



PROBLEM SUMMARY

Sample Rating Trend

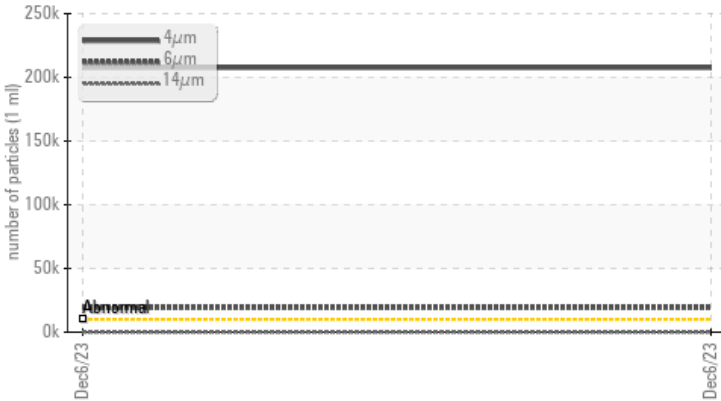
ISO

Area
WMD
 Machine Id
B-02-402 Biogas Blower Drive End
 Component
Drive End Compressor
 Fluid
GARDNER DENVER AEON PD (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | --- | --- |
|-----------------|--------------|-----------|-------------------|-----|-----|
| Particles >4µm | ASTM D7647 | >10000 | ▲ 207573 | --- | --- |
| Particles >6µm | ASTM D7647 | >2500 | ▲ 19257 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | ▲ 25/21/13 | --- | --- |

Customer Id: GEVDOO
 Sample No.: WC06027698
 Lab Number: 06027698
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@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 Filter | --- | --- | ? | We recommend you service the filters on this component if applicable. |

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
WMD
 Machine Id
B-02-402 Biogas Blower Drive End
 Component
Drive End Compressor
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GARDNER DENVER AEON PD (--- GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 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.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-----------------|--------------------|----------|----------|
| Sample Number | Client Info | WC06027698 | --- | --- |
| Sample Date | Client Info | 06 Dec 2023 | --- | --- |
| Machine Age | hrs Client Info | 0 | --- | --- |
| Oil Age | hrs Client Info | 0 | --- | --- |
| Oil Changed | Client Info | N/A | --- | --- |
| Sample Status | | ABNORMAL | --- | --- |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|--------------------------|------------|--------------|----------|----------|
| Iron ppm ASTM D5185m | >50 | 37 | --- | --- |
| Chromium ppm ASTM D5185m | >10 | 2 | --- | --- |
| Nickel ppm ASTM D5185m | | <1 | --- | --- |
| Titanium ppm ASTM D5185m | | 0 | --- | --- |
| Silver ppm ASTM D5185m | | 0 | --- | --- |
| Aluminum ppm ASTM D5185m | >25 | <1 | --- | --- |
| Lead ppm ASTM D5185m | >25 | <1 | --- | --- |
| Copper ppm ASTM D5185m | >50 | 7 | --- | --- |
| Tin ppm ASTM D5185m | >15 | <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 | | 0 | --- | --- |
| Molybdenum ppm ASTM D5185m | | <1 | --- | --- |
| Manganese ppm ASTM D5185m | | <1 | --- | --- |
| Magnesium ppm ASTM D5185m | | 0 | --- | --- |
| Calcium ppm ASTM D5185m | | <1 | --- | --- |
| Phosphorus ppm ASTM D5185m | | 657 | --- | --- |
| Zinc ppm ASTM D5185m | | 0 | --- | --- |
| Sulfur ppm ASTM D5185m | | 627 | --- | --- |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|---------------------------|------------|--------------|----------|----------|
| Silicon ppm ASTM D5185m | >25 | 13 | --- | --- |
| Sodium ppm ASTM D5185m | | 0 | --- | --- |
| Potassium ppm ASTM D5185m | >20 | <1 | --- | --- |
| Water % ASTM D6304 | >0.1 | NEG | --- | --- |

FLUID CLEANLINESS

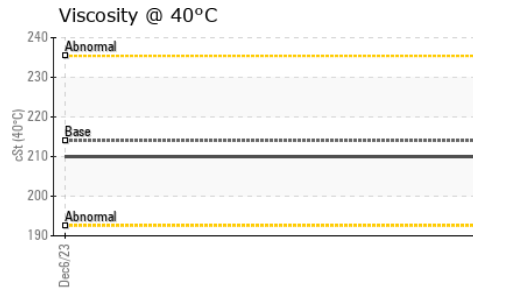
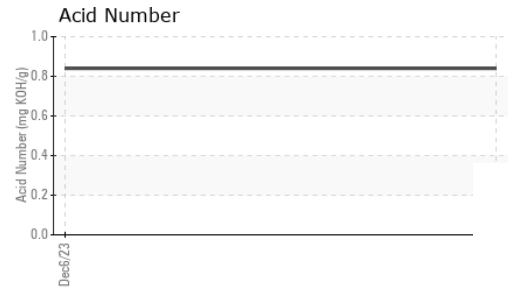
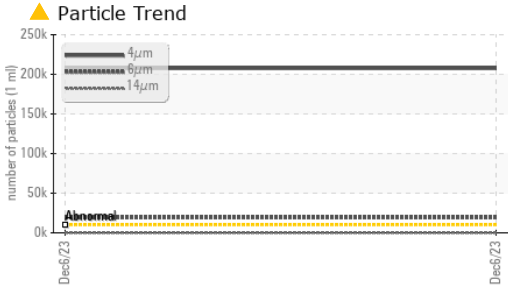
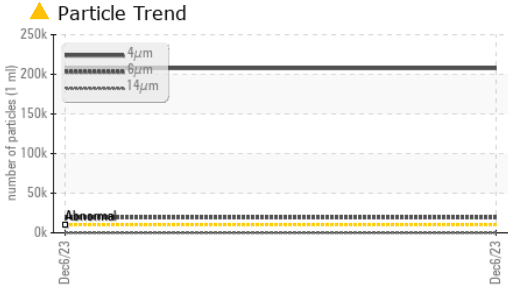
| method | limit/base | current | history1 | history2 |
|------------------------------|------------|-------------------|----------|----------|
| Particles >4µm ASTM D7647 | >10000 | ▲ 207573 | --- | --- |
| Particles >6µm ASTM D7647 | >2500 | ▲ 19257 | --- | --- |
| Particles >14µm ASTM D7647 | >320 | 78 | --- | --- |
| Particles >21µm ASTM D7647 | >80 | 9 | --- | --- |
| Particles >38µm ASTM D7647 | >20 | 1 | --- | --- |
| Particles >71µm ASTM D7647 | >4 | 0 | --- | --- |
| Oil Cleanliness ISO 4406 (c) | >20/18/15 | ▲ 25/21/13 | --- | --- |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|--------------------------------------|------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g ASTM D8045 | | 0.84 | --- | --- |



OIL ANALYSIS REPORT



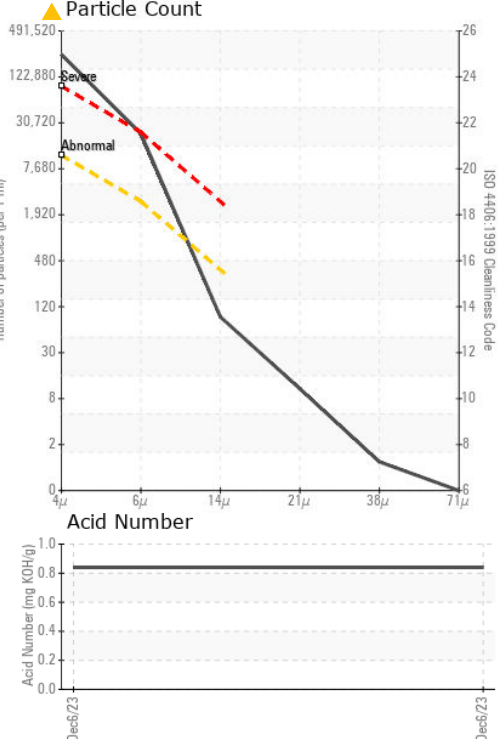
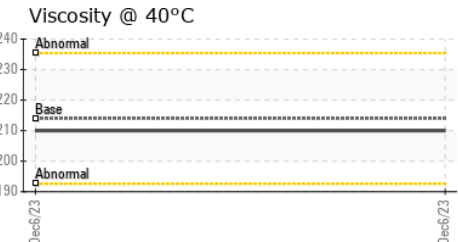
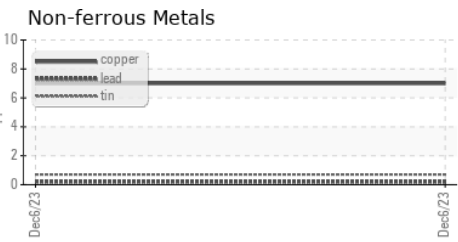
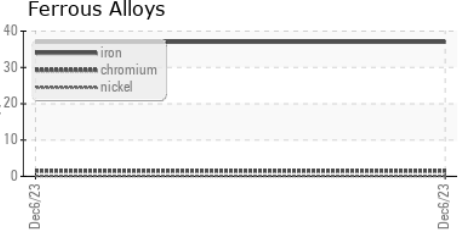
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Precipitate | scalar | *Visual | 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 214 | 210 | --- | --- |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

| | | | |
|--------|--|----------|----------|
| Color | | no image | no image |
| Bottom | | no image | no image |

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06027698 **Received** : 07 Dec 2023
Lab Number : 06027698 **Diagnosed** : 11 Dec 2023
Unique Number : 10777489 **Diagnostician** : Jonathan Hester
Test Package : PLANT

GEVO Inc.
 2498 250th Street
 Doon, IA
 US 51235
 Contact: Service Manager

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)