

# **OIL ANALYSIS REPORT**

## **KAESER S-460 [6162]** KAESER 1040 - COMP 1 - CVS CAREMARK Component

Compressor

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

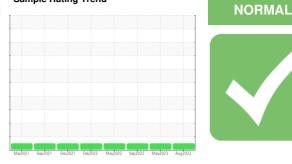
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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



Sample Rating Trend

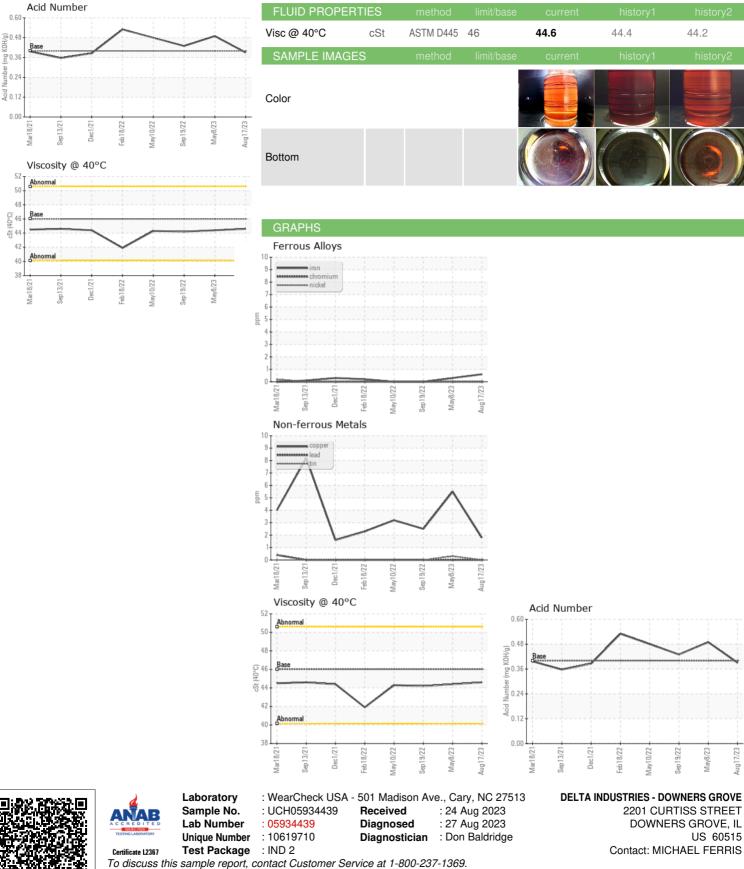


Iron ppm ASTM D5185m >50 <1	ed
Sample Date Client Info 17 Aug 2023 08 May 2023 19 Sep Machine Age   Machine Age hrs Client Info 21895 19500 14035   Oil Age hrs Client Info 1700 5465 3146   Oil Changed Client Info Not Changd Not Changd Changed   Sample Status Image Image Not Changd NorRMAL NORMAL   WEAR METALS method Imit/base current history1 history1   Iron ppm ASTM D5185m >50 <1 <1 0   Chromium ppm ASTM D5185m >10 0 0 0   Nickel ppm ASTM D5185m >3 0 0 0   Silver ppm ASTM D5185m >10 0 0 0   Aluminum ppm ASTM D5185m >10 0 0 0   Copper ppm ASTM D5185m >10 0 0 0	ed AL
Machine Age hrs Client Info 21895 19500 14035   Oil Age hrs Client Info 1700 5465 3146   Oil Changed Client Info Not Changd Not Changd Change   Sample Status Imathematical Content Nor Changd Nor MAL NORMAL NORMAL   WEAR METALS method limit/base current history1 history1   Iron ppm ASTM D5185m >50 <1 <1 0   Chromium ppm ASTM D5185m >10 0 0 0 0   Nickel ppm ASTM D5185m >3 0 0 0 0   Silver ppm ASTM D5185m >3 0 0 0 0   Aluminum ppm ASTM D5185m >10 0 0 0 0   Copper ppm ASTM D5185m >10 0 0 0 0   Vanadium ppm AS	AL
Oil Changed Sample StatusClient InfoNot Changd NORMALNot Changd NORMALNor MaleWEAR METALSmethodlimit/basecurrenthistory1history1IronppmASTM D5185m>50<1<10ChromiumppmASTM D5185m>10000NickelppmASTM D5185m>3000NickelppmASTM D5185m>3000SilverppmASTM D5185m>2000AluminumppmASTM D5185m>10<1<111LeadppmASTM D5185m>50262TinppmASTM D5185m>50262TinppmASTM D5185m>10000VanadiumppmASTM D5185m>10000CadmiumppmASTM D5185m>10000CadmiumppmASTM D5185m0000ADDITIVESmethodlimit/basecurrenthistory1history1BoronppmASTM D5185m0000	AL
Sample Status Image: Mode of the status Normation of the status Normatic status	AL
WEAR METALS method limit/base current history1 history1   Iron ppm ASTM D5185m >50 <1 <1 0   Chromium ppm ASTM D5185m >10 0 0 0   Nickel ppm ASTM D5185m >3 0 0 0   Titanium ppm ASTM D5185m >3 0 0 0   Silver ppm ASTM D5185m >3 0 0 0   Aluminum ppm ASTM D5185m >10 <1 <1 1   Lead ppm ASTM D5185m >10 <1 <1 1   Lead ppm ASTM D5185m >10 0 0 0   Copper ppm ASTM D5185m >50 2 6 2 2   Tin ppm ASTM D5185m >10 0 <1 0 0   Vanadium ppm ASTM D5185m 0 0<	
Iron ppm ASTM D5185m >50 <1	story2
Chromium ppm ASTM D5185m >10 0 0 0   Nickel ppm ASTM D5185m >3 0 0 0 0   Titanium ppm ASTM D5185m >3 0 0 0 0   Silver ppm ASTM D5185m >2 0 0 0 0   Aluminum ppm ASTM D5185m >2 0 0 0 0   Aluminum ppm ASTM D5185m >10 <1 1 1 1   Lead ppm ASTM D5185m >10 0 0 0 0   Copper ppm ASTM D5185m >50 2 6 2 0	
Nickel ppm ASTM D5185m >3 0 0 0   Titanium ppm ASTM D5185m >3 0 0 0 0   Silver ppm ASTM D5185m >2 0 0 0 0   Aluminum ppm ASTM D5185m >2 0 0 0 0   Aluminum ppm ASTM D5185m >10 <1 <1 1   Lead ppm ASTM D5185m >10 0 0 0   Copper ppm ASTM D5185m >50 2 6 2   Tin ppm ASTM D5185m >10 0 <1 0   Vanadium ppm ASTM D5185m >10 0 0 0   Cadmium ppm ASTM D5185m 0 0 0 0   ADDITIVES method limit/base current history1 history1	
Titanium ppm ASTM D5185m >3 0 0 0   Silver ppm ASTM D5185m >2 0 0 0 0   Aluminum ppm ASTM D5185m >10 <1 <1 1   Lead ppm ASTM D5185m >10 <1 <1 1   Lead ppm ASTM D5185m >10 0 0 0   Copper ppm ASTM D5185m >50 2 6 2   Tin ppm ASTM D5185m >10 0 <1 0   Vanadium ppm ASTM D5185m >10 0 0 0   Cadmium ppm ASTM D5185m 0 0 0 0   ADDITIVES method limit/base current history1 history1   Boron ppm ASTM D5185m 0 0 0 0	
Silver ppm ASTM D5185m >2 0 0 0   Aluminum ppm ASTM D5185m >10 <1	
Aluminum ppm ASTM D5185m >10 <1	
Lead ppm ASTM D5185m >10 0 0 0   Copper ppm ASTM D5185m >50 2 6 2   Tin ppm ASTM D5185m >10 0 <11	
Copper ppm ASTM D5185m >50 2 6 2   Tin ppm ASTM D5185m >10 0 <1	
Tin ppm ASTM D5185m >10 0 <1	
VanadiumppmASTM D5185m00CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1hisBoronppmASTM D5185m0000	
CadmiumppmASTM D5185m00ADDITIVESmethodlimit/basecurrenthistory1hisBoronppmASTM D5185m000	
ADDITIVESmethodlimit/basecurrenthistory1hisBoronppmASTM D5185m000	
Boron ppm ASTM D5185m 0 0	
i pp i i i i i i i i i i i i i i i i i	story2
Molybdenum ppm ASTM D5185m 0 0 0	
Manganese ppm ASTM D5185m 0 <1	
Magnesium ppm ASTM D5185m 90 28 6 3	
Calcium ppm ASTM D5185m 2 0 0 0	
Phosphorus ppm ASTM D5185m 2 <1	
Zinc ppm ASTM D5185m 10 0 2	
Sulfur ppm ASTM D5185m 19092 21287 2094	49
CONTAMINANTS method limit/base current history1 his	story2
Silicon ppm ASTM D5185m >25 0 <1	
Sodium ppm ASTM D5185m 10 4 <1	
Potassium ppm ASTM D5185m >20 2 1 0	
FLUID DEGRADATION method limit/base current history1 his	story2
Acid Number (AN) mg KOH/g ASTM D8045 0.4 0.39 0.49 0.43	
VISUAL method limit/base current history1 his	story2
White Metal scalar *Visual 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	١E
Debris scalar *Visual NONE NONE MODER NON	
Sand/Dirt scalar *Visual NONE NONE NONE NONE	νE
Appearance scalar *Visual NORML NORML NORML NORML	
Odor scalar *Visual NORML NORML NORML NOR	RML
Emulsified Water scalar *Visual >0.05 NEG NEG NEG	
Free Water scalar *Visual NEG NEG	RML

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# **OIL ANALYSIS REPORT**



\* - 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: (630)960-3931

US 60515

Sep19/22

May10/22

May8/23

Aug17/23

44.2

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