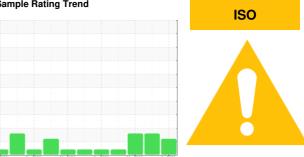


PROBLEM SUMMARY

Sample Rating Trend

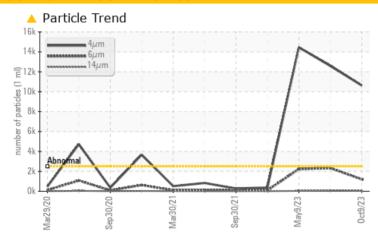


RC-4 (S/N R60182)

Component **Reciprocating Compressor**

CHEVRON REFRIGERATION OIL WF 68 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS | | | | | | | | |
|--------------------------|-------------------|-------------------------|-------------------|-------------------|--|--|--|--|
| Sample Status | | ABNORMAL | ABNORMAL | ABNORMAL | | | | |
| Particles >4µm | ASTM D7647 >250 | 00 A 10625 | <u>12589</u> | <u>14458</u> | | | | |
| Particles >6µm | ASTM D7647 >320 | 1200 | △ 2332 | <u>2235</u> | | | | |
| Oil Cleanliness | ISO 4406 (c) >18/ | 15/12 A 21/17/12 | <u>^</u> 21/18/13 | <u>^</u> 21/18/13 | | | | |

Customer Id: KRAWAL Sample No.: PCA0106627 Lab Number: 05978334 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---------------|--------|------|---------|---|
| Change Filter | | | ? | We recommend you service the filters on this component if applicable. |

HISTORICAL DIAGNOSIS

26 Jul 2023 Diag: Don Baldridge





We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



09 May 2023 Diag: Jonathan Hester

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



19 Jan 2023 Diag: Jonathan Hester

VISCOSITY



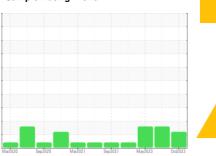
Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. The amount and size of particulates present in the system are acceptable. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.





OIL ANALYSIS REPORT

Sample Rating Trend



ISO

RC-4 (S/N R60182)

Reciprocating Compressor

CHEVRON REFRIGERATION OIL WF 68 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

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

| - GAL) | | Mar2020 | Sep2020 Mar2021 | Sep2021 May2023 | Oct2023 | |
|------------------|----------|--------------|-----------------|-----------------|------------------------|-------------------|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | PCA0106627 | PCA0101702 | PCA0095713 |
| Sample Date | | Client Info | | 09 Oct 2023 | 26 Jul 2023 | 09 May 2023 |
| Machine Age | hrs | Client Info | | 37768 | 37767 | 37767 |
| Oil Age | hrs | Client Info | | 1 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Changed |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 0 | 0 | 0 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 1 | 0 | 11 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 2 | 0 | 13 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 13 |
| Phosphorus | ppm | ASTM D5185m | | <1 | 0 | 14 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 71 |
| Sulfur | ppm | ASTM D5185m | | 118 | 88 | 127 |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 0 | <1 | 0 |
| Sodium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Water | % | ASTM D6304 | >0.1 | 0.002 | 0.001 | 0.002 |
| ppm Water | ppm | ASTM D6304 | >1000 | 15.7 | 7.0 | 21.8 |
| FLUID CLEANL | INESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >2500 | 10625 | <u>12589</u> | <u> </u> |
| Particles >6µm | | ASTM D7647 | >320 | 1200 | <u>\$\text{2332}\$</u> | <u>^</u> 2235 |
| Particles >14µm | | ASTM D7647 | >40 | 38 | △ 65 | <u>42</u> |
| Particles >21µm | | ASTM D7647 | >10 | 9 | 10 | 10 |
| Particles >38µm | | ASTM D7647 | >3 | 1 | 0 | 1 |
| Particles >71μm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >18/15/12 | <u> </u> | <u></u> 21/18/13 | <u>^</u> 21/18/13 |
| FLUID DEGRAD | OATION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.014 | 0.014 | 0.014 |



OIL ANALYSIS REPORT

