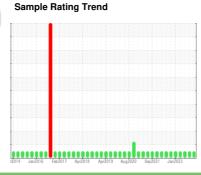


# **OIL ANALYSIS REPORT**

<sup>Area</sup> [2076019] BC-16 (S/N 0039)

**Refrigeration Compressor** 

**CHEVRON REFRIGERATION OIL WF 68 (150 GAL)** 





## DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

The water content is negligible. There is no indication of any contamination in the oil.

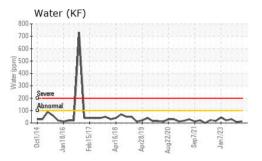
## **Fluid Condition**

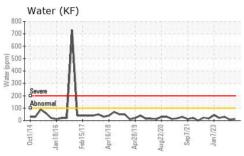
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

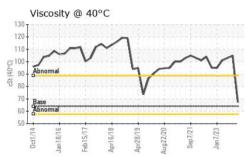
| SAMPLE INFORM | MATION | method               | limit/base         | current       | history1        | history2         |
|---------------|--------|----------------------|--------------------|---------------|-----------------|------------------|
| Sample Number |        | Client Info          |                    | WC0914841     | WC0857541       | WC0831587        |
| Sample Date   |        | Client Info          |                    | 24 Mar 2024   | 25 Oct 2023     | 10 Jul 2023      |
| Machine Age   | hrs    | Client Info          |                    | 95841         | 93994           | 92758            |
| Oil Age       | hrs    | Client Info          |                    | 0             | 0               | 0                |
| Oil Changed   |        | Client Info          |                    | N/A           | N/A             | N/A              |
| Sample Status |        |                      |                    | NORMAL        | NORMAL          | NORMAL           |
| WEAR METALS   |        | method               | limit/base         | current       | history1        | history2         |
| Iron          | ppm    | ASTM D5185m          | >8                 | 2             | 9               | 8                |
| Chromium      | ppm    | ASTM D5185m          | >2                 | 0             | 0               | 0                |
| Nickel        | ppm    | ASTM D5185m          |                    | 0             | 0               | <1               |
| Titanium      | ppm    | ASTM D5185m          |                    | 0             | <1              | 0                |
| Silver        | ppm    | ASTM D5185m          | >2                 | 0             | 0               | 0                |
| Aluminum      | ppm    | ASTM D5185m          | >3                 | 0             | 1               | 0                |
| Lead          | ppm    | ASTM D5185m          | >2                 | 0             | <1              | <1               |
| Copper        | ppm    | ASTM D5185m          | >8                 | 0             | <1              | <1               |
| Tin           | ppm    | ASTM D5185m          | >4                 | 0             | 0               | 0                |
| Vanadium      | ppm    | ASTM D5185m          |                    | 0             | 0               | 0                |
| Cadmium       | ppm    | ASTM D5185m          |                    | 0             | <1              | 0                |
| ADDITIVES     |        | method               | limit/base         | current       | history1        | history2         |
| Boron         | ppm    | ASTM D5185m          |                    | 0             | 0               | 0                |
| Barium        | ppm    | ASTM D5185m          |                    | 0             | 0               | 2                |
| Molybdenum    | ppm    | ASTM D5185m          |                    | 0             | 0               | 0                |
| Manganese     | ppm    | ASTM D5185m          |                    | 0             | 0               | 0                |
| Magnesium     | ppm    | ASTM D5185m          |                    | 0             | 0               | 0                |
| Calcium       | ppm    | ASTM D5185m          |                    | 0             | 0               | 0                |
| Phosphorus    | ppm    | ASTM D5185m          |                    | 0             | 4               | <1               |
| Zinc          | ppm    | ASTM D5185m          |                    | 0             | 3               | 4                |
| Sulfur        | ppm    | ASTM D5185m          |                    | 28            | 137             | 227              |
| CONTAMINANTS  |        | method               | limit/base         | current       | history1        | history2         |
| Silicon       | ppm    | ASTM D5185m          | >15                | 0             | <1              | 0                |
| Sodium        | ppm    | ASTM D5185m          |                    | 1             | 0               | 0                |
| Potassium     | ppm    | ASTM D5185m          | >20                | 0             | <1              | 0                |
|               | %      | ASTM D6304           | >0.01              | 0.001         | 0.001           | 0.003            |
| Water         | 70     |                      |                    |               |                 |                  |
| ppm Water     | ppm    | ASTM D6304           | >100               | 14            | 8.0             | 30.6             |
|               | ppm    | ASTM D6304<br>method | >100<br>limit/base | 14<br>current | 8.0<br>history1 | 30.6<br>history2 |



# **OIL ANALYSIS REPORT**







| VISUAL                  |        | method  |       |       |       | 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    |
| <b>Emulsified Water</b> | scalar | *Visual | >0.01 | NEG   | NEG   | NEG      |
| Free Water              | scalar | *Visual |       | NEG   | NEG   | NEG      |
|                         |        |         |       |       |       |          |

| FLUID PROPER | HES | metnoa    | ilmit/base | current | nistory i | nistory |
|--------------|-----|-----------|------------|---------|-----------|---------|
| Visc @ 40°C  | cSt | ASTM D445 | 64.0       | 67.2    | 105       | 103     |

| SAMPLE IMAGES | method |  |  |  | history2 |
|---------------|--------|--|--|--|----------|
|---------------|--------|--|--|--|----------|

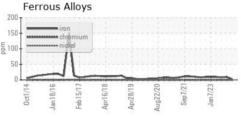
Color

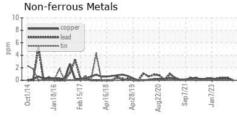


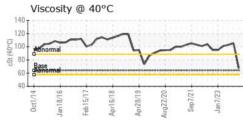


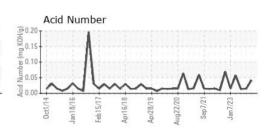


**GRAPHS** 













Certificate L2367

Laboratory Sample No. Unique Number: 10951557

Test Package : IND 2

: WC0914841 Lab Number : 06132092

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

**Tested** Diagnosed

: 28 Mar 2024 : 29 Mar 2024

: 02 Apr 2024 - Angela Borella

LAMB WESTON/RDO PO BOX 552 PARK RAPIDS, MN US 56470

Contact: MICHAEL GRUIS michael.gruis@lambweston.com

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. T: (218)732-2188 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (218)732-2175