

OIL ANALYSIS REPORT



Machine Id LT-601 Component Refrigeration Compressor Fluid M & M 717 (--- GAL)

DIAGNOSIS

A Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

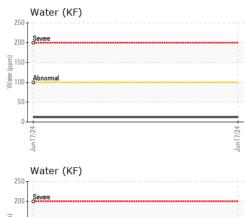
Fluid Condition

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

| SAMPLE INFORM | /IATION | method | limit/base | current | history1 | history2 |
|---|--|--|-----------------------------------|---|------------------------------|------------------------------|
| Sample Number | | Client Info | | USP0013044 | | |
| Sample Date | | Client Info | | 17 Jun 2024 | | |
| Machine Age | hrs | Client Info | | 5 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | ABNORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >8 | 0 | | |
| Chromium | ppm | ASTM D5185m | >2 | <1 | | |
| Nickel | ppm | ASTM D5185m | | 0 | | |
| Titanium | ppm | ASTM D5185m | | 0 | | |
| Silver | ppm | ASTM D5185m | >2 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >3 | 0 | | |
| Lead | ppm | ASTM D5185m | >2 | 0 | | |
| Copper | ppm | ASTM D5185m | >8 | 0 | | |
| Tin | ppm | ASTM D5185m | >4 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | limit/base | current 0 | history1 | history2 |
| | ppm ppm | | limit/base | | | |
| Boron | | ASTM D5185m | limit/base | 0 | | |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | limit/base | 0 0 | | |
| Boron Barium Molybdenum | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 0 0 | | |
| Boron Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 0 0 | | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 0 0 <1 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 0 0 <1 0 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 0 <1 0 0 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 0 0 <1 0 0 0 0 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 0 <1 0 0 0 0 0 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 0 0 <1 0 0 0 0 0 0 0 0 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | limit/base | 0 0 0 <1 0 0 0 0 0 0 0 0 0 0 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | limit/base >15 | 0 0 0 3 3 4 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base >15 >20 | 0 0 0 3 3 4 1 0 0 0 0 0 0 0 0 0 0 0 1 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base >15 >20 >0.01 | 0 0 0 2 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0 | history1 | history2 |



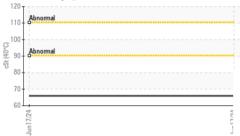
OIL ANALYSIS REPORT







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| | VISUAL | | method | limit/base | current | history1 | history2 |
|------------|--|--|-----------|-------------------|--|--|----------|
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | Precipitate | scalar | *Visual | NONE | NONE | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| + +2// Lun | Appearance | scalar | *Visual | NORML | NORML | | |
| | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | scalar | *Visual | >0.01 | NEG | | |
| | Free Water | scalar | *Visual | | NEG | | |
| | | | | line it /le e e e | | | |
| | FLUID PROPER | | method | limit/base | current | history1 | history2 |
| | Visc @ 40°C | cSt | ASTM D445 | | 65.9 | | |
| | SAMPLE IMAGE | S | method | limit/base | current | history1 | history2 |
| | Color | | | | HIS - LICE ALL There is a the derivative trans- tice of the derivative production of the derivative pro | no image | no image |
| | Bottom | | | | | no image | no image |
| | Non-ferrous Meta | ls | | Jun17/24 | Acid Number | | |
| | 100 Abnormal (0.00) 90 Abnormal 80 4 70 4 60 4 70 5 70 5 70 5 70 | | | Jun17/24 + | 01 01 00 472/Llunr | | |
| lumber | : USP0013044 : 06221280 : 11099477 : IND 2 | 6221280 Tested : 27 Jun 2024 1099477 Diagnosed : 27 Jun 2024 - Doug Bogart | | | | SMITHFIELD - SIOUX CIT 1000 CUNNINGHAM D SIOUX CITY, I US 5110 Contact: D PEARSO | |

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 L2367

Contact/Location: D PEARSON - SMISIOCUR

Page 2 of 2