

## **OIL ANALYSIS REPORT**



Machine Id **LT-1** (S/N 16016R) Component Component Refrigeration Compressor Fluid USPI 1009-68 SC (--- 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.

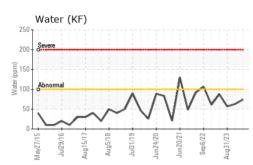
### Fluid Condition

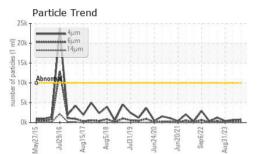
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

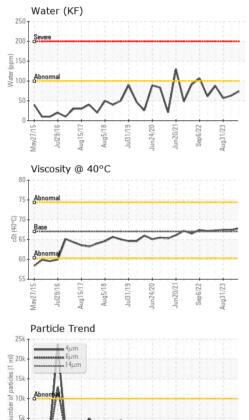
| SAMPLE INFORM         | /IATION  | method       | limit/base | current     | history1    | history2    |
|-----------------------|----------|--------------|------------|-------------|-------------|-------------|
| Sample Number         |          | Client Info  |            | USP0006567  | USP0004196  | USP0000357  |
| Sample Date           |          | Client Info  |            | 23 Apr 2024 | 13 Dec 2023 | 31 Aug 2023 |
| Machine Age           | hrs      | Client Info  |            | 0           | 0           | 0           |
| 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         | 0           | 0           | 3           |
| Chromium              | ppm      | ASTM D5185m  | >2         | <1          | 0           | 0           |
| Nickel                | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Titanium              | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Silver                | ppm      | ASTM D5185m  | >2         | 0           | 0           | 0           |
| Aluminum              | ppm      | ASTM D5185m  | >3         | 0           | 0           | 0           |
| Lead                  | ppm      | ASTM D5185m  | >2         | <1          | 0           | 0           |
| Copper                | ppm      | ASTM D5185m  | >8         | <1          | 0           | 0           |
| Tin                   | ppm      | ASTM D5185m  | >4         | <1          | 0           | <1          |
| Vanadium              | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Cadmium               | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| ADDITIVES             |          | method       | limit/base | current     | history1    | history2    |
| Boron                 | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Barium                | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Molybdenum            | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Manganese             | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Magnesium             | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Calcium               | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Phosphorus            | ppm      | ASTM D5185m  |            | 0           | 0           | 1           |
| Zinc                  | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Sulfur                | ppm      | ASTM D5185m  | 50         | 0           | 0           | 27          |
| CONTAMINANTS          | ;        | method       | limit/base | current     | history1    | history2    |
| Silicon               | ppm      | ASTM D5185m  | >15        | <1          | 0           | 0           |
| Sodium                | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Potassium             | ppm      | ASTM D5185m  | >20        | <1          | 0           | 1           |
| Water                 | %        | ASTM D6304   | >0.01      | 0.007       | 0.006       | 0.005       |
| ppm Water             | ppm      | ASTM D6304   | >100       | 74          | 63          | 57.0        |
| FLUID CLEANLIN        | IESS     | method       | limit/base | current     | history1    | history2    |
| Particles >4µm        |          | ASTM D7647   | >10000     | 766         | 706         | 424         |
| Particles >6µm        |          | ASTM D7647   | >2500      | 237         | 216         | 128         |
| Particles >14 $\mu$ m |          | ASTM D7647   | >320       | 18          | 12          | 16          |
| Particles >21µm       |          | ASTM D7647   | >80        | 4           | 2           | 6           |
| Particles >38µm       |          | ASTM D7647   | >20        | 0           | 0           | 0           |
| Particles >71µm       |          | ASTM D7647   | >4         | 0           | 0           | 0           |
| Oil Cleanliness       |          | ISO 4406 (c) | >20/18/15  | 17/15/11    | 17/15/11    | 16/14/11    |
| FLUID DEGRADA         | TION     | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN)      | mg KOH/g | ASTM D974    | 0.005      | 0.014       | 0.015       | 0.014       |



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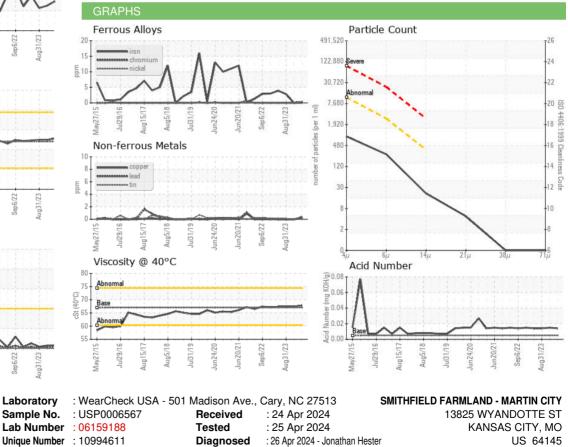




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| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | 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   | >0.01      | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERT    | IES    | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 67         | 67.8    | 67.4     | 67.5     |
| SAMPLE IMAGES    | \$     | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         |          |          |
| Bottom           |        |           |            |         |          |          |



Certificate L2367 Test Package : IND 2

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)

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Contact/Location: ? ? - SMIKAN Page 2 of 2