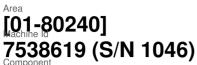


## **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO



Compressor

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

#### DIAGNOSIS

#### A 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.

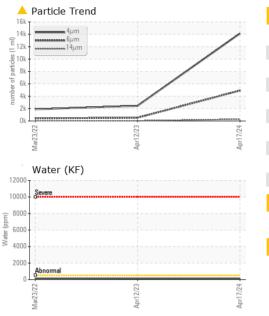
#### **Fluid Condition**

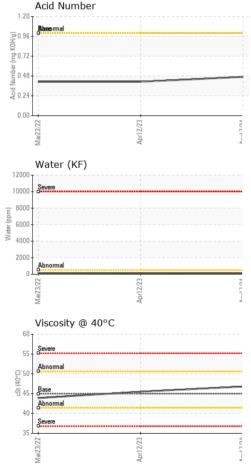
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Machine Age   hrs   Client Info   10559   7615   4514     Oil Age   hrs   Client Info   0   3000   3000     Oil Changed   Client Info   Changed   Changed   Changed   Changed     Sample Status   method   limit/base   current   history1   h     Iron   ppm   ASTM D5185m   >50   0   <1   0   0     Nickel   ppm   ASTM D5185m   >3   <1   0   0   0     Nickel   ppm   ASTM D5185m   >3   <1   0   0   0     Silver   ppm   ASTM D5185m   >3   <1   0   0   0     Aluminum   ppm   ASTM D5185m   >10   <1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   0   1	ar 2022 ged
Machine Age   hrs   Client Info   10559   7615   4514     Oil Age   hrs   Client Info   0   3000   3000     Oil Changed   Client Info   Changed   Changed   Changed   Changed     Sample Status   Imit/base   current   history1   h     WEAR METALS   method   limit/base   current   history1   h     Iron   ppm   ASTM D5185m   >50   0   <1	ged /AL
Dil Age   hrs   Client Info   0   3000   3000   3000     Dil Changed   Client Info   Changed   Changed   Changed   Changed   Changed   Changed   NORMAL   NORM	ЛАL
Oil Changed Sample StatusClient InfoChanged ABNORMALChanged NORMALChanged NORMALChanged NORMALChanged NORMALChanged 	ЛАL
Sample Status   method   limit/base   current   history1   h     Iron   ppm   ASTM D5185m   >50   0   <1	ЛАL
WEAR METALS   method   limit/base   current   history1   h     ron   ppm   ASTM D5185m   >50   0   <1	
Iron   ppm   ASTM D5185m   >50   0   <1   0     Chromium   ppm   ASTM D5185m   >10   <1	istory2
Chromium   ppm   ASTM D5185m   >10   <1   0   0     Nickel   ppm   ASTM D5185m   >3   <1	
Dromium   ppm   ASTM D5185m   >10   <1   0   0     Nickel   ppm   ASTM D5185m   >3   <1	
Nickel   ppm   ASTM D5185m   >3   <1   0   0     Titanium   ppm   ASTM D5185m   >3   <1	
Titanium   ppm   ASTM D5185m   >3   <1   0   0     Silver   ppm   ASTM D5185m   >2   <1	
Silver ppm ASTM D5185m >2 <1 0 0   Aluminum ppm ASTM D5185m >10 3 <1 2   Lead ppm ASTM D5185m >10 <1 0 <1   Copper ppm ASTM D5185m >50 4 3 7   Tin ppm ASTM D5185m >50 4 3 7   Vanadium ppm ASTM D5185m >50 4 3 7   Vanadium ppm ASTM D5185m >10 <1 0 0   Cadmium ppm ASTM D5185m 0 <1 0 0   ADDITIVES method limit/base current history1 h   Boron ppm ASTM D5185m 0 0 0 0   Barium ppm ASTM D5185m 90 0 0 0   Magnesium ppm ASTM D5185m 0 <1 0 0   Magnesium ppm ASTM D5185m 0 0 <1 0	
Aluminum   ppm   ASTM D5185m   >10   3   <1   2     Lead   ppm   ASTM D5185m   >10   <1	
Lead   ppm   ASTM D5185m   >10   <1   0   <1     Copper   ppm   ASTM D5185m   >50   4   3   7     Tin   ppm   ASTM D5185m   >10   <1   0   <1     Vanadium   ppm   ASTM D5185m   >10   <1   0   <1     Vanadium   ppm   ASTM D5185m   <10   <1   0   0     Cadmium   ppm   ASTM D5185m   <10   <1   0   0     ADDITIVES   method   limit/base   current   history1   h     Boron   ppm   ASTM D5185m   0   0   0   0   0     Barium   ppm   ASTM D5185m   0   <1   0   0     Magnaese   ppm   ASTM D5185m   0   <1   <1   0     Magnesium   ppm   ASTM D5185m   0   0   <1   0     Phosphorus   ppm   ASTM D5185m   0   0   <1	
Copper   ppm   ASTM D5185m   >50   4   3   7     Tin   ppm   ASTM D5185m   >10   <1	
Tin   ppm   ASTM D5185m   >10   <1   0   <1     Vanadium   ppm   ASTM D5185m   >10   <1   0   0     Cadmium   ppm   ASTM D5185m   <10   <1   0   0     Cadmium   ppm   ASTM D5185m   <1   0   0     ADDITIVES   method   limit/base   current   history1   h     Boron   ppm   ASTM D5185m   0   0   0   0   0     Barium   ppm   ASTM D5185m   90   0   0   0   0     Malganese   ppm   ASTM D5185m   0   <1   0   0     Magnesium   ppm   ASTM D5185m   100   18   27   15     Calcium   ppm   ASTM D5185m   0   0   <1   0     Phosphorus   ppm   ASTM D5185m   0   0   <1   0     Zinc   ppm   ASTM D5185m   0   0   <1 <td></td>	
VanadiumppmASTM D5185m<100CadmiumppmASTM D5185m<1	
CadmiumppmASTM D5185m<100ADDITIVESmethodlimit/basecurrenthistory1hBoronppmASTM D5185m0000BariumppmASTM D5185m90000MolybdenumppmASTM D5185m0<1	
Boron   ppm   ASTM D5185m   0	
Barium   ppm   ASTM D5185m   90   0   0   0     Molybdenum   ppm   ASTM D5185m   0   <1	istory2
Molybdenum   ppm   ASTM D5185m   0   <1   0   0     Manganese   ppm   ASTM D5185m   <<1	
Manganese   ppm   ASTM D5185m   <1   <1   0     Magnesium   ppm   ASTM D5185m   100   18   27   15     Calcium   ppm   ASTM D5185m   0   0   <1	
Manganese   ppm   ASTM D5185m   <1   <1   0     Magnesium   ppm   ASTM D5185m   100   18   27   15     Calcium   ppm   ASTM D5185m   0   0   <1	
Magnesium   ppm   ASTM D5185m   100   18   27   15     Calcium   ppm   ASTM D5185m   0   0      100   18   27   15     Calcium   ppm   ASTM D5185m   0   0 <th< th=""></th<>	
Calcium   ppm   ASTM D5185m   0   0   <1   0     Phosphorus   ppm   ASTM D5185m   0   0   <1   0     Zinc   ppm   ASTM D5185m   0   36   23   16     Sulfur   ppm   ASTM D5185m   23500   19008   22720   163     CONTAMINANTS   method   limit/base   current   history1   h	
Zinc   ppm   ASTM D5185m   0   36   23   16     Sulfur   ppm   ASTM D5185m   23500   19008   22720   16     CONTAMINANTS   method   limit/base   current   history1   h	
ZincppmASTM D5185m0362316SulfurppmASTM D5185m23500190082272016CONTAMINANTSmethodlimit/basecurrenthistory1h	
SulfurppmASTM D5185m235001900822720163CONTAMINANTSmethodlimit/basecurrenthistory1h	
	738
	istory2
Silicon ppm ASTM D5185m >25 1 0 <1	
Sodium ppm ASTM D5185m <b>4</b> 8 2	
Potassium ppm ASTM D5185m >20 3 <1 3	
Water % ASTM D6304 >0.05 0.010 0.012 0.0	09
ppm Water ppm ASTM D6304 >500 <b>108</b> 125.8 95.	2
FLUID CLEANLINESS method limit/base current history1 h	istory2
Particles >4μm   ASTM D7647   14126   2451   189	
Particles >6μm   ASTM D7647   >1300   ▲ 4909   517   42°	
Particles >14μm   ASTM D7647   >80   ▲ 290   30   44	90
Particles >21μm   ASTM D7647   >20   ▲ 56   9   9   9	90
Particles >38μm   ASTM D7647   >4   1   0   0	90
Particles >71μm   ASTM D7647   >3   0   0   0	90
Oil Cleanliness ISO 4406 (c) >/17/13 <b>△ 21/19/15</b> 18/16/12 16/	90
FLUID DEGRADATION method limit/base current history1 h	90
Acid Number (AN) mg KOH/g ASTM D8045 1.0 0.47 0.41 0.4	90



# **OIL ANALYSIS REPORT**

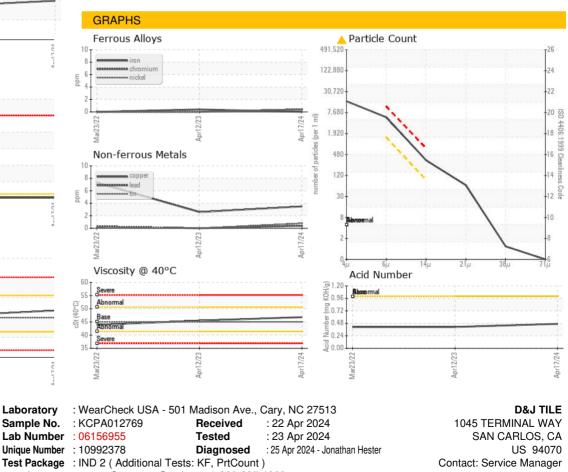




E.

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	NONE	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	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.8	45.5	43.9
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color				•		

Bottom



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) T: F:

Certificate 12367

Contact/Location: Service Manager - DJTSAN Page 2 of 2