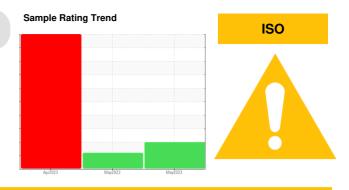


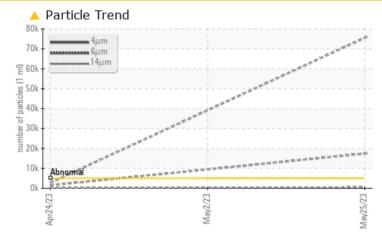
# **PROBLEM SUMMARY**



# HCTS (S/N CB105-BL)

## Servo Valve Upstream Hydraulic System Fluid DEXRON-VI (--- GAL)

### COMPONENT CONDITION SUMMARY



#### RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

| Sample Status   |              |           | ABNORMAL | ABNORMAL | SEVERE       |
|-----------------|--------------|-----------|----------|----------|--------------|
| Particles >4µm  | ASTM D7647   | >5000     | <u> </u> |          | 2714         |
| Particles >6µm  | ASTM D7647   | >1300     | 🔺 17437  |          | <b>1</b> 479 |
| Particles >14µm | ASTM D7647   | >160      | 🔺 595    |          | <u> </u>     |
| Particles >21µm | ASTM D7647   | >40       | <u> </u> |          | <b>A</b> 85  |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | <u> </u> |          | ▲ 19/18/15   |

Customer Id: DUNAUS Sample No.: WC0806748 Lab Number: 05859212 Test Package: PLANT



To manage this report scan the QR code

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

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       | MISSED | Jun 14 2023 | ?       | We recommend you service the filters on this component. |  |

#### HISTORICAL DIAGNOSIS

#### 02 May 2023 Diag: Don Baldridge

#### VISUAL METAL



We recommend you service the filters on this component. We advise that you inspect for the source(s) of metal. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.Moderate concentration of visible metal present. All component wear rates are normal. No other contaminants were detected in the oil. The AN level is acceptable for this fluid.



#### 24 Apr 2023 Diag: Doug Bogart

VISUAL METAL



We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data updates for particle count.Moderate concentration of visible metal present. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





## **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

# HCTS (S/N CB105-BL)

Servo Valve Upstream Hydraulic System Fluid DEXRON-VI (--- GAL)

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## DIAGNOSIS

### Recommendation

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

#### Wear

All component wear rates are normal.

#### Contamination

There is a high amount of particulates 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 INFORM    | IATION   | method       | limit/base | current           | history1    | history2    |
|------------------|----------|--------------|------------|-------------------|-------------|-------------|
| Sample Number    |          | Client Info  |            | WC0806748         | WC0806749   | WC0806750   |
| Sample Date      |          | Client Info  |            | 25 May 2023       | 02 May 2023 | 24 Apr 2023 |
| Machine Age      | hrs      | Client Info  |            | 0                 | 0           | 0           |
| Oil Age          | hrs      | Client Info  |            | 0                 | 0           | 0           |
| Oil Changed      |          | Client Info  |            | N/A               | N/A         | N/A         |
| Sample Status    |          |              |            | ABNORMAL          | ABNORMAL    | SEVERE      |
| WEAR METALS      |          | method       | limit/base | current           | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >20        | 5                 | 3           | 4           |
| Chromium         | ppm      | ASTM D5185m  | >20        | <1                | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m  | >20        | 0                 | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m  |            | <1                | 0           | 0           |
| Silver           | ppm      | ASTM D5185m  |            | <1                | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185m  | >20        | 4                 | 4           | 1           |
| Lead             | ppm      | ASTM D5185m  | >20        | 1                 | 0           | <1          |
| Copper           | ppm      | ASTM D5185m  | >20        | 1                 | <1          | 2           |
| Tin              | ppm      | ASTM D5185m  | >20        | <1                | 0           | 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  | 75         | 17                | 15          | 17          |
| Barium           | ppm      | ASTM D5185m  | 0          | 0                 | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m  | 0          | <1                | 0           | 3           |
| Manganese        | ppm      | ASTM D5185m  |            | <1                | <1          | 0           |
| Magnesium        | ppm      | ASTM D5185m  | 0          | 12                | 0           | <1          |
| Calcium          | ppm      | ASTM D5185m  | 200        | 146               | 76          | 74          |
| Phosphorus       | ppm      | ASTM D5185m  | 300        | 208               | 182         | 175         |
| Zinc             | ppm      | ASTM D5185m  | 25         | 52                | 0           | 9           |
| Sulfur           | ppm      | ASTM D5185m  | 1200       | 1845              | 1536        | 1615        |
| CONTAMINANTS     |          | method       | limit/base | current           | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >15        | 2                 | <1          | 1           |
| Sodium           | ppm      | ASTM D5185m  |            | 2                 | <1          | 0           |
| Potassium        | ppm      | ASTM D5185m  | >20        | 3                 | 1           | 3           |
| FLUID CLEANLIN   | ESS      | method       | limit/base | current           | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   | >5000      | <b>A</b> 75520    |             | 2714        |
| Particles >6µm   |          | ASTM D7647   | >1300      | <u> </u>          |             | <u> </u>    |
| Particles >14µm  |          | ASTM D7647   | >160       | 🔺 595             |             | 🔺 252       |
| Particles >21µm  |          | ASTM D7647   | >40        | <u> </u>          |             | <b>A</b> 85 |
| Particles >38µm  |          | ASTM D7647   | >10        | 0                 |             | <b>1</b> 3  |
| Particles >71µm  |          | ASTM D7647   | >3         | 0                 |             | 1           |
| Oil Cleanliness  |          | ISO 4406 (c) | >19/17/14  | <b>A</b> 23/21/16 |             | ▲ 19/18/15  |
| FLUID DEGRADA    | TION     | method       | limit/base | current           | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   |            | 0.71              | 0.79        | 0.77        |



80 701

60k

sejorted 40k

30k

20k

0

80 70

60 <u>왕</u> 50k

te 40k 30

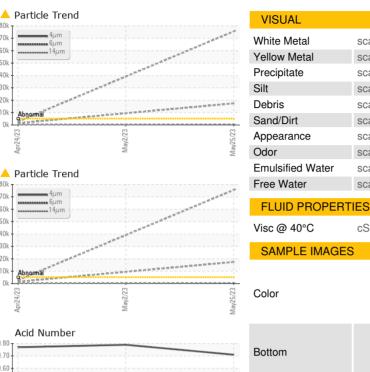
a 201 10

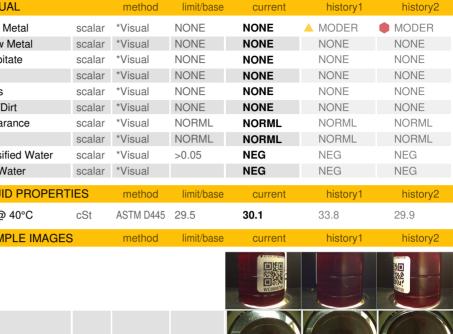
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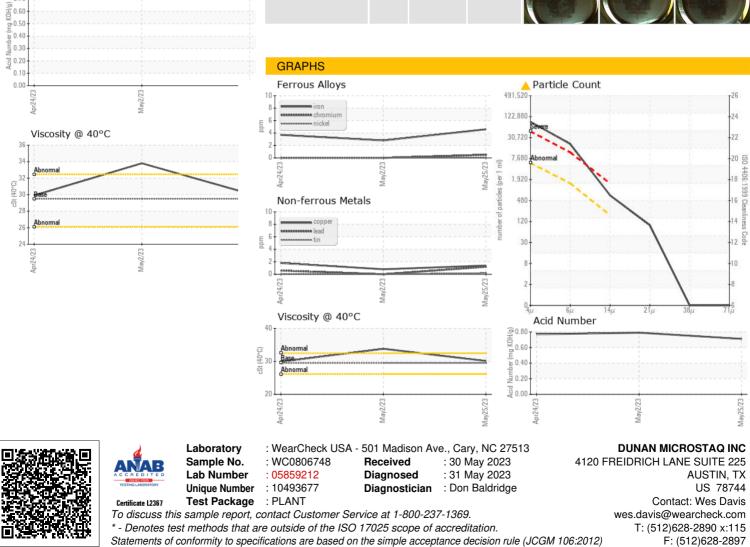
0.80

0.70

# **OIL ANALYSIS REPORT**







Contact/Location: Wes Davis - DUNAUS