

# **OIL ANALYSIS REPORT**

## Sample Rating Trend



ISO



# ATLAS COPCO AIR AC STUN 2 (S/N API327076)

Component Air Compressor

**USPI AIR 46 (--- GAL)** 

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

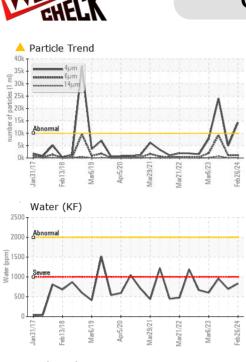
## **Fluid Condition**

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

| m2017 Feb2016 Mar2019 Apr2020 Mar2021 Mar2022 Mar2023 Feb202 |          |              |            |                  |             |                   |  |
|--|----------|--------------|------------|------------------|-------------|-------------------|--|
| SAMPLE INFORM  | MATION   | method       | limit/base | current          | history1    | history2          |  |
| Sample Number  |          | Client Info  |            | USPM30153        | USPM29999   | USPM27039         |  |
| Sample Date  |          | Client Info  |            | 26 Feb 2024      | 12 Oct 2023 | 04 Jul 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  |          |              |            | ATTENTION        | NORMAL      | ABNORMAL          |  |
| WEAR METALS  |          | method       | limit/base | current          | history1    | history2          |  |
| Iron   | ppm      | ASTM D5185m  | >50        | 0                | 0           | 0                 |  |
| Chromium   | ppm      | ASTM D5185m  | >4         | <1               | 0           | 0                 |  |
| Nickel   | ppm      | ASTM D5185m  | >4         | 0                | 0           | <1                |  |
| Titanium   | ppm      | ASTM D5185m  |            | 0                | 0           | 0                 |  |
| Silver   | ppm      | ASTM D5185m  |            | 0                | 0           | 0                 |  |
| Aluminum   | ppm      | ASTM D5185m  | >10        | 0                | 0           | 0                 |  |
| Lead   | ppm      | ASTM D5185m  | >20        | 0                | 0           | 0                 |  |
| Copper   | ppm      | ASTM D5185m  | >40        | 0                | 0           | <1                |  |
| Tin  | ppm      | ASTM D5185m  | >5         | 0                | <1          | <1                |  |
| 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           | 0                 |  |
| Barium   | ppm      | ASTM D5185m  | 0          | 0                | 0           | 0                 |  |
| Molybdenum   | ppm      | ASTM D5185m  | 0          | 0                | 0           | 0                 |  |
| Manganese  | ppm      | ASTM D5185m  |            | 0                | <1          | 0                 |  |
| Magnesium  | ppm      | ASTM D5185m  | 0          | <1               | 0           | 0                 |  |
| Calcium  | ppm      | ASTM D5185m  | 0          | 0                | 1           | 0                 |  |
| Phosphorus   | ppm      | ASTM D5185m  | 1          | 0                | <1          | 4                 |  |
| Zinc   | ppm      | ASTM D5185m  | 0          | 0                | 0           | 0                 |  |
| Sulfur   | ppm      | ASTM D5185m  | 0          | 0                | 5           | 0                 |  |
| CONTAMINANTS   | ;        | method       | limit/base | current          | history1    | history2          |  |
| Silicon  | ppm      | ASTM D5185m  | >25        | 0                | <1          | 2                 |  |
| Sodium   | ppm      | ASTM D5185m  |            | 0                | 0           | 0                 |  |
| Potassium  | ppm      | ASTM D5185m  | >20        | 1                | 0           | 0                 |  |
| Water  | %        | ASTM D6304   | >0.2       | 0.083            | 0.069       | 0.095             |  |
| ppm Water  | ppm      | ASTM D6304   | >2000      | 830              | 693.3       | 955.8             |  |
| FLUID CLEANLIN   | IESS _   | method       | limit/base | current          | history1    | history2          |  |
| Particles >4μm   |          | ASTM D7647   | >10000     | <b>14265</b>     | 4905        | <u></u> 24028     |  |
| Particles >6µm   |          | ASTM D7647   | >2500      | 1113             | 993         | <b>△</b> 9269     |  |
| Particles >14µm  |          | ASTM D7647   | >320       | 89               | 61          | <b>△</b> 745      |  |
| Particles >21µm  |          | ASTM D7647   | >80        | 26               | 11          | <u> 156</u>       |  |
| Particles >38µm  |          | ASTM D7647   | >20        | 4                | 1           | 5                 |  |
| Particles >71µm  |          | ASTM D7647   | >4         | 1                | 0           | 0                 |  |
| Oil Cleanliness  |          | ISO 4406 (c) | >20/18/15  | <b>2</b> 1/17/14 | 19/17/13    | <u>△</u> 22/20/17 |  |
| FLUID DEGRADA  | ATION    | method       | limit/base | current          | history1    | history2          |  |
| Acid Number (AN)   | mg KOH/g | ASTM D8045   | 0.05       | 0.088            | 0.064       | 0.044             |  |



## **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    |
| <b>Emulsified Water</b> | scalar | *Visual | >0.2       | NEG     | NEG      | NEG      |
| Free Water              | scalar | *Visual |            | NEG     | NEG      | NEG      |
| FLUID PROPERT           | TFS    | method  | limit/base | current | historv1 | historv2 |

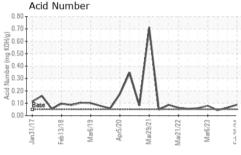
| . 20.2      |     |           |      |      |      |      |
|-------------|-----|-----------|------|------|------|------|
| Visc @ 40°C | cSt | ASTM D445 | 49.7 | 50.7 | 48.6 | 50.2 |

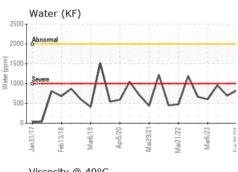
SAMPLE IMAGES

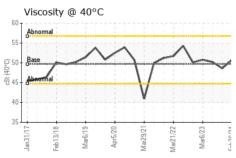
Color

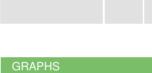


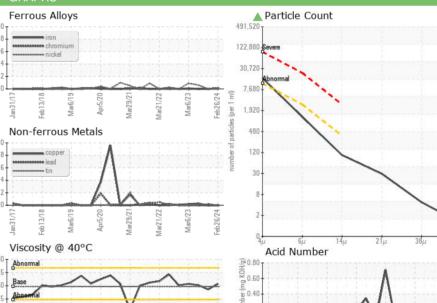












00.00 PG





Certificate L2367

Laboratory Sample No. Lab Number : 06101011

: USPM30153

35

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

Received **Tested** Unique Number : 10899241 Test Package : IND 2

: 26 Feb 2024 : 27 Feb 2024 : 27 Feb 2024 - Doug Bogart Diagnosed

TYSON - WATERLOO - USP CODE TYSWATPRO

501 N Elk Run Road Waterloo, IA US 50703 Contact: ED ALBERT

T: (319)236-9328

F: (319)236-9393

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)

Report Id: IBPWAT01 [WUSCAR] 06101011 (Generated: 02/28/2024 02:55:42) Rev: 1

Contact/Location: ED ALBERT - IBPWAT01