

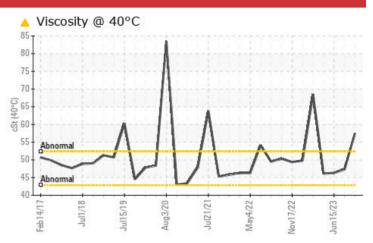
PROBLEM SUMMARY

GARDNER DENVER 7 (S/N S541933)

Compressor Fluid USPI COMP CLEAN II (--- GAL)

COMPONENT CONDITION SUMMARY Acid Number 14.0 12.0 Acid Number (mg KOH/g) 10.0 8.0 6.0 4.0 2.0 0.0 Aug3/20. Jul1/18 Jul21/21. May4/22 Jun15/23 Jul15/19 Vov17/22 Feb14/1





RECOMMENDATION

Recommend drain oil if not already done and flush with cleaner before refilling with oil. We recommend an early resample to monitor this condition.

| PROBLEMATIC TEST RESULTS | | | | | | | |
|--------------------------|----------|------------|-------------|--------|--------|--|--|
| Sample Status | | | SEVERE | NORMAL | NORMAL | | |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 4.70 | 0.91 | 0.89 | | |
| Visc @ 40°C | cSt | ASTM D445 | ▲ 57.5 | 47.3 | 46.3 | | |

Customer Id: CARFORCO Sample No.: USPM30146 Lab Number: 06100999 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 <u>dougb@wearcheckusa.com</u>

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

| RECOMMENDED | RECOMMENDED ACTIONS | | | | | |
|--------------|---------------------|------|---------|---|--|--|
| Action | Status | Date | Done By | Description | | |
| Change Fluid | | | ? | Recommend drain oil if not already done and flush with cleaner before refilling with oil. | | |
| Flush System | | | ? | Recommend drain oil if not already done and flush with cleaner before refilling with oil. | | |
| Resample | | | ? | We recommend an early resample to monitor this condition. | | |

HISTORICAL DIAGNOSIS



19 Jul 2023 Diag: Doug Bogart

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

15 Jun 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

11 May 2023 Diag: Doug Bogart



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

DEGRADATION

GARDNER DENVER 7 (S/N S541933)

Compressor

USPI COMP CLEAN II (--- GAL)

DIAGNOSIS

Recommendation

Recommend drain oil if not already done and flush with cleaner before refilling with oil. We recommend an early resample to monitor this condition.

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 oil viscosity is higher than normal. The AN level is above the recommended limit. Confirmed.

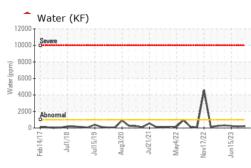


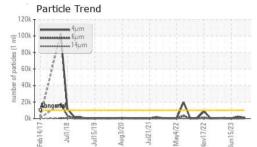
Sample Rating Trend

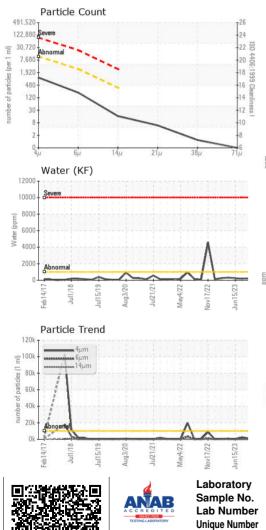
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|--------------|------------|-------------|-------------|-------------|
| Sample Number | | Client Info | | USPM30146 | USP0001063 | USPM27127 |
| Sample Date | | Client Info | | 26 Feb 2024 | 19 Jul 2023 | 15 Jun 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 | | | | SEVERE | NORMAL | NORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 0 | 0 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 0 | 1 |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 5 | 4 | 2 |
| Tin | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 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 | | 0 | 1 | <1 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Calcium | ppm | ASTM D5185m | | <1 | 3 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Zinc | ppm | ASTM D5185m | | 4 | 5 | 1 |
| Sulfur | ppm | ASTM D5185m | | 0 | 0 | 6 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | 1 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 1 | <1 |
| Water | % | ASTM D6304 | >0.1 | 0.021 | 0.019 | 0.022 |
| ppm Water | ppm | ASTM D6304 | >1000 | 218 | 193.1 | 227.7 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | 983 | 2455 | 261 |
| Particles >6µm | | ASTM D7647 | >2500 | 188 | 172 | 32 |
| Particles >14µm | | ASTM D7647 | >320 | 14 | 9 | 4 |
| Particles >21µm | | ASTM D7647 | >80 | 5 | 2 | 2 |
| Particles >38µm | | ASTM D7647 | >20 | 1 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | 17/15/11 | 18/15/10 | 15/12/9 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 4.70 | 0.91 | 0.89 |



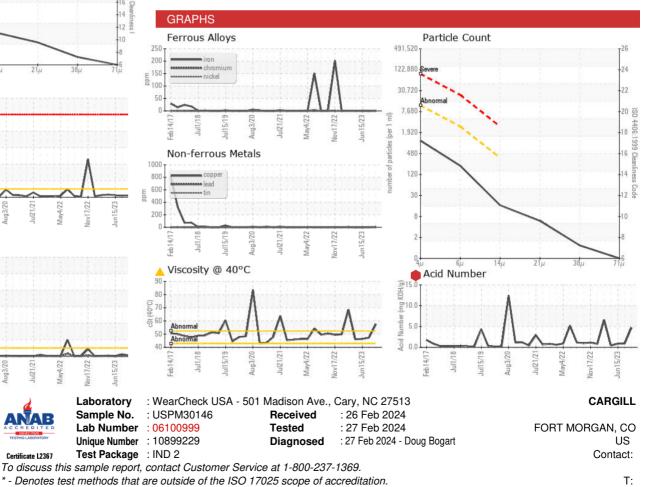
OIL ANALYSIS REPORT







| 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 | 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 | >0.1 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPER | TIES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | | 6 57.5 | 47.3 | 46.3 |
| SAMPLE IMAGE | S | method | limit/base | current | history1 | history2 |
| Color | | | | | | |
| Bottom | | | | | (-8-) | |



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: CARFORCO [WUSCAR] 06100999 (Generated: 02/28/2024 02:53:23) Rev: 1

Certificate L2367

Contact/Location: ? ? - CARFORCO

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