

## **OIL ANALYSIS REPORT**

Sample Rating Trend



### Machine Id Component Hydraulic System Fluid USPI FG HYD 46 (--- GAL)

#### DIAGNOSIS

#### 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.

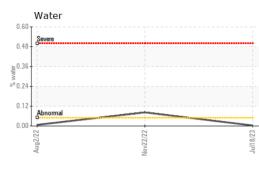
| SAMPLE INFORM    | IATION   | method       | limit/base | current     | history1    | history2    |
|------------------|----------|--------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info  |            | USPM27364   | USPM24319   | USP218435   |
| Sample Date      |          | Client Info  |            | 18 Jul 2023 | 22 Nov 2022 | 02 Aug 2022 |
| 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      | MARGINAL    | NORMAL      |
| WEAR METALS      |          | method       | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >20        | 4           | <1          | 0           |
| Chromium         | ppm      | ASTM D5185m  | >20        | <1          | 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        | 1           | 1           | <1          |
| Lead             | ppm      | ASTM D5185m  | >20        | 0           | 0           | 0           |
| Copper           | ppm      | ASTM D5185m  | >20        | 0           | 0           | 0           |
| 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           | 0           | 0           |
| Magnesium        | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Calcium          | ppm      | ASTM D5185m  |            | 0           | 5           | <1          |
| Phosphorus       | ppm      | ASTM D5185m  | 725        | 510         | 322         | 513         |
| Zinc             | ppm      | ASTM D5185m  |            | <1          | <1          | 0           |
| Sulfur           | ppm      | ASTM D5185m  | 625        | 2081        | 869         | 621         |
| CONTAMINANTS     | 1        | method       | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >15        | <1          | 2           | <1          |
| Sodium           | ppm      | ASTM D5185m  |            | 0           | <1          | 0           |
| Potassium        | ppm      | ASTM D5185m  | >20        | <1          | 0           | 0           |
| Water            | %        | ASTM D6304   | >0.05      | 0.003       | ▲ 0.082     | 0.007       |
| ppm Water        | ppm      | ASTM D6304   | >500       | 39.6        | ▲ 826.6     | 70.8        |
| FLUID CLEANLIN   | IESS     | method       | limit/base | current     | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   | >10000     | 9843        | 2505        | 65          |
| Particles >6µm   |          | ASTM D7647   | >2500      | 1732        | 670         | 26          |
| Particles >14µm  |          | ASTM D7647   | >640       | 70          | 72          | 5           |
| Particles >21µm  |          | ASTM D7647   | >160       | 18          | 17          | 1           |
| Particles >38µm  |          | ASTM D7647   | >40        | 1           | 2           | 0           |
| Particles >71µm  |          | ASTM D7647   | >10        | 0           | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >20/18/16  | 20/18/13    | 19/17/13    | 13/12/10    |
| FLUID DEGRADA    | TION     | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   | 0.36       | 0.60        | 0.41        | 0.40        |

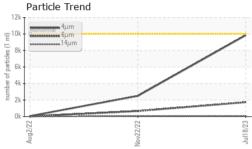


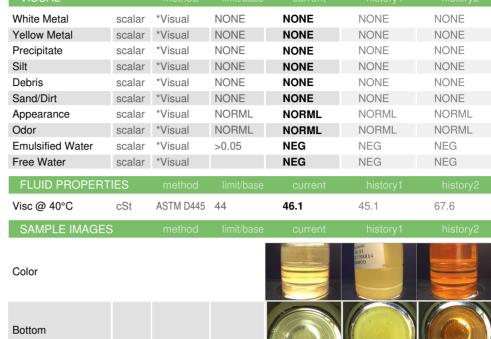
Water

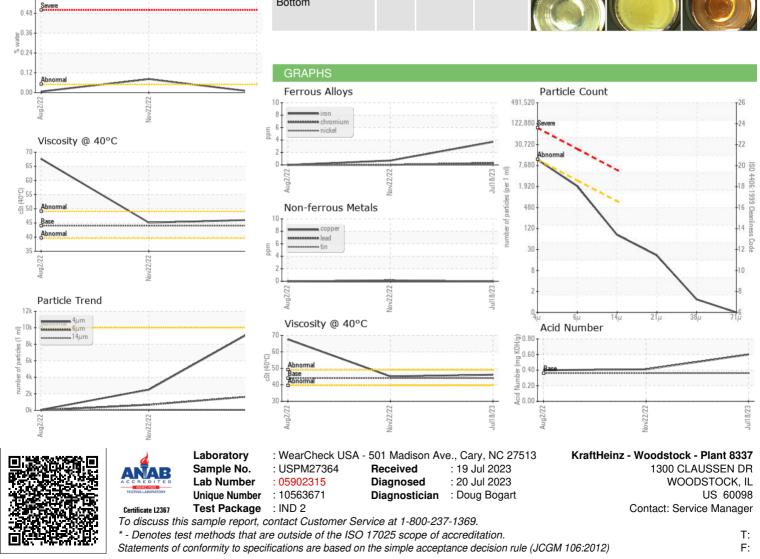
0.60

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Contact/Location: Service Manager - KRAWOOIL