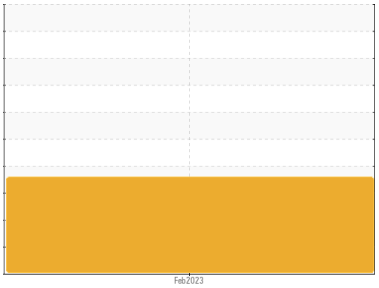
# PROBLEM SUMMARY

Sample Rating Trend

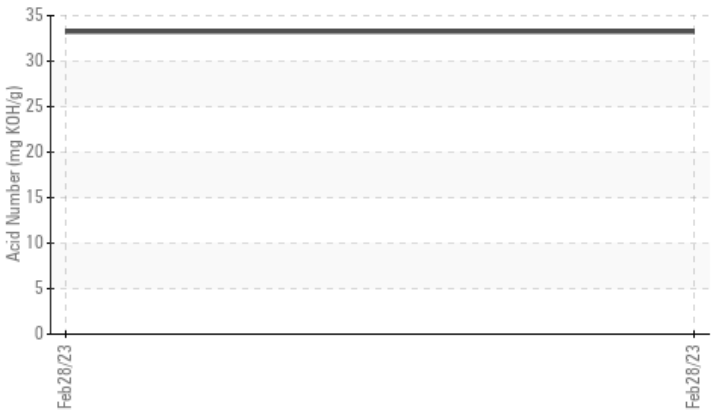



**DEGRADATION**

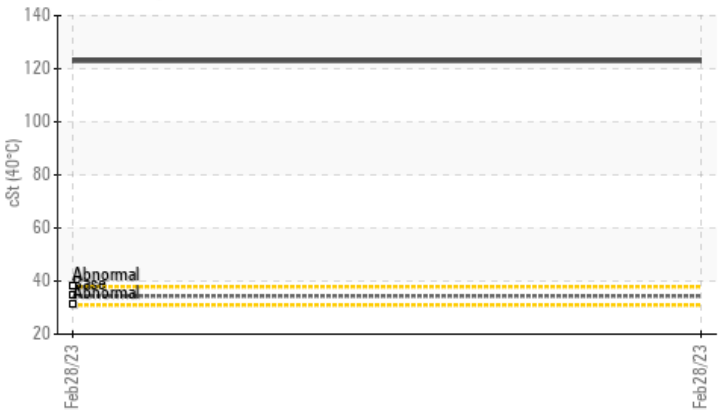
Area
## STEAM AND POWER
Machine Id
## 424.1250 # 9 AIR COMPRESSOR
Component
**Air Compressor**
Fluid
**PENNZOIL DEXRON MERCON ATF FLUID (15 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Acid Number




▲ Viscosity @ 40°C




## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample Status | | | | **SEVERE** | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | ▲ **33.25** | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 34.35 | ▲ **123** | --- | --- |

**Customer Id:** PORPORWA
**Sample No.:** PE0000296
**Lab Number:** 05786118
**Test Package:** PLANT

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

## RECOMMENDED ACTIONS

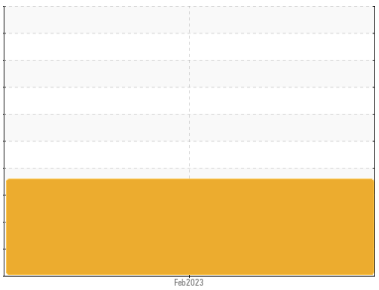
| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Change Fluid | --- | --- | ? | Recommend drain oil if not already done and flush with cleaner before refilling with oil. |
| Flush System | --- | --- | ? | Recommend drain oil if not already done and flush with cleaner before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

## HISTORICAL DIAGNOSIS

PetroCard MORE THAN JUST FUEL.

# OIL ANALYSIS REPORT

Sample Rating Trend




DEGRADATION

Area
## STEAM AND POWER
Machine Id
## 424.1250 # 9 AIR COMPRESSOR
Component
**Air Compressor**
Fluid
**PENNZOIL DEXRON MERCON ATF FLUID (15 GAL)**

## DIAGNOSIS

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

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

**Contamination**
The amount and size of particulates present in the system are acceptable.

**▲ Fluid Condition**
The oil viscosity is higher than normal because of excessive oxidation. The AN level is above the recommended limit. Additives are consistent with reported ATF fluid.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **PE0000296** | --- | --- |
| Sample Date | | Client Info | | **28 Feb 2023** | --- | --- |
| Machine Age | hrs | Client Info | | **0** | --- | --- |
| Oil Age | hrs | Client Info | | **0** | --- | --- |
| Oil Changed | | Client Info | | **N/A** | --- | --- |
| Sample Status | | | | **SEVERE** | --- | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184 | | **21** | --- | --- |
| Iron | ppm | ASTM D5185m | >50 | **2** | --- | --- |
| Chromium | ppm | ASTM D5185m | >4 | **0** | --- | --- |
| Nickel | ppm | ASTM D5185m | >4 | **0** | --- | --- |
| Titanium | ppm | ASTM D5185m | | **0** | --- | --- |
| Silver | ppm | ASTM D5185m | | **<1** | --- | --- |
| Aluminum | ppm | ASTM D5185m | >10 | **<1** | --- | --- |
| Lead | ppm | ASTM D5185m | >20 | **0** | --- | --- |
| Copper | ppm | ASTM D5185m | >40 | **<1** | --- | --- |
| Tin | ppm | ASTM D5185m | >5 | **0** | --- | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | --- | --- |
| Cadmium | ppm | ASTM D5185m | | **0** | --- | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **28** | --- | --- |
| Barium | ppm | ASTM D5185m | | **0** | --- | --- |
| Molybdenum | ppm | ASTM D5185m | | **<1** | --- | --- |
| Manganese | ppm | ASTM D5185m | | **<1** | --- | --- |
| Magnesium | ppm | ASTM D5185m | | **2** | --- | --- |
| Calcium | ppm | ASTM D5185m | | **96** | --- | --- |
| Phosphorus | ppm | ASTM D5185m | | **191** | --- | --- |
| Zinc | ppm | ASTM D5185m | | **42** | --- | --- |
| Sulfur | ppm | ASTM D5185m | | **469** | --- | --- |

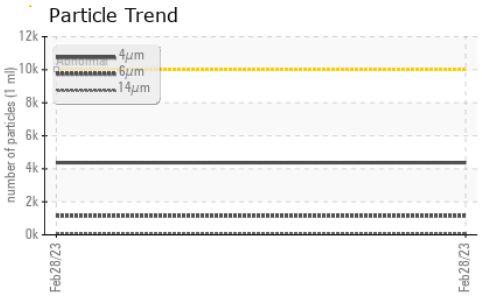
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **2** | --- | --- |
| Sodium | ppm | ASTM D5185m | | **51** | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | **3** | --- | --- |
| Water | % | ASTM D6304 | >0.6 | **NEG** | --- | --- |

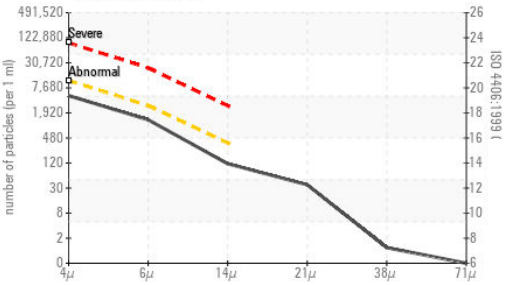
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | **4369** | --- | --- |
| Particles >6µm | | ASTM D7647 | >2500 | **1148** | --- | --- |
| Particles >14µm | | ASTM D7647 | >320 | **102** | --- | --- |
| Particles >21µm | | ASTM D7647 | >80 | **32** | --- | --- |
| Particles >38µm | | ASTM D7647 | >20 | **1** | --- | --- |
| Particles >71µm | | ASTM D7647 | >4 | **0** | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | **19/17/14** | --- | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | ▲ **33.25** | --- | --- |

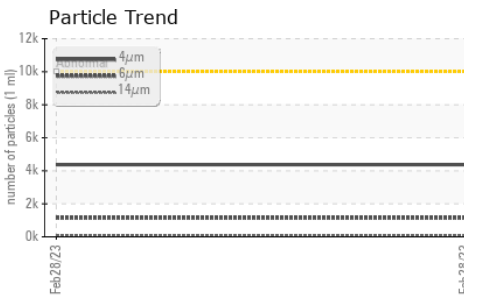
# OIL ANALYSIS REPORT

PetroCard MORE THAN JUST FUEL.

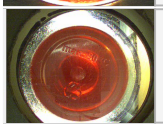





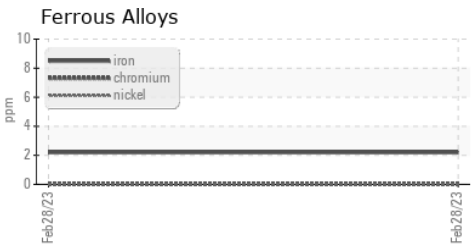


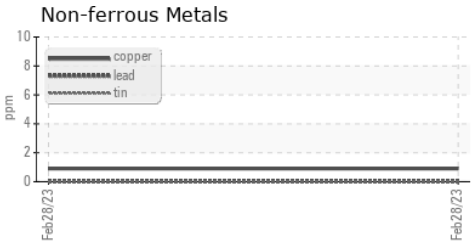

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | --- | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | --- | --- |
| Silt | 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 | >0.6 | **NEG** | --- | --- |
| Free Water | scalar | *Visual | | **NEG** | --- | --- |

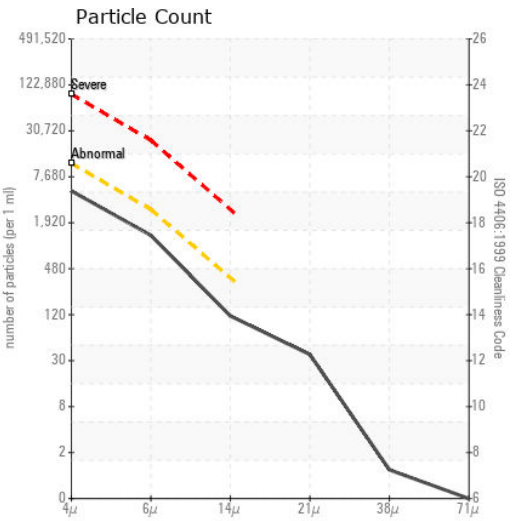
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 34.35 | ▲ **123** | --- | --- |

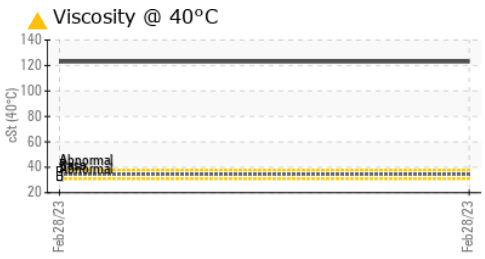
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | *no image* | *no image* |
| Bottom | | |  | *no image* | *no image* |

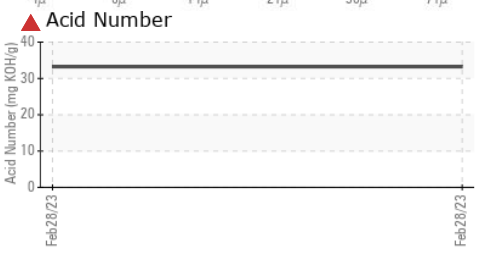
## GRAPHS




ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : PE0000296
**Lab Number** : 05786118
**Unique Number** : 10370789
**Test Package** : PLANT ( Additional Tests: ICP, KF, KV40, PQ, PrtCount, SCREEN )

**Received** : 08 Mar 2023
**Tested** : 13 Mar 2023
**Diagnosed** : 13 Mar 2023 - Doug Bogart

*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)*

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