



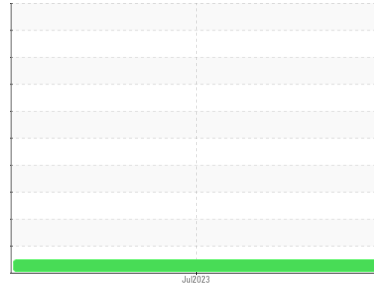
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Evp Island
 Machine Id
GOULDS A HSC Pump 0303
 Component
Pump
 Fluid
MOBIL SHC 626 (1 GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Analytical Ferrography: Results are normal with typical amounts of ferrous rubbing wear and contamination present.

Wear

All component wear rates are normal. The analytical ferrographic results are normal indicating no abnormal wear in the system.

Contaminants

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Oil 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 | | WC0824314 | --- | --- |
| Sample Date | Client Info | | 19 Jul 2023 | --- | --- |
| Machine Age | mths | Client Info | 0 | --- | --- |
| Oil Age | mths | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | Not Chngd | --- | --- |
| Sample Status | | | NORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|------------|-----------------|--------------|----------|----------|
| PQ | ASTM D8184 | | 18 | --- | --- |
| Iron | ppm | ASTM D5185m >90 | <1 | --- | --- |
| Chromium | ppm | ASTM D5185m >5 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185m >5 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185m >3 | 0 | --- | --- |
| Silver | ppm | ASTM D5185m >3 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m >7 | 0 | --- | --- |
| Lead | ppm | ASTM D5185m >12 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m >30 | <1 | --- | --- |
| Tin | ppm | ASTM D5185m >9 | 0 | --- | --- |
| 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 | 0 | --- | --- |
| Manganese | ppm | ASTM D5185m | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 0 | --- | --- |
| Calcium | ppm | ASTM D5185m | 0 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 374 | --- | --- |
| Zinc | ppm | ASTM D5185m | 0 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 6 | --- | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >60 | 3 | --- | --- |
| Sodium | ppm | ASTM D5185m | <1 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | 0 | --- | --- |

FLUID CLEANLINESS

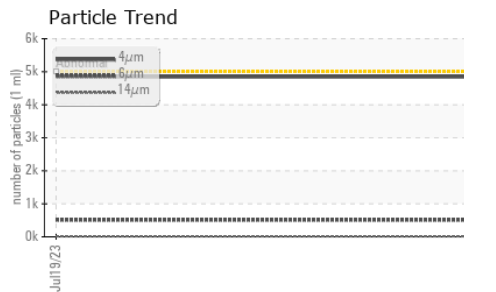
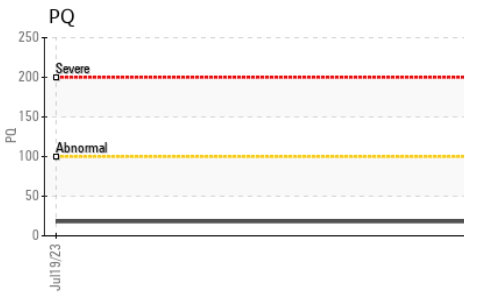
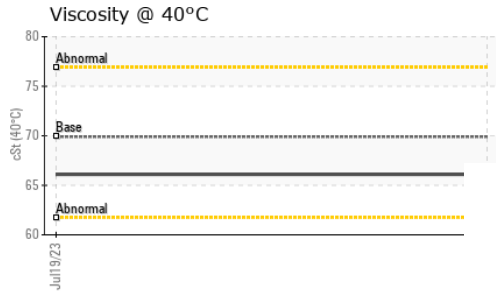
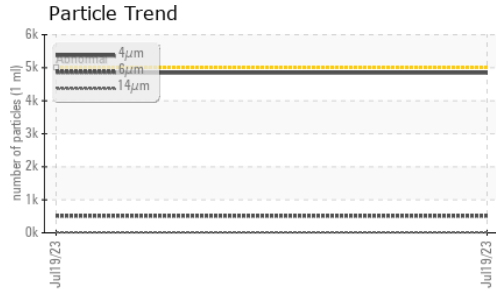
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | 4845 | --- | --- |
| Particles >6µm | ASTM D7647 | >1300 | 514 | --- | --- |
| Particles >14µm | ASTM D7647 | >160 | 16 | --- | --- |
| Particles >21µm | ASTM D7647 | >40 | 6 | --- | --- |
| Particles >38µm | ASTM D7647 | >10 | 0 | --- | --- |
| Particles >71µm | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | 19/16/11 | --- | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.39 | --- | --- |



OIL ANALYSIS REPORT



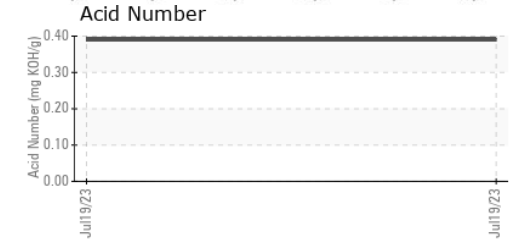
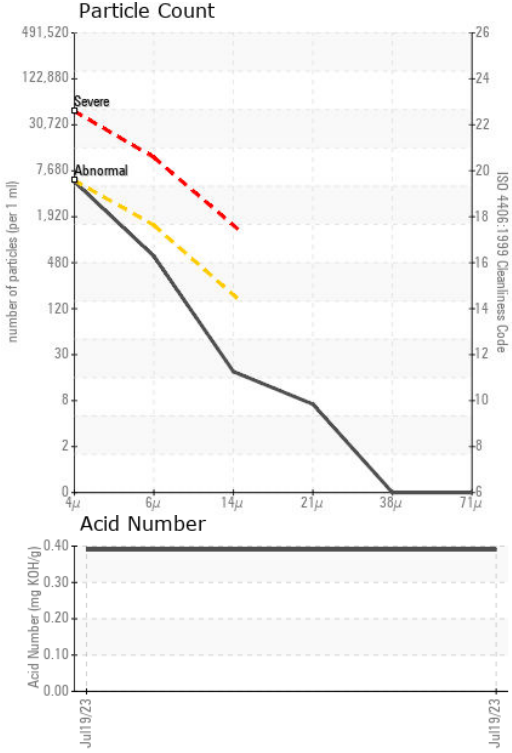
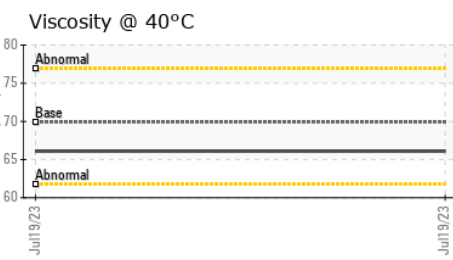
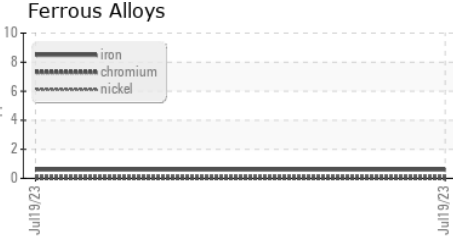
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | ---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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 69.9 | 66.1 | --- |

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

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0824314 **Received** : 21 Jul 2023
Lab Number : 05904961 **Diagnosed** : 03 Aug 2023
Unique Number : 10566317 **Diagnostician** : Aaron Black
Test Package : PLANT (Additional Tests: A-FERR)

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)

GRAPHIC PACKAGING INTERNATIONAL
 100 GRAPHIC PACKAGING INTERNATIONAL
 MACON, GA
 US 31206

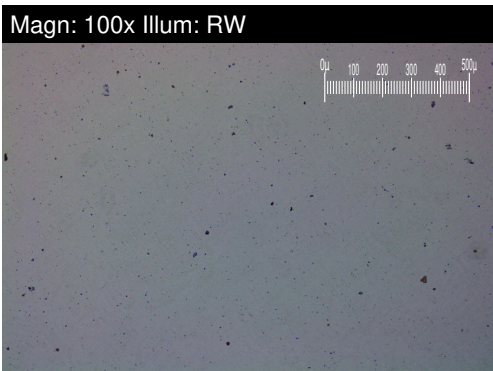
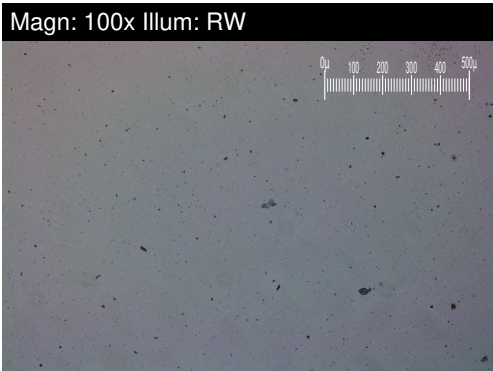
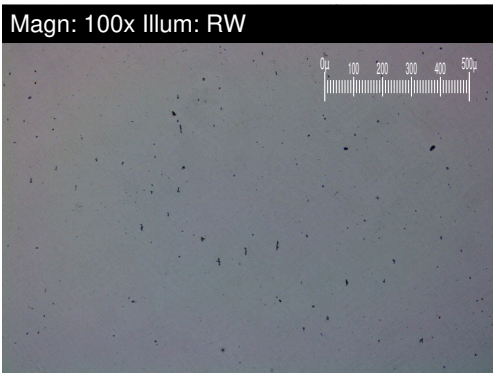
Contact: DARYL SPRINGER
 daryl.springer@graphicpkg.com
 T: (478)784-3677

F:



FERROGRAPHY REPORT

Area
Evp Island
 Machine Id
GOULDS A HSC Pump 0303
 Component
Pump
 Fluid
MOBIL SHC 626 (1 GAL)



| FERROGRAPHY | method | limit/base | current | history1 | history2 |
|-----------------------|------------|-------------|---------|----------|----------|
| Ferrous Rubbing | Scale 0-10 | *ASTM D7684 | 2 | | |
| Ferrous Sliding | Scale 0-10 | *ASTM D7684 | | | |
| Ferrous Cutting | Scale 0-10 | *ASTM D7684 | | | |
| Ferrous Rolling | Scale 0-10 | *ASTM D7684 | | | |
| Ferrous Break-in | Scale 0-10 | *ASTM D7684 | | | |
| Ferrous Spheres | Scale 0-10 | *ASTM D7684 | | | |
| Ferrous Black Oxides | Scale 0-10 | *ASTM D7684 | | | |
| Ferrous Red Oxides | Scale 0-10 | *ASTM D7684 | | | |
| Ferrous Corrosive | Scale 0-10 | *ASTM D7684 | | | |
| Ferrous Other | Scale 0-10 | *ASTM D7684 | | | |
| Nonferrous Rubbing | Scale 0-10 | *ASTM D7684 | | | |
| Nonferrous Sliding | Scale 0-10 | *ASTM D7684 | | | |
| Nonferrous Cutting | Scale 0-10 | *ASTM D7684 | | | |
| Nonferrous Rolling | Scale 0-10 | *ASTM D7684 | | | |
| Nonferrous Other | Scale 0-10 | *ASTM D7684 | | | |
| Carbonaceous Material | Scale 0-10 | *ASTM D7684 | | | |
| Lubricant Degradation | Scale 0-10 | *ASTM D7684 | | | |
| Sand/Dirt | Scale 0-10 | *ASTM D7684 | | | |
| Fibres | Scale 0-10 | *ASTM D7684 | | | |
| Spheres | Scale 0-10 | *ASTM D7684 | | | |
| Other | Scale 0-10 | *ASTM D7684 | 2 | | |

WEAR

All component wear rates are normal.
 The analytical ferrographic results are normal indicating no abnormal wear in the system.

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