

## WEAR NORMAL CONTAMINATION MARGINAL FLUID CONDITION NORMAL



# BELL B30E B93A631EC03010095

**Center Differential** 

GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### **WEAR**

All component wear rates are normal.

#### CONTAMINATION

There is a light concentration of water present in the oil.

### **FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

| Test             | UOM        | Method                    | Limit/Abn | Current        | History1 | History2 |
|------------------|------------|---------------------------|-----------|----------------|----------|----------|
| Sample Number    |            | Client Info               |           | BE0009656      |          |          |
| Sample Date      |            | Client Info               |           | 23 May 2024    |          |          |
| Machine Age      | hrs        | Client Info               |           | 2025           |          |          |
| Oil Age          | hrs        | Client Info               |           | 0              |          |          |
| Filter Age       | hrs        | Client Info               |           | 0              |          |          |
| Oil Changed      |            | Client Info               |           | Changed        |          |          |
| Filter Changed   |            | Client Info               |           | Changed        |          |          |
| Sample Status    |            |                           |           | MARGINAL       |          |          |
| PQ               |            | ASTM D8184                | >3000     | 144            |          |          |
| Iron             | nnm        | ASTM D0104<br>ASTM D5185m | >HR:1=    | 524            |          |          |
| Chromium         | ppm<br>ppm | ASTM D5185m               | >10       | 4              |          |          |
| Nickel           |            | ASTM D5185m               | >10       | 2              |          |          |
| Titanium         | ppm<br>ppm | ASTM D5185m               | 210       | 2<br><1        |          |          |
| Silver           | ppm        | ASTM D5185m               |           | 0              |          |          |
| Aluminum         | ppm        | ASTM D5185m               | >25       | 3              |          |          |
| Lead             | ppm        | ASTM D5185m               | >25       | 0              |          |          |
| Copper           | ppm        | ASTM D5185m               | >100      | 60             |          |          |
| Tin              | ppm        | ASTM D5185m               | >10       | 2              |          |          |
| Vanadium         | ppm        | ASTM D5185m               | 210       | 0              |          |          |
| White Metal      | scalar     | *Visual                   | NONE      | NONE           |          |          |
| Yellow Metal     | scalar     | *Visual                   | NONE      | NONE           |          |          |
|                  |            |                           |           |                |          |          |
| Silicon          | ppm        | ASTM D5185m               | >201      | 8              |          |          |
| Potassium        | ppm        | ASTM D5185m               | >20       | 2              |          |          |
| Water            | %          | ASTM D6304                | >1.01     | <b>A</b> 0.145 |          |          |
| ppm Water        | ppm        | ASTM D6304                | >10001    | <b>4</b> 1450  |          |          |
| Silt             | scalar     | *Visual                   | NONE      | NONE           |          |          |
| Debris           | scalar     | *Visual                   | NONE      | NONE           |          |          |
| Sand/Dirt        | scalar     | *Visual                   | NONE      | NONE           |          |          |
| Appearance       | scalar     | *Visual                   | NORML     | NORML          |          |          |
| Odor             | scalar     | *Visual                   | NORML     | NORML          |          |          |
| Emulsified Water | scalar     | *Visual                   | >1.01     | <b>A</b> 0.2%  |          |          |
| Sodium           | ppm        | ASTM D5185m               | >170      | 3              |          |          |
| Boron            | ppm        | ASTM D5185m               | 400       | 2              |          |          |
| Barium           | ppm        | ASTM D5185m               | 200       | 0              |          |          |
| Molybdenum       | ppm        | ASTM D5185m               | 12        | 5              |          |          |
| Manganese        | ppm        | ASTM D5185m               |           | 7              |          |          |
| Magnesium        | ppm        | ASTM D5185m               | 12        | 12             |          |          |
| Calcium          | ppm        | ASTM D5185m               | 150       | 39             |          |          |
| Phosphorus       | ppm        | ASTM D5185m               | 1650      | 596            |          |          |
| Zinc             | ppm        | ASTM D5185m               | 125       | 49             |          |          |
| Sulfur           | ppm        | ASTM D5185m               | 22500     | 21490          |          |          |
| Visc @ 40°C      | cSt        | ASTM D445                 | 143       | 146            |          |          |



