

### **OIL ANALYSIS REPORT**

Sample Rating Trend



# PRESS 13 (S/N 61025518)

Hydraulic System

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

#### Fluid Condition

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

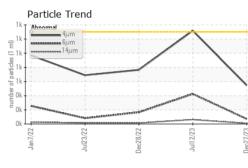
|                                   |                   | Jan2022              | Jui2022            | Dec2022 Jul2023 | Dec2023          |                  |
|-----------------------------------|-------------------|----------------------|--------------------|-----------------|------------------|------------------|
| SAMPLE INFORM                     | <b>MATION</b>     | method               | limit/base         | current         | history1         | history2         |
| Sample Number                     |                   | Client Info          |                    | KFS0004134      | KFS0004151       | KFS0002420       |
| Sample Date                       |                   | Client Info          |                    | 27 Dec 2023     | 12 Jul 2023      | 28 Dec 2022      |
| Machine Age                       | hrs               | Client Info          |                    | 33701           | 32749            | 0                |
| Oil Age                           | hrs               | Client Info          |                    | 0               | 0                | 0                |
| Oil Changed                       |                   | Client Info          |                    | N/A             | N/A              | N/A              |
| Sample Status                     |                   |                      |                    | NORMAL          | NORMAL           | NORMAL           |
| CONTAMINATIO                      | N                 | 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               | <1               | <1               |
| Chromium                          | ppm               | ASTM D5185m          | >20                | 0               | 0                | <1               |
| Nickel                            | ppm               | ASTM D5185m          | >20                | 0               | 0                | 0                |
| Titanium                          | ppm               | ASTM D5185m          |                    | 0               | 0                | 0                |
| Silver                            | ppm               | ASTM D5185m          |                    | 0               | <1               | 0                |
| Aluminum                          | ppm               | ASTM D5185m          | >20                | 0               | 0                | 0                |
| Lead                              | ppm               |                      | >20                | 0               | <1               | 0                |
| Copper                            | ppm               | ASTM D5185m          | >20                | 10              | 13               | 11               |
| Tin                               | ppm               |                      | >20                | 0               | 0                | 0                |
| Vanadium                          | ppm               | ASTM D5185m          | 0                  | 0               | 0                | 0                |
| Cadmium                           | ppm               | ASTM D5185m          |                    | 0               | 0                | 0                |
|                                   | PPIII             |                      |                    |                 | -                |                  |
| ADDITIVES                         |                   | method               | limit/base         | current         | history1         | history2         |
| Boron                             | ppm               | ASTM D5185m          |                    | 0               | 0                | 0                |
| Barium                            | ppm               | ASTM D5185m          |                    | 0               | 1                | 0                |
| Molybdenum                        | ppm               | ASTM D5185m          |                    | 0               | 0                | 0                |
| Manganese                         | ppm               | ASTM D5185m          |                    | 0               | 0                | 0                |
| Magnesium                         | ppm               | ASTM D5185m          |                    | 0               | <1               | 0                |
| Calcium                           | ppm               | ASTM D5185m          |                    | 21              | 21               | 23               |
| Phosphorus                        | ppm               | ASTM D5185m          |                    | 341             | 330              | 326              |
| Zinc                              | ppm               | ASTM D5185m          |                    | 333             | 335              | 342              |
| Sulfur                            | ppm               | ASTM D5185m          |                    | 926             | 1061             | 924              |
| CONTAMINANTS                      | ;                 | method               | limit/base         | current         | history1         | history2         |
| Silicon                           | ppm               | ASTM D5185m          | >15                | 0               | <1               | 1                |
| Sodium                            | ppm               | ASTM D5185m          |                    | <1              | 0                | 0                |
| Potassium                         | ppm               | ASTM D5185m          | >20                | 0               | <1               | <1               |
| FLUID CLEANLIN                    | IESS              | method               | limit/base         | current         | history1         | history2         |
| Particles >4µm                    |                   | ASTM D7647           | >1300              | 547             | 1318             | 765              |
| Particles >6µm                    |                   | ASTM D7647           | >160               | 71              | 425              | 166              |
| Particles >14µm                   |                   | ASTM D7647           | >10                | 9               | 62               | 13               |
| Particles >21µm                   |                   | ASTM D7647           | >3                 | 3               | 23               | 4                |
| Particles >38µm                   |                   | ASTM D7647           | >3                 | 0               | 1                | 0                |
| Particles >71µm                   |                   | ASTM D7647           | >3                 | 0               | 0                | 0                |
| Oil Cleanliness                   |                   | ISO 4406 (c)         | >17/14/10          | 16/13/10        | 18/16/13         | 17/15/11         |
|                                   |                   |                      |                    |                 |                  |                  |
| FLUID DEGRADA                     |                   | method               |                    |                 |                  | history2         |
| FLUID DEGRADA<br>Acid Number (AN) | ATION<br>mg KOH/g | method<br>ASTM D8045 | limit/base<br>0.38 | current<br>0.31 | history1<br>0.33 | history2<br>0.28 |

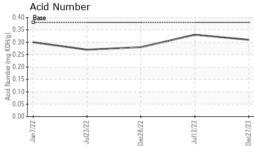
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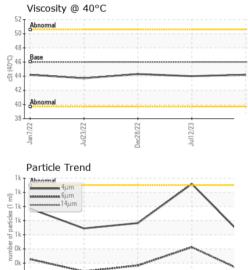
Contact/Location: RONALD TRUETT - PROPUL



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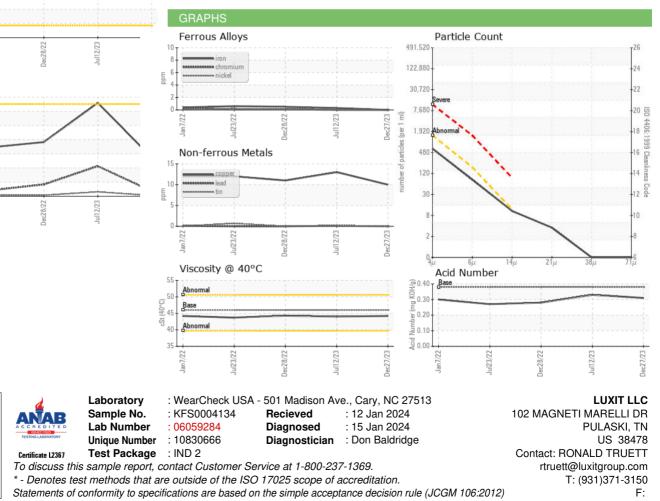




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| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual   | NONE       | NONE    | LIGHT    | NONE     |
| Debris           | scalar | *Visual   | NONE       | LIGHT   | NONE     | NONE     |
| 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   | >0.05      | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERTIES |        | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 46         | 44.2    | 44.0     | 44.3     |
| SAMPLE IMAGES    | ;      | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         |          |          |
| Bottom           |        |           |            |         |          |          |



Contact/Location: RONALD TRUETT - PROPUL