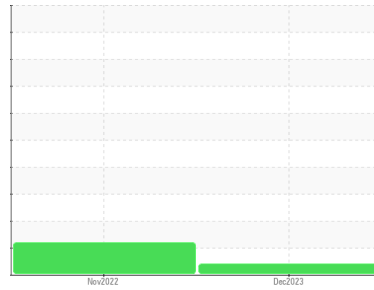


PROBLEM SUMMARY

Sample Rating Trend

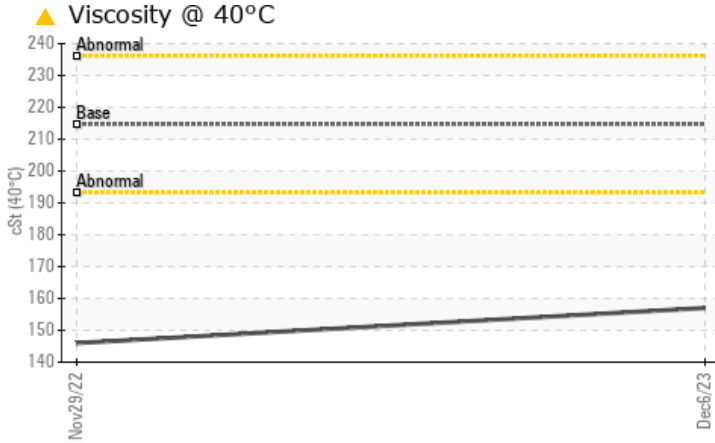


VISCOSITY



Area
MEK
Machine Id
[MEK] MEKU-C-0002A COMPRESSOR, VACUUM, "A", NORTH
Component
Compressor
Fluid
BELRAY Turbine Oil 220 (--- QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | ATTENTION | ABNORMAL | --- |
|---------------|-----|-----------|-------|-----------|----------|-----|
| Visc @ 40°C | cSt | ASTM D445 | 214.7 | ▲ 157 | 146 | --- |

Customer Id: CALSHR
Sample No.: RP0038979
Lab Number: 06029469
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

29 Nov 2022 Diag: Doug Bogart

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

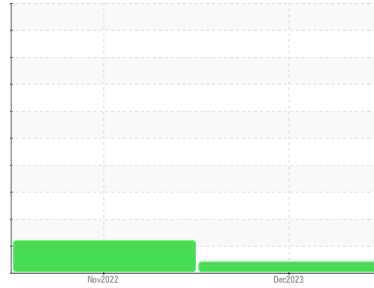
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
MEK
 Machine Id
[MEK] MEKU-C-0002A COMPRESSOR, VACUUM, "A", NORTH
 Component
Compressor
 Fluid
BELRAY Turbine Oil 220 (--- QTS)

DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|----------|
| Sample Number | Client Info | | | RP0038979 | RP0031653 | --- |
| Sample Date | Client Info | | | 06 Dec 2023 | 29 Nov 2022 | --- |
| Machine Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | Client Info | | | Not Changed | Not Changed | --- |
| Sample Status | | | | ATTENTION | ABNORMAL | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >50 | 21 | 16 | --- |
| Chromium | ppm | ASTM D5185m | >10 | 2 | 0 | --- |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | 0 | --- |
| Lead | ppm | ASTM D5185m | >25 | 0 | 2 | --- |
| Copper | ppm | ASTM D5185m | >50 | <1 | 4 | --- |
| Tin | ppm | ASTM D5185m | >15 | 0 | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | --- |

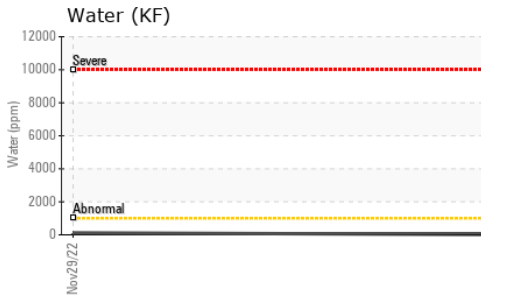
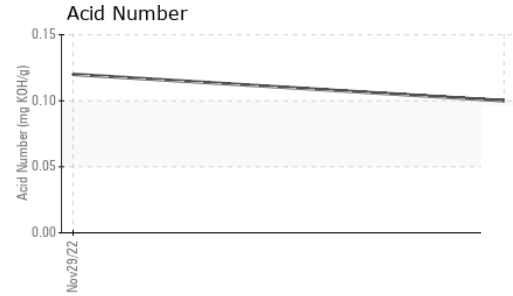
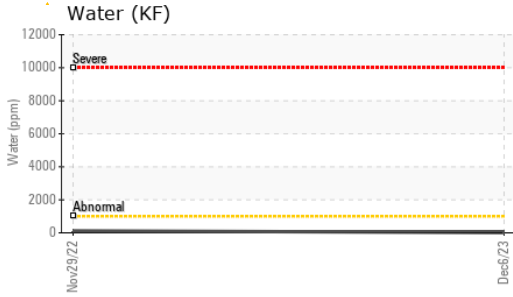
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|-----------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | 1 | --- |
| Barium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | 1 | 2 | --- |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | 3 | 11 | --- |
| Calcium | ppm | ASTM D5185m | | 13 | 25 | --- |
| Phosphorus | ppm | ASTM D5185m | | 13 | 88 | --- |
| Zinc | ppm | ASTM D5185m | | 0 | 17 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >25 | 17 | 10 | --- |
| Sodium | ppm | ASTM D5185m | | 1 | 0 | --- |
| Potassium | ppm | ASTM D5185m | >20 | <1 | <1 | --- |
| Water | % | ASTM D6304 | >0.1 | 0.002 | 0.011 | --- |
| ppm Water | ppm | ASTM D6304 | >1000 | 16 | 119.9 | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.10 | 0.12 | --- |

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

OIL ANALYSIS REPORT



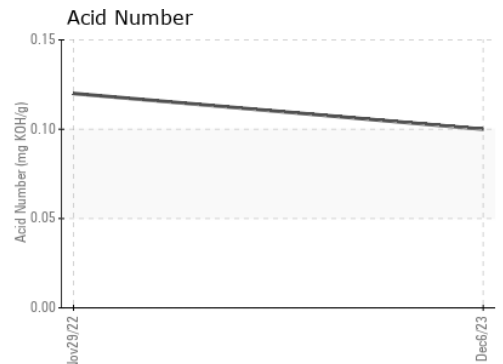
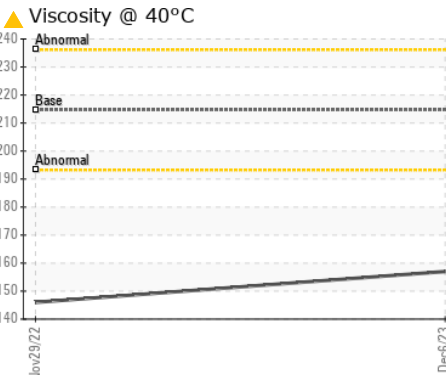
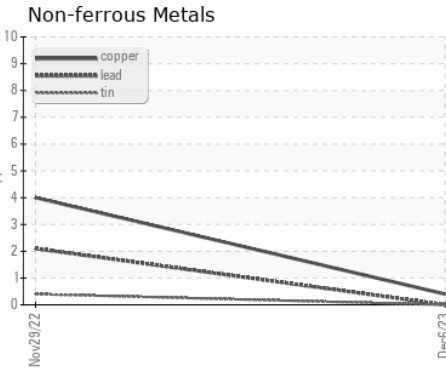
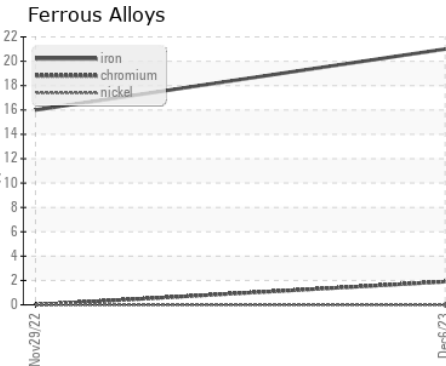
FLUID PROPERTIES

| method | limit/base | current | history1 | history2 | | |
|-------------|------------|-----------|----------|----------|-----|-----|
| Visc @ 40°C | cSt | ASTM D445 | 214.7 | ▲ 157 | 146 | --- |

SAMPLE IMAGES

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038979 **Received** : 08 Dec 2023
Lab Number : 06029469 **Diagnosed** : 12 Dec 2023
Unique Number : 10779260 **Diagnostician** : Don Baldrige
Test Package : IND 2

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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 Contact: NICHOLAS LESAGE
 nicholas.lesage@clmt.com

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