# OIL ANALYSIS REPORT

Sample Rating Trend


**DIRT**

Machine Id
## ATLAS COPCO API873673 - JBS-PIPESTONE
Component
**Compressor**
Fluid
**{not provided} (5 GAL)**

## DIAGNOSIS

**Recommendation**
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

**Wear**
All component wear rates are normal.

**Contamination**
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 dirt/seal material.

**Fluid Condition**
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **DFP0000015** | --- | --- |
| Sample Date | | Client Info | | **30 May 2024** | --- | --- |
| Machine Age | hrs | Client Info | | **8061** | --- | --- |
| Oil Age | hrs | Client Info | | **8061** | --- | --- |
| Oil Changed | | Client Info | | **Changed** | --- | --- |
| Sample Status | | | | **ABNORMAL** | --- | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **0** | --- | --- |
| Chromium | ppm | ASTM D5185m | >5 | **0** | --- | --- |
| Nickel | ppm | ASTM D5185m | | **0** | --- | --- |
| Titanium | ppm | ASTM D5185m | | **0** | --- | --- |
| Silver | ppm | ASTM D5185m | | **0** | --- | --- |
| Aluminum | ppm | ASTM D5185m | >15 | **0** | --- | --- |
| Lead | ppm | ASTM D5185m | >65 | **0** | --- | --- |
| Copper | ppm | ASTM D5185m | >65 | **2** | --- | --- |
| Tin | ppm | ASTM D5185m | >10 | **<1** | --- | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | --- | --- |
| Cadmium | ppm | ASTM D5185m | | **0** | --- | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | --- | --- |
| Barium | ppm | ASTM D5185m | | **<1** | --- | --- |
| Molybdenum | ppm | ASTM D5185m | | **0** | --- | --- |
| Manganese | ppm | ASTM D5185m | | **<1** | --- | --- |
| Magnesium | ppm | ASTM D5185m | | **0** | --- | --- |
| Calcium | ppm | ASTM D5185m | | **2** | --- | --- |
| Phosphorus | ppm | ASTM D5185m | | **21** | --- | --- |
| Zinc | ppm | ASTM D5185m | | **28** | --- | --- |
| Sulfur | ppm | ASTM D5185m | | **35** | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >35 | ▲ **82** | --- | --- |
| Sodium | ppm | ASTM D5185m | | **<1** | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | --- | --- |
| Water | % | ASTM D6304 | >0.1 | **0.000** | --- | --- |
| ppm Water | ppm | ASTM D6304 | >1000 | **0** | --- | --- |

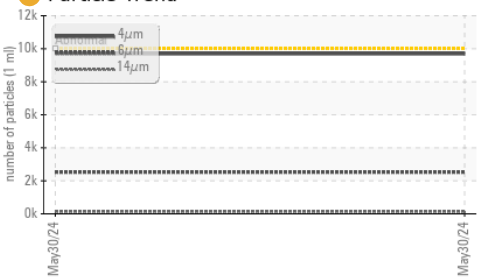
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | **9696** | --- | --- |
| Particles >6µm | | ASTM D7647 | >2500 | ● **2528** | --- | --- |
| Particles >14µm | | ASTM D7647 | >320 | **134** | --- | --- |
| Particles >21µm | | ASTM D7647 | >80 | **26** | --- | --- |
| Particles >38µm | | ASTM D7647 | >20 | **1** | --- | --- |
| Particles >71µm | | ASTM D7647 | >4 | **0** | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | ● **20/19/14** | --- | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.26** | --- | --- |

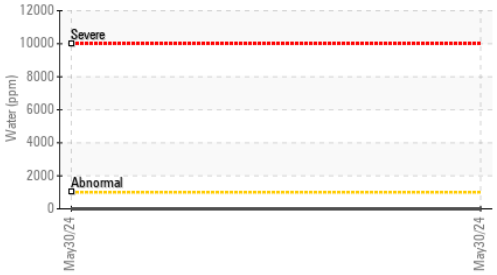
# OIL ANALYSIS REPORT

Silicon (ppm)


Particle Trend

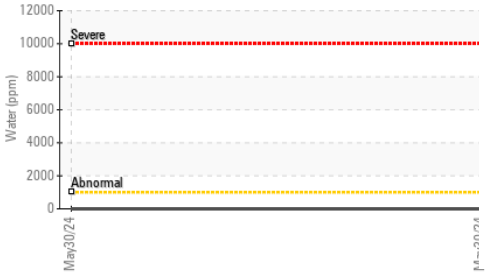



Water (KF)




Acid Number


Water (KF)



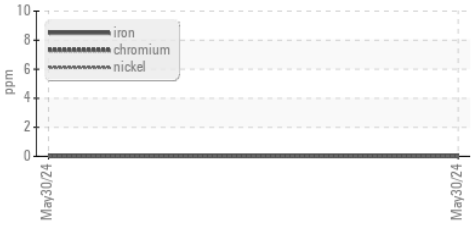

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | --- | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | --- | --- |
| Silt | scalar | *Visual | NONE | **NONE** | --- | --- |
| Debris | scalar | *Visual | NONE | **NONE** | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | --- | --- |
| Appearance | scalar | *Visual | NORML | **NORML** | --- | --- |
| Odor | scalar | *Visual | NORML | **NORML** | --- | --- |
| Emulsified Water | scalar | *Visual | >0.1 | **NEG** | --- | --- |
| Free Water | scalar | *Visual | | **NEG** | --- | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | **51.8** | --- | --- |

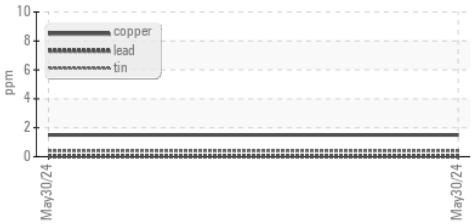
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | *no image* | *no image* |
| Bottom | | |  | *no image* | *no image* |

## GRAPHS

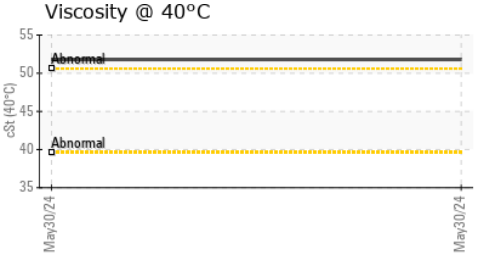
Ferrous Alloys



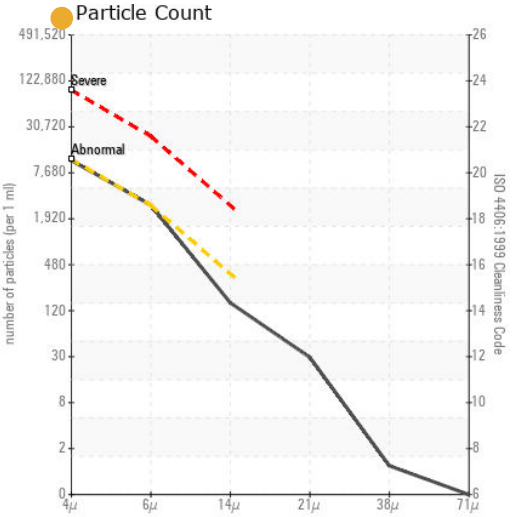

Non-ferrous Metals




Viscosity @ 40°C




Particle Count




Acid Number


Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : DFP0000015 **Received** : 05 Jun 2024
**Lab Number** : 06200140 **Tested** : 06 Jun 2024
**Unique Number** : 11062263 **Diagnosed** : 07 Jun 2024 - Don Baldridge
**Test Package** : PLANT ( Additional Tests: KF )

*To discuss this sample report, contact Customer Service at 1-833-307-5970.*
** - 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)*


**Compressed Air Technology**
1801 E. 39th Street North
Sioux Falls,
US 57104
Contact: KEN HURST
khurst@dfpcompressedairtechnology.com
T:
F: (605)332-0988