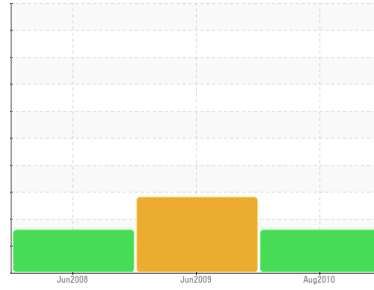




PROBLEM SUMMARY

Sample Rating Trend



VISUAL METAL



Machine Id
COALMILL-1/K1/TC
 Component
Gearbox
 Fluid
ISO 460 (550 LTR)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We were unable to perform a particle count due to a high concentration of particles present in this sample. 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 | ABNORMAL | ABNORMAL |
|---------------|--------|---------|------|-----------------|----------|----------|
| White Metal | scalar | *Visual | NONE | ▲ HEAVY | ▲ HEAVY | NONE |
| Debris | scalar | *Visual | NONE | ▲ HEAVY | ▲ HEAVY | ▲ MODER |

Customer Id: JPOWERBD
Sample No.: WCI2097842
Lab Number: 02692084
Test Package: IND 2



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. |
| Alert | --- | --- | ? | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

HISTORICAL DIAGNOSIS

29 Jun 2009 Diag: Doug Bogart

VISUAL METAL



We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend you service the filter/screen on this component if applicable. Resample at the next service interval to monitor. High concentration of visible metal present. All component wear rates are normal. High concentration of visible dirt/debris present in the oil. The condition of oil is suitable for further service. The viscosity index is 251.

[view report](#)



16 Jun 2008 Diag: Doug Bogart

VISUAL METAL



We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. High concentration of visible metal present. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The condition of oil is suitable for further service. The viscosity index is 251.

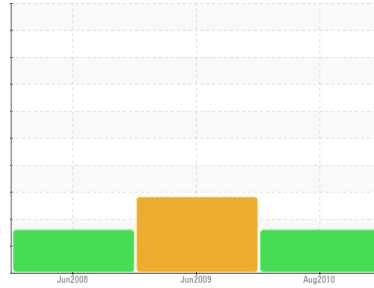
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Machine Id
COALMILL-1/K1/TC
 Component
Gearbox
 Fluid
ISO 460 (550 LTR)

DIAGNOSIS

Recommendation

We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

High concentration of visible metal present. All component wear rates are normal.

Contamination

High concentration of visible dirt/debris present in the oil.

Fluid Condition

The condition of oil is suitable for further service. The viscosity index is 249.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WCI2097842 | WCI2091289 | WCI288579 |
| Sample Date | Client Info | | 06 Aug 2010 | 29 Jun 2009 | 16 Jun 2008 |
| Machine Age | mths | Client Info | 0 | 0 | 0 |
| Oil Age | mths | Client Info | 40 | 27 | 15 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | <1 | 2 | 0 |
| Chromium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | 3 | 6 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | <1 | <1 | 0 |
| Lead | ppm | ASTM D5185m | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | 3 | <1 | 0 |
| Tin | ppm | ASTM D5185m | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | <1 | <1 | 0 |
| Barium | ppm | ASTM D5185m | 2 | 7 | 0 |
| Molybdenum | ppm | ASTM D5185m | <1 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 0 | 1 | 0 |
| Calcium | ppm | ASTM D5185m | 0 | 2 | 0 |
| Phosphorus | ppm | ASTM D5185m | 319 | 544 | 219 |
| Zinc | ppm | ASTM D5185m | 0 | <1 | 0 |
| Sulfur | ppm | ASTM D5185m | 3177 | 3489 | 2625 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | 38 | 25 | 17 |
| Sodium | ppm | ASTM D5185m | 0 | <1 | 0 |
| Potassium | ppm | ASTM D5185m | <1 | 3 | 0 |

FLUID DEGRADATION

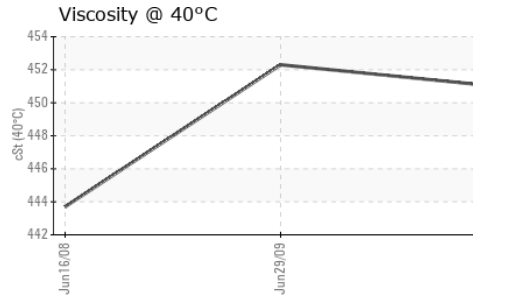
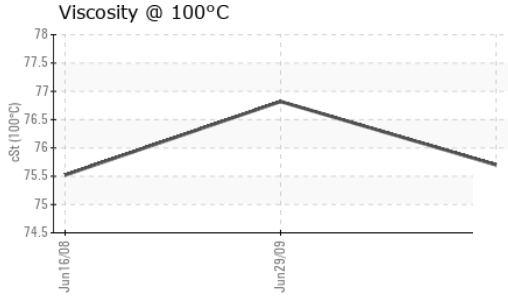
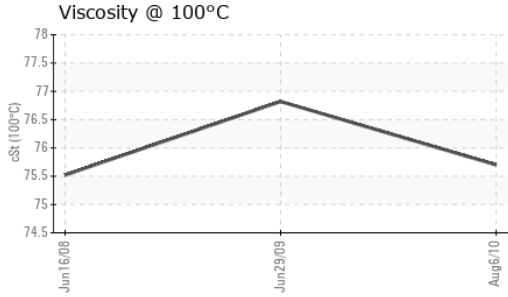
| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.699 | 0.242 | 0.676 |

VISUAL

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



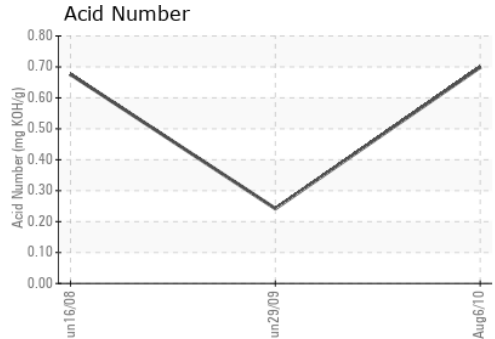
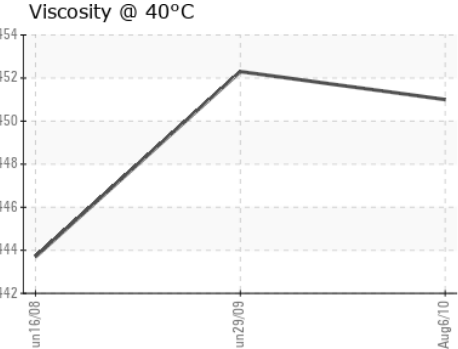
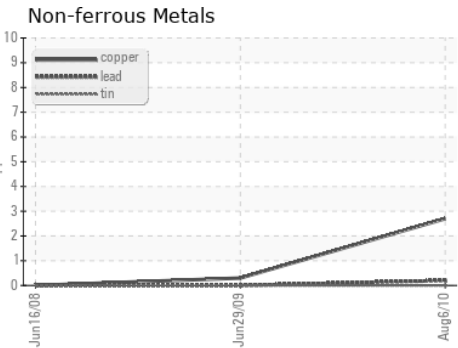
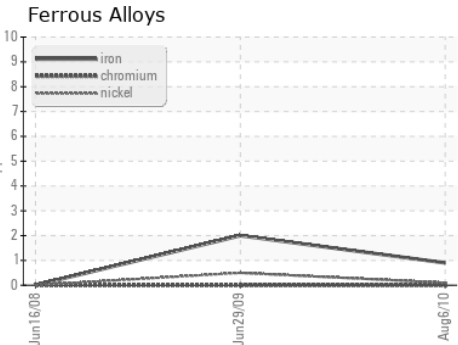
OIL ANALYSIS REPORT



| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|--------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 451.0 | 452.3 | 443.7 |
| Visc @ 100°C | cSt | ASTM D445 | 75.7 | 76.82 | 75.52 |
| Viscosity Index (VI) | Scale | ASTM D2270 | 249 | 251 | 251 |

| 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. : WC12097842 **Received** : 19 Aug 2010
Lab Number : 02692084 **Diagnosed** : 22 Aug 2010
Unique Number : 5297092 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: Bottom, KV100, PrtCount, VI)

J/POWER-BD

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: KENTO OKUHARA
Mitsuo_Miyahara@jpower.co.jp

* - 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)

JP
T:
F: x