

Machine Id MYCOM A

Component Compressor

250k

200k

(m l) saticles (l m) 150k

50k

0k

Mar26/18

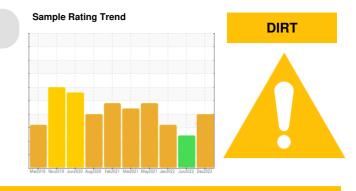
PROBLEM SUMMARY

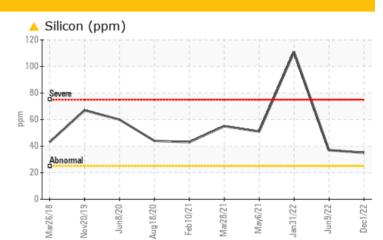
Dec1/22 -

Jan31/22

May6/2

Jun9/22





RECOMMENDATION

Vov20/19

Resample at the next service interval to monitor.

Jun8/20

Aug18/20

Feb10/21

Mar28/2

TULCO LUBSOIL LPG WI 100 (--- GAL)

COMPONENT CONDITION SUMMARY

lum um

4111

Particle Trend

| PROBLEMATIC TEST RESULTS | | | | | | |
|--------------------------|-----|--------------|-----------|-------------|-------------|--------------|
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| Silicon | ppm | ASTM D5185m | >25 | <u> </u> | 4 37 | 🔺 111 |
| Particles >4µm | | ASTM D7647 | >10000 | 🔺 100713 | 9886 | 63348 |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | 🔺 1661 | 🔺 16426 |
| Particles >14µm | | ASTM D7647 | >320 | 4038 | 34 |) 994 |
| Particles >21µm | | ASTM D7647 | >80 | <u> </u> | 9 | <u> </u> |
| Particles >38µm | | ASTM D7647 | >20 | A 76 | 0 | 4 |
| Oil Cleanliness | | ISO 4406 (c) | >20/17/15 | <u> </u> | 🔺 20/18/12 | 🔺 23/21/17 |

Customer Id: MELMELTX Sample No.: TO50000123 Lab Number: 05708432 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Angela Borella +1 800-237-1369 angela.borella@wearcheckusa.com

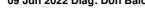
To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

| Page | 1 | of 4 | 1 |
|-------|---|----------|---|
| - ago | | <u> </u> | • |

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

09 Jun 2022 Diag: Don Baldridge

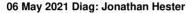


No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



We recommend you service the filters on this component if applicable. 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. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid.









The filter change at the time of sampling has been noted. 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. Moderate concentration of visible metal present. All component wear rates are normal. There is a moderate concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

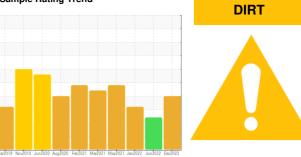




Machine Id MYCOM A

OIL ANALYSIS REPORT

Sample Rating Trend



Component Compressor Fluid TULCO LUBSOIL LPG WI 100 (--- 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.

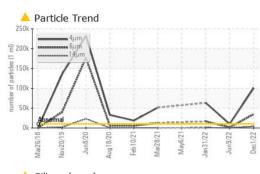
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|------------------|----------|--------------|------------|-------------------|--------------|-------------|
| Sample Number | | Client Info | | TO50000123 | TO50000121 | TO5000086 |
| Sample Date | | Client Info | | 01 Dec 2022 | 09 Jun 2022 | 31 Jan 2022 |
| Machine Age | mths | Client Info | | 0 | 0 | 0 |
| Oil Age | mths | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Filtered | Filtered | N/A |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | <1 | 0 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | | 0 | <1 | 2 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >25 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >50 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m | >15 | <1 | 1 | <1 |
| Antimony | ppm | ASTM D5185m | | | | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 0 | <1 | 3 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 0 | 2 | <1 | <1 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Phosphorus | ppm | ASTM D5185m | 0 | 38 | 17 | 14 |
| Zinc | ppm | ASTM D5185m | 0 | 5 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 0 | 1607 | 2656 | 2309 |
| CONTAMINANTS | 5 | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 4 35 | A 37 | 1 11 |
| Sodium | ppm | ASTM D5185m | | 1 | 0 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | 2 |
| Water | % | ASTM D6304 | >2.26 | 0.172 | 0.963 | 0.357 |
| ppm Water | ppm | ASTM D6304 | >22600 | 1725.0 | 9630 | 3578.2 |
| FLUID CLEANLIN | NESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | A 100713 | 9886 | ▲ 63348 |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | 1 661 | 16426 |
| Particles >14µm | | ASTM D7647 | >320 | <u> </u> | 34 | 9 94 |
| Particles >21µm | | ASTM D7647 | >80 | <u> </u> | 9 | <u> </u> |
| Particles >38µm | | ASTM D7647 | >20 | <mark>/</mark> 76 | 0 | 4 |
| Particles >71µm | | ASTM D7647 | >4 | 4 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/17/15 | A 24/22/19 | ▲ 20/18/12 | ▲ 23/21/17 |
| FLUID DEGRAD | ATION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.79 | 0.401 | 0.705 |
| :51:12) Rev: 1 | 9 | | | | | |

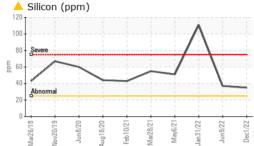
Report Id: MELMELTX [WUSCAR] 05708432 (Generated: 07/19/2023 14:51:12) Rev: 1

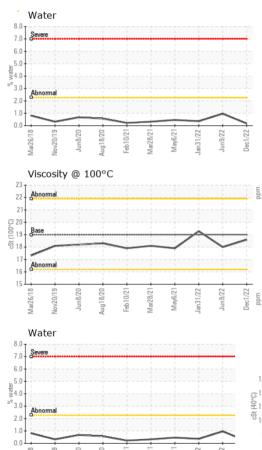
Contact/Location: BILL PALMER - MELMELTX



OIL ANALYSIS REPORT

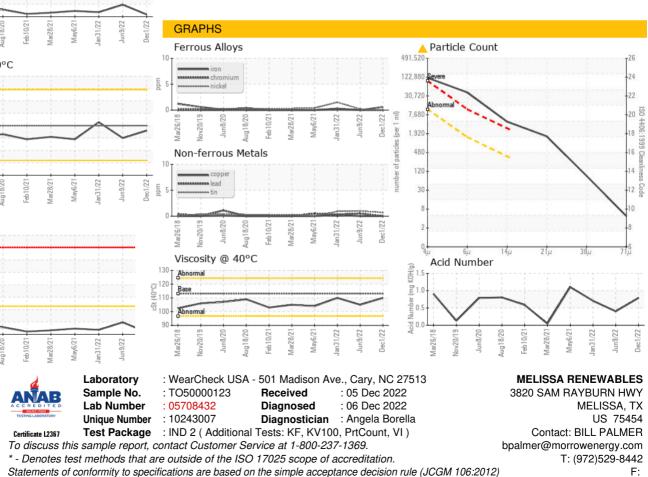






| VISUAL | | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | LIGHT | VLITE | VLITE |
| 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 | >2.26 | 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 | 113 | 110 | 105 | 110 |
| Visc @ 100°C | cSt | ASTM D445 | 19 | 18.6 | 18.0 | 19.28 |
| Viscosity Index (VI) | Scale | ASTM D2270 | 189 | 189 | 190 | 197 |
| SAMPLE IMAGES | 6 | method | limit/base | current | history1 | history2 |
| Color | | | | | | |

Bottom



Contact/Location: BILL PALMER - MELMELTX