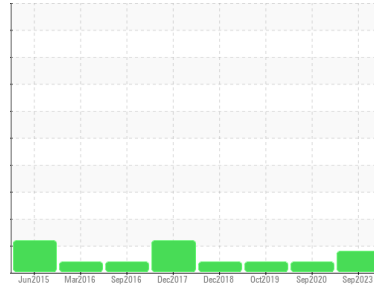




PROBLEM SUMMARY

Sample Rating Trend



ISO



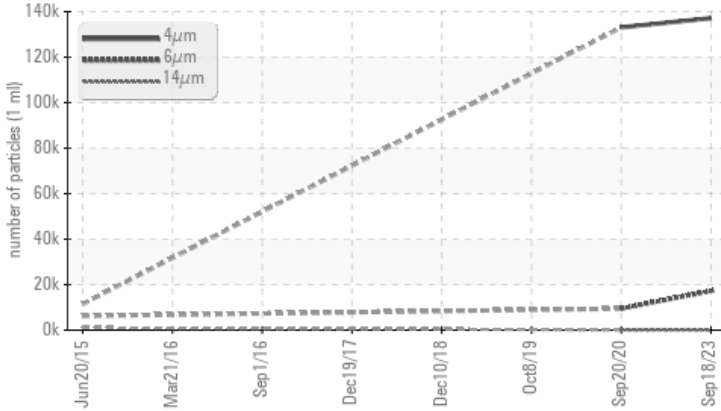
Machine Id
TY/NY/2RM-GB

Component
Gearbox

Fluid
ROYAL PURPLE THERMYL-GLYDE 320 (2800 LTR)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | ABNORMAL | ATTENTION | ABNORMAL |
|-----------------|------------------------|-----------------|------------|----------|
| Particles >6µm | ASTM D7647 >5000 | ▲ 17241 | ▲ 9447 | --- |
| Oil Cleanliness | ISO 4406 (c) >--/19/16 | ▲ 24/21/12 | ▲ 24/20/13 | --- |

Customer Id: JPOWERBD
Sample No.: WC0695241
Lab Number: 05963535
Test Package: PLANT



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

20 Sep 2020 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate 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



08 Oct 2019 Diag: Jonathan Hester

VIS DEBRIS



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Please note that this is a corrected copy for laboratory data updates. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



10 Dec 2018 Diag: Jonathan Hester

VIS DEBRIS



We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. High concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

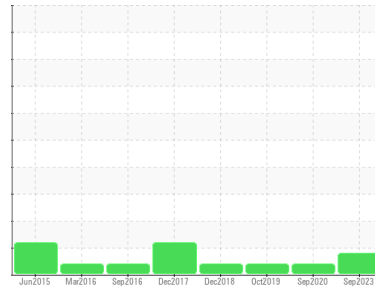
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
TY/NY/2RM-GB

Component
Gearbox

Fluid
ROYAL PURPLE THERMYL-GLYDE 320 (2800 LTR)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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 | | WC0695241 | WC0407659 | WC12327187 |
| Sample Date | Client Info | | 18 Sep 2023 | 20 Sep 2020 | 08 Oct 2019 |
| Machine Age | mths | Client Info | 0 | 0 | 0 |
| Oil Age | mths | Client Info | 97 | 61 | 52 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | ABNORMAL | ATTENTION | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >200 | 41 | 44 | 43 |
| Chromium | ppm | ASTM D5185m >15 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m >15 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185m >25 | 2 | 3 | 3 |
| Lead | ppm | ASTM D5185m >100 | 37 | 53 | 48 |
| Copper | ppm | ASTM D5185m >200 | 104 | 83 | 71 |
| Tin | ppm | ASTM D5185m >25 | <1 | <1 | 0 |
| Antimony | ppm | ASTM D5185m >5 | --- | 1099 | 1077 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | <1 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 5 | <1 |
| Barium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | <1 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | 1 | <1 |
| Calcium | ppm | ASTM D5185m | 6 | 13 | 12 |
| Phosphorus | ppm | ASTM D5185m | 130 | 128 | 116 |
| Zinc | ppm | ASTM D5185m | 1288 | 1249 | 1102 |
| Sulfur | ppm | ASTM D5185m | 14067 | 12242 | 11369 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >50 | 2 | 3 | 4 |
| Sodium | ppm | ASTM D5185m | <1 | 0 | <1 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 0 | 0 |

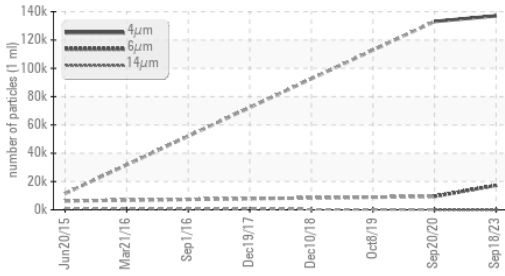
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|------------|----------|
| Particles >4µm | ASTM D7647 | | 137113 | 133096 | --- |
| Particles >6µm | ASTM D7647 | >5000 | ▲ 17241 | ▲ 9447 | --- |
| Particles >14µm | ASTM D7647 | >640 | 30 | 52 | --- |
| Particles >21µm | ASTM D7647 | >160 | 6 | 9 | --- |
| Particles >38µm | ASTM D7647 | >40 | 0 | 0 | --- |
| Particles >71µm | ASTM D7647 | >10 | 0 | 0 | --- |
| Oil Cleanliness | ISO 4406 (c) | >--/19/16 | ▲ 24/21/12 | ▲ 24/20/13 | --- |

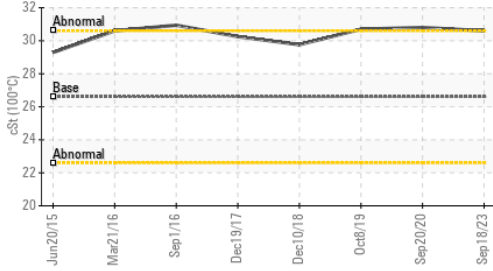
FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.63 | 0.563 | 0.660 |

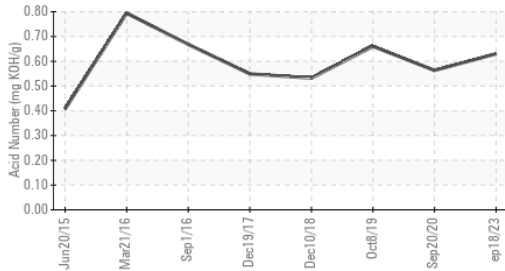
▲ Particle Trend



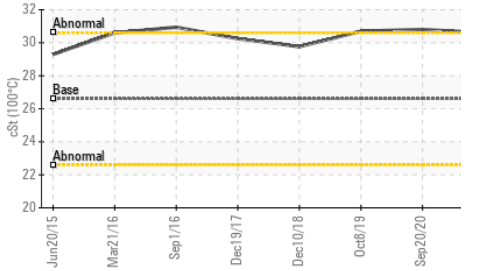
Viscosity @ 100°C



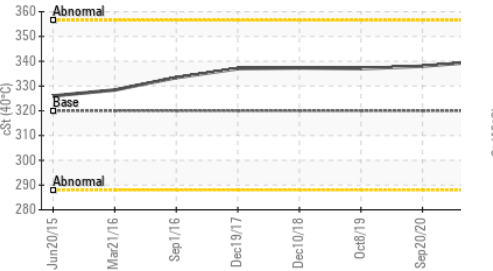
Acid Number



Viscosity @ 100°C



Viscosity @ 40°C



| 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 | ▲ MODER |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

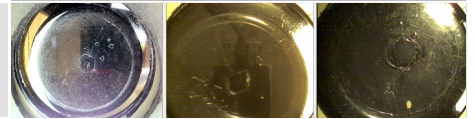
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 320 | 340 | 338 |
| Visc @ 100°C | cSt | ASTM D445 | 26.6 | 30.6 | 30.8 |
| Viscosity Index (VI) | Scale | ASTM D2270 | 110 | 125 | 126 |

SAMPLE IMAGES

Color

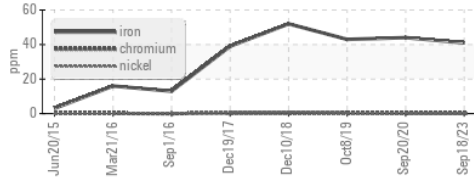


Bottom

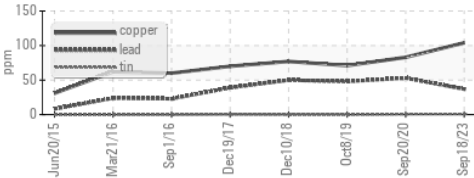


GRAPHS

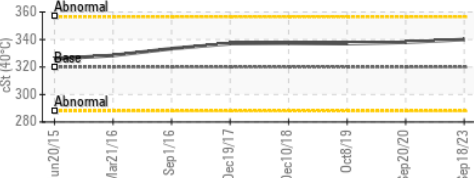
Ferrous Alloys



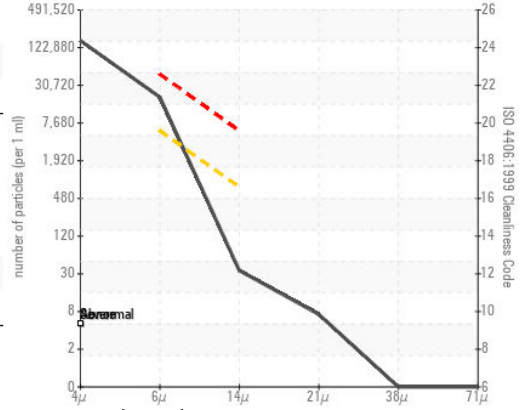
Non-ferrous Metals



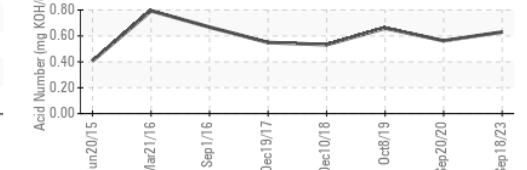
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0695241 **Received** : 28 Sep 2023
Lab Number : 05963535 **Diagnosed** : 29 Sep 2023
Unique Number : 10670086 **Diagnostician** : Don Baldrige
Test Package : PLANT (Additional Tests: KV100, VI)

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)

J/POWER-BD

JP

Contact: KENTO OKUHARA
Mitsuo_Miyahara@jpower.co.jp

T:

F: x: