

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

## **TS03-08** Hydraulic System **DURA CLEAN (330 GAL)**

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

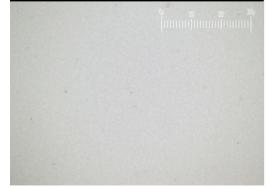
#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Particle Filter (Magn: 200 x)



| SAMPLE INFORM    | IATION   | method                     | limit/base | current     | history1    | history2    |
|------------------|----------|----------------------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info                |            | PH0001188   | PH0001186   | PH0001189   |
| Sample Date      |          | Client Info                |            | 03 Apr 2024 | 07 Feb 2024 | 04 Dec 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    |          |                            |            | NORMAL      | NORMAL      | NORMAL      |
| CONTAMINATION    | ٧        | method                     | limit/base | current     | history1    | history2    |
| Water            |          | WC Method                  | >0.05      | NEG         | NEG         | NEG         |
| WEAR METALS      |          | method                     | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m                | >20        | 0           | 0           | 0           |
| Chromium         | ppm      | ASTM D5185m                | >20        | 0           | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m                | >20        | 0           | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m                |            | 0           | 0           | 0           |
| Silver           | ppm      | ASTM D5185m                |            | 0           | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185m                | >20        | 0           | 0           | 0           |
| Lead             | ppm      | ASTM D5185m                | >20        | 0           | 0           | 0           |
| Copper           | ppm      | ASTM D5185m                | >20        | 16          | 17          | 19          |
| Tin              | ppm      | ASTM D5185m                | >20        | 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                |            | 0           | 0           | 0           |
| Barium           | ppm      | ASTM D5185m                |            | 0           | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m                |            | 0           | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m                |            | 0           | <1          | <1          |
| Magnesium        | ppm      | ASTM D5185m                |            | 0           | 0           | 0           |
| Calcium          | ppm      | ASTM D5185m                |            | 24          | 19          | 26          |
| Phosphorus       | ppm      | ASTM D5185m                |            | 408         | 396         | 417         |
| Zinc<br>Sulfur   | ppm      | ASTM D5185m<br>ASTM D5185m |            | 535<br>1299 | 523<br>1091 | 585<br>1064 |
|                  | ppm      |                            |            | 1299        |             | 1064        |
| CONTAMINANTS     |          | method                     | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m                | >15        | 0           | <1          | 0           |
| Sodium           | ppm      | ASTM D5185m                |            | 1           | <1          | 3           |
| Potassium        | ppm      | ASTM D5185m                |            | 0           | 0           | 0           |
| FLUID CLEANLIN   | IESS     | method                     | limit/base | current     | history1    | history2    |
| Particles >4µm   |          | ASTM D7647                 | >10000     | 2164        | 1082        | 2202        |
| Particles >6µm   |          | ASTM D7647                 | >2500      | 293         | 222         | 421         |
| Particles >14µm  |          | ASTM D7647                 | >320       | 19          | 13          | 24          |
| Particles >21µm  |          | ASTM D7647                 | >80        | 5           | 4           | 6           |
| Particles >38µm  |          | ASTM D7647                 | >20        | 0           | 0           | 0           |
| Particles >71µm  |          | ASTM D7647                 |            | 0           | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c)               | >20/18/15  | 18/15/11    | 17/15/11    | 18/16/12    |
| FLUID DEGRADA    | TION     | method                     | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045                 |            | 0.59        | 0.51        | 0.51        |

Report Id: PARCOR [WUSCAR] 06145852 (Generated: 04/16/2024 08:35:14) Rev: 1

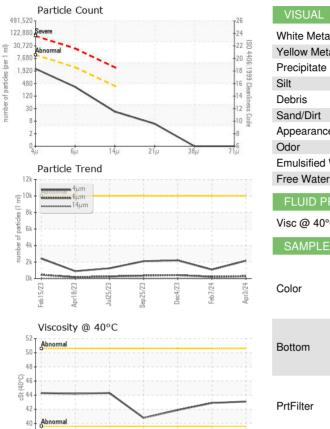
Contact/Location: ALEX ALVAREZ - PARCOR



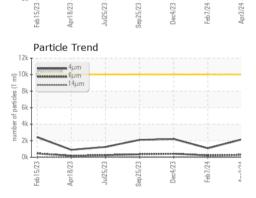
number of particles (per 1

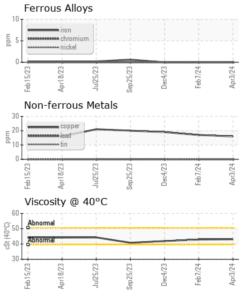
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# **OIL ANALYSIS REPORT**









: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Diagnosed

Tested

: 11 Apr 2024

: 16 Apr 2024

: 16 Apr 2024 - Jonathan Hester

Particle Filter (Magn: 200 x) Acid Number

| 5           | Acia | Numb | er    |      |       |       |       |
|-------------|------|------|-------|------|-------|-------|-------|
| 2 0.60      | T    | _    |       |      |       |       | -     |
| Ê 0.40      |      |      |       |      |       |       |       |
| a<br>2 0.20 | 1    |      |       |      |       |       |       |
| 0.00        |      |      |       |      |       |       |       |
| 8 0.00      | 5    | 33   | 53    | 3    | 23+   | 24 +  | 24 +  |
| 4           | 15/2 | 18/2 | 125/2 | 25/2 | sc4// | 4/Lds | pr3/2 |
|             | 19   | đ    | 7     | 8    | õ     | Ľ.    | A     |

### PARKER HANNIFIN CORPORATION

221 HELICOPTER CIR CORONA, CA US 92878 Contact: ALEX ALVAREZ alex.alvarez@parker.com T: (951)475-6106 E:

Test Package : PLANT (Additional Tests: PrtFilter) Certificate 12367 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)

Lab Number : 06145852

Unique Number : 10975930

: PH0001188

Laboratory

Sample No.

Report Id: PARCOR [WUSCAR] 06145852 (Generated: 04/16/2024 08:35:14) Rev: 1

Contact/Location: ALEX ALVAREZ - PARCOR