method         limit/base         current         history1         history2           Barium         ppm         ASTM D5185m         0         0             Addenum         ppm         ASTM D5185m         0              Marganesium         ppm         ASTM D5185m		maa					
Nickel         ppm         ASTM D5185m         >3         0             Titanium         ppm         ASTM D5185m         >3         0             Sliver         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         0             Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         0         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         2	-						
Titanium         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         5             Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Magnaese         ppm         ASTM D5185m         0         0             Magnaese         ppm         ASTM D5185m         0         0             Magnaese         ppm         ASTM D5185m         0         20             Zinc         ppm         ASTM D5185m         22         1 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>					-		
Silver         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         5             Aluminum         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         10         0             Vanadium         ppm         ASTM D5185m         10         0             Vanadium         ppm         ASTM D5185m         0         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         20             Solifor         ppm         ASTM D5185m         225					-		
Auminum         ppm         ASTM D5185m         >10         5             Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >50         12             Vanadium         ppm         ASTM D5185m         >10         0             Cadmium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         0             Phosphorus         ppm         ASTM D5185m         0         0             Sulfur         ppm         ASTM D5185m         2.5 <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></t<>					-		
Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >50         12             Vanadium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Malganese         ppm         ASTM D5185m         0         0             Magnese         ppm         ASTM D5185m         0         0             Magnese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0					-		
Copper         ppm         ASTM D5185m         >50         12             Tin         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         11             Phosphorus         ppm         ASTM D5185m         0         20             Silion         ppm         ASTM D5185m         22         1             Sodium         ppm         ASTM D5185m <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></t<>					-		
Tin         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         0         20             Sulfur         ppm         ASTM D5185m         0         20             Sulfur         ppm         ASTM D5185m         22             Sulfur         ppm         ASTM D5185m         22 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>					-		
Vanadium         ppm         ASTM D5185m         <1             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         90         0             Barium         ppm         ASTM D5185m         90         0             Maganese         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         0              Sulfur         ppm         ASTM D5185m         0         -1             Sulfur         ppm         ASTM D5185m         0         20             Sodium         ppm         ASTM D5185m         23500         19195             Sodium         ppm         ASTM D5185m         >20         2 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         90         0             Barium         ppm         ASTM D5185m         90         0             Walydenum         ppm         ASTM D5185m         0         0             Magnese         ppm         ASTM D5185m         0         0             Magnese         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         0         <1		ppm		>10	-		
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             Manganese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         6             Calcium         ppm         ASTM D5185m         0         <1	Vanadium	ppm	ASTM D5185m		<1		
Boron         ppm         ASTM D5185m         0         0             Barium         ppm         ASTM D5185m         90         0             Malganese         ppm         ASTM D5185m         0         0             Maganese         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         0         <1	Cadmium	ppm	ASTM D5185m		0		
Barium         ppm         ASTM D5185m         90         0             Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         100         6             Calcium         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         0         20             Zinc         ppm         ASTM D5185m         0         20             Sulfur         ppm         ASTM D5185m         23500         19195             Solicon         ppm         ASTM D5185m         >25         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         100         6             Magnesium         ppm         ASTM D5185m         100         6             Calcium         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         0         <11	Boron	ppm	ASTM D5185m	0	0		
Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         100         6             Calcium         ppm         ASTM D5185m         0         0             Phosphorus         ppm         ASTM D5185m         0         20             Zinc         ppm         ASTM D5185m         0         20             Sulfur         ppm         ASTM D5185m         23500         19195             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1	Barium	ppm	ASTM D5185m	90	0		
Magnesium         ppm         ASTM D5185m         100         6             Calcium         ppm         ASTM D5185m         0         0             Phosphorus         ppm         ASTM D5185m         0         <1	Molybdenum	ppm	ASTM D5185m	0	0		
Magnesium         ppm         ASTM D5185m         100         6             Calcium         ppm         ASTM D5185m         0         0             Phosphorus         ppm         ASTM D5185m         0         <1	Vanganese	ppm	ASTM D5185m		0		
Calcium         ppm         ASTM D5185m         0             Phosphorus         ppm         ASTM D5185m         0         <1	Vagnesium	ppm	ASTM D5185m	100	6		
Phosphorus         ppm         ASTM D5185m         0         <1             Zinc         ppm         ASTM D5185m         0         20             Sulfur         ppm         ASTM D5185m         23500         19195             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1             Sodium         ppm         ASTM D5185m         >20         2             Sodium         ppm         ASTM D5185m         >20         2             Sodium         ppm         ASTM D5185m         >20         2             Water         %         ASTM D6304         >0.05         0.009             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         >1300         94             Particles >38µm         ASTM D7647         >20	Calcium		ASTM D5185m	0	0		
Zinc         ppm         ASTM D5185m         0         20             Sulfur         ppm         ASTM D5185m         23500         19195             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1	Phosphorus		ASTM D5185m	0	<1		
SulfurppmASTM D5185m2350019195CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>25<1							
Silicon         ppm         ASTM D5185m         >25         <1             Sodium         ppm         ASTM D5185m         2              Potassium         ppm         ASTM D5185m         >20         2             Water         %         ASTM D6304         >0.05         0.009             opm Water         ppm         ASTM D6304         >500         92.3             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         >1300         94             Particles >6µm         ASTM D7647         >80         13             Particles >14µm         ASTM D7647         >20         5             Particles >21µm         ASTM D7647         >3         0             Particles >71µm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         16/14/11	-				-		
Sodium         ppm         ASTM D5185m         2             Potassium         ppm         ASTM D5185m         >20         2             Water         %         ASTM D6304         >0.05         0.009             ppm Water         ppm         ASTM D6304         >500         92.3             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         343              Particles >6µm         ASTM D7647         >1300         94             Particles >6µm         ASTM D7647         >80         13             Particles >1µm         ASTM D7647         >20         5             Particles >38µm         ASTM D7647         >3         0             Particles >71µm         ASTM D7647         >3         0              Oil Cleanliness         ISO 4406 (c)         >/17/13         16/14/11    <	CONTAMINANTS	;	method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         2             Water         %         ASTM D6304         >0.05         0.009             opm         Water         ppm         ASTM D6304         >500         92.3             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         343             Particles >6µm         ASTM D7647         >1300         94             Particles >14µm         ASTM D7647         >80         13             Particles >14µm         ASTM D7647         >20         5             Particles >21µm         ASTM D7647         >4         1             Particles >38µm         ASTM D7647         >3         0             Particles >71µm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         16/14/11       <	Silicon	ppm	ASTM D5185m	>25	<1		
Potassium         ppm         ASTM D5185m         >20         2             Water         %         ASTM D6304         >0.05         0.009             opm         Water         ppm         ASTM D6304         >500         92.3             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         343             Particles >6µm         ASTM D7647         >1300         94             Particles >1µm         ASTM D7647         >80         13             Particles >1µm         ASTM D7647         >20         5             Particles >21µm         ASTM D7647         >4         1             Particles >38µm         ASTM D7647         >3         0              Oil Cleanliness         ISO 4406 (c)         >/17/13         16/14/11             FLUID DEGRADATION         method         limit/base         current         history1 <th< td=""><td>Sodium</td><td></td><td>ASTM D5185m</td><td></td><td>2</td><td></td><td></td></th<>	Sodium		ASTM D5185m		2		
Water         %         ASTM D6304         >0.05         0.009             opm Water         ppm         ASTM D6304         >500         92.3             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         343             Particles >6µm         ASTM D7647         >1300         94            Particles >6µm         ASTM D7647         >80         13            Particles >14µm         ASTM D7647         >20         5            Particles >21µm         ASTM D7647         >4         1            Particles >38µm         ASTM D7647         >3         0            Particles >71µm         ASTM D7647         >3         0            Oil Cleanliness         ISO 4406 (c)         >/17/13         16/14/11            FLUID DEGRADATION         method         limit/base         current         history1         history2				>20	2		
Number         ppm         ASTM D6304         >500         92.3             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         343             Particles >6µm         ASTM D7647         >1300         94             Particles >6µm         ASTM D7647         >80         13             Particles >14µm         ASTM D7647         >20         5             Particles >21µm         ASTM D7647         >4         1             Particles >38µm         ASTM D7647         >4         1             Particles >71µm         ASTM D7647         3         0             Oil Cleanliness         ISO 4406 (c)        /17/13         16/14/11             FLUID DEGRADATION         method         limit/base         current         history1         history2					_		
Particles >4µm       ASTM D7647       343           Particles >6µm       ASTM D7647       >1300       94           Particles >6µm       ASTM D7647       >80       13           Particles >14µm       ASTM D7647       >80       13           Particles >21µm       ASTM D7647       >20       5           Particles >21µm       ASTM D7647       >20       5           Particles >38µm       ASTM D7647       >4       1           Particles >71µm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       16/14/11           FLUID DEGRADATION       method       limit/base       current       history1       history2							
Particles >6µm         ASTM D7647         >1300         94             Particles >14µm         ASTM D7647         >80         13             Particles >14µm         ASTM D7647         >20         5             Particles >21µm         ASTM D7647         >20         5             Particles >38µm         ASTM D7647         >4         1             Particles >38µm         ASTM D7647         >3         0             Particles >71µm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         16/14/11             FLUID DEGRADATION         method         limit/base         current         history1         history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14µm       ASTM D7647       >80       13           Particles >21µm       ASTM D7647       >20       5           Particles >21µm       ASTM D7647       >20       5           Particles >38µm       ASTM D7647       >4       1           Particles >38µm       ASTM D7647       >3       0           Particles >71µm       ASTM D7647       >3       0           Dil Cleanliness       ISO 4406 (c)       >/17/13       16/14/11           FLUID DEGRADATION       method       limit/base       current       history1       history2	Particles >4µm		ASTM D7647		343		
Particles >14μm       ASTM D7647       >80       13           Particles >21μm       ASTM D7647       >20       5           Particles >38μm       ASTM D7647       >4       1           Particles >38μm       ASTM D7647       >4       1           Particles >38μm       ASTM D7647       >3       0           Particles >71μm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       16/14/11           FLUID DEGRADATION       method       limit/base       current       history1       history2	Particles >6µm		ASTM D7647	>1300	94		
Particles >21μm         ASTM D7647         >20         5             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         16/14/11             FLUID DEGRADATION         method         limit/base         current         history1         history2	· · · · · ·		ASTM D7647	>80	13		
Particles >38μm         ASTM D7647         >4         1             Particles >71μm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         16/14/11             FLUID DEGRADATION         method         limit/base         current         history1         history2							
Particles >71μm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         16/14/11             FLUID DEGRADATION         method         limit/base         current         history1         history2							
Oil Cleanliness       ISO 4406 (c)       >/17/13       16/14/11           FLUID DEGRADATION       method       limit/base       current       history1       history2							
FLUID DEGRADATION method limit/base current history1 history2	-						
	FLUID DEGRADA		( )		current	historv1	history2
	NGIO INUTIDET (AIN)	iiiy NUH/g	AOTIVI DOU40	1.0	0.37		

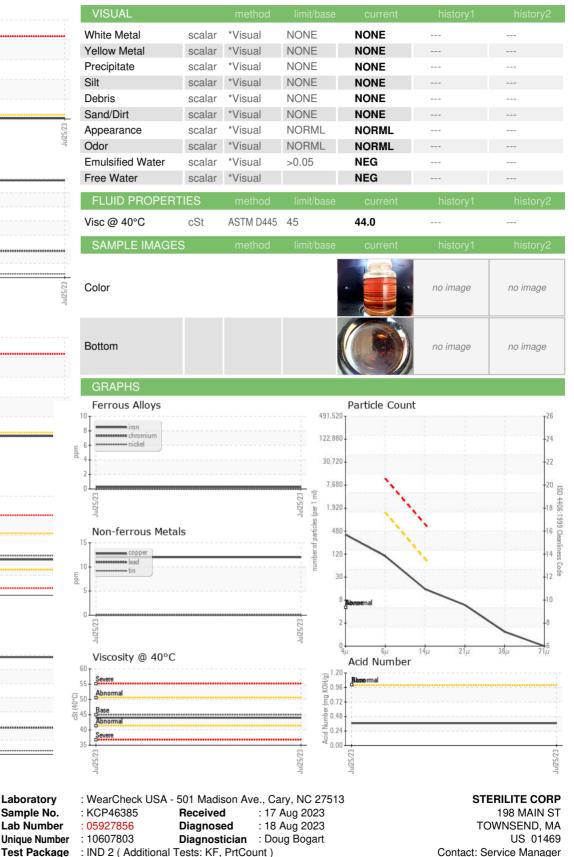


## **OIL ANALYSIS REPORT**









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)

Certificate L2367

Unique Number