

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# LIGHTNIN RX-24 (S/N 09228761) Gearbox

Fluid

GEAR OIL SAE 80W90 (8 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.

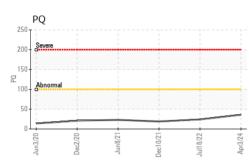
### Fluid Condition

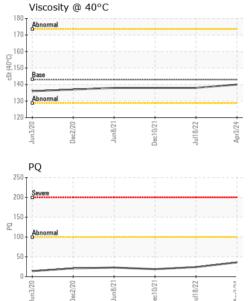
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORM    | IATION   | method      | limit/base | current     | history1    | history2    |
|------------------|----------|-------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info |            | WC0887931   | WC0710502   | WC0646527   |
| Sample Date      |          | Client Info |            | 03 Apr 2024 | 18 Jul 2022 | 10 Dec 2021 |
| Machine Age      | yrs      | Client Info |            | 0           | 0           | 22          |
| Oil Age          | yrs      | Client Info |            | 0           | 0           | 0           |
| Oil Changed      |          | Client Info |            | N/A         | N/A         | Not Changd  |
| Sample Status    |          |             |            | NORMAL      | NORMAL      | NORMAL      |
| WEAR METALS      |          | method      | limit/base | current     | history1    | history2    |
| PQ               |          | ASTM D8184  |            | 36          | 24          | 19          |
| Iron             | ppm      | ASTM D5185m | >200       | 24          | 20          | 52          |
| Chromium         | ppm      | ASTM D5185m | >15        | 0           | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m | >15        | 0           | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m |            | <1          | 0           | 0           |
| Silver           | ppm      | ASTM D5185m |            | 0           | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185m | >25        | 0           | <1          | <1          |
| Lead             | ppm      | ASTM D5185m | >100       | 0           | 0           | 0           |
| Copper           | ppm      | ASTM D5185m | >200       | <1          | <1          | 0           |
| Tin              | ppm      | ASTM D5185m | >25        | 0           | 0           | 0           |
| Antimony         | ppm      | ASTM D5185m | >5         |             |             | 0           |
| Vanadium         | ppm      | ASTM D5185m |            | <1          | 0           | 0           |
| Cadmium          | ppm      | ASTM D5185m |            | 0           | 0           | 0           |
| ADDITIVES        |          | method      | limit/base | current     | history1    | history2    |
| Boron            | ppm      | ASTM D5185m | 400        | 12          | 9           | 4           |
| Barium           | ppm      | ASTM D5185m | 200        | <1          | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m | 12         | 0           | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m |            | <1          | <1          | 0           |
| Magnesium        | ppm      | ASTM D5185m | 12         | 7           | 8           | <1          |
| Calcium          | ppm      | ASTM D5185m | 150        | 6           | 7           | 0           |
| Phosphorus       | ppm      | ASTM D5185m | 1650       | 701         | 641         | 818         |
| Zinc             | ppm      | ASTM D5185m | 125        | 6           | 3           | 61          |
| Sulfur           | ppm      | ASTM D5185m | 22500      | 25443       | 24167       | 22164       |
| CONTAMINANTS     |          | method      | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m | >50        | <1          | <1          | 1           |
| Sodium           | ppm      | ASTM D5185m | >170       | 2           | 1           | <1          |
| Potassium        | ppm      | ASTM D5185m | >20        | 0           | 0           | 0           |
| Water            | %        | ASTM D6304  | >0.2       | NEG         | NEG         | NEG         |
| FLUID DEGRADA    | TION     | method      | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045  | 2.00       | 2.20        | 2.04        | 2.139       |

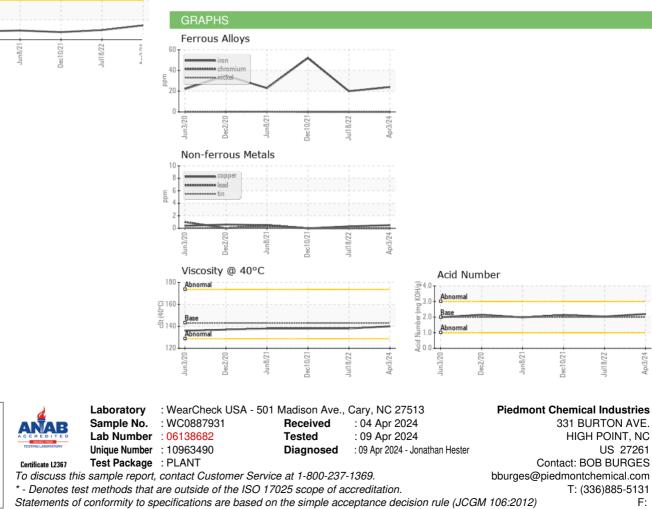


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| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual   | NONE       | NONE    | 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   | >0.2       | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERTIES |        | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 143        | 140     | 138      | 138      |
| SAMPLE IMAGES m  |        | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         |          |          |
| Bottom           |        |           | (          |         |          |          |



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Contact/Location: BOB BURGES - PIEHIG