

# LABORATORY ANALYSIS



11525 Rock Island Court, St. Louis, MO 63043  
Tel: 1-800-876-0008 info@englube.com

Department **REYLAM - DIECAST**  
 Equipment No. **QUEN06 DIECAST QUENCH TANK (X0040)**  
 System **Quenching Fluid**  
 Oil Type **ENGINEERED LUBRICANTS ENCOOL SOL-6465GF-ND-XL-RO (--- GAL)**

**COPELAND (MHDS)**  
 6001 S. 35TH STREET, SUITE D"  
 REYNOSA, ZZ  
 US  
 Contact: GERARDO GUERRERO  
 francisco.castillo@Copeland.com  
 T:  
 F:

## DIAGNOSIS

Add make up dilution of 50:1 ENGINEERED LUBRICANTS ENCOOL SOL-6465GF-ND-XL-RO lean dilution until reaching recommended dilution of 10. The desired refractometer reading for this reservoir is 3.02.(not applicable) There is no indication of any contamination in the quenching fluid. Ratio is slightly strong.

## SAMPLE INFORMATION

|                     |           |                    |             |             |
|---------------------|-----------|--------------------|-------------|-------------|
| Lab Number          | New       | <b>2310-00649</b>  | 2309-00653  | 2308-00879  |
| Date of Sample      | (Typical) | <b>10 Oct 2023</b> | 14 Sep 2023 | 09 Aug 2023 |
| Oil Added           |           | <b>UNK</b>         | UNK         | UNK         |
| Last Drain Date     |           | --                 | --          | --          |
| Last Filter Service |           | --                 | --          | --          |
| Sample Point        |           | ---                | ---         | ---         |
| Sample Status       |           | <b>ABNORMAL</b>    | ABNORMAL    | SEVERE      |

## RATIO PER REFRACTOMETER

|                  |           |                |         |         |
|------------------|-----------|----------------|---------|---------|
| Refract. Reading |           | <b>3.8</b>     | 1.6     | 1.9     |
| Refract. Model   |           | <b>DIGITAL</b> | DIGITAL | DIGITAL |
| Refract. Ratio   | oil:water | <b>▲ 7:1</b>   | ▲ 18:1  | ■ 15:1  |

## PH (ASTM E-70)

|             |            |                 |          |          |
|-------------|------------|-----------------|----------|----------|
| pH          | Scale 0-14 | <b>■ 9.0</b>    | ▲ 8.7    | ● 8.6    |
| Ratio Rec'd | oil:water  | <b>AS REC'D</b> | AS REC'D | AS REC'D |

## HARDNESS (MG/L CaCO3)

|                  |      |             |      |       |
|------------------|------|-------------|------|-------|
| Hardness (CaCO3) | mg/L | <b>26.5</b> | 14.1 | 126.3 |
| Grains           |      | <b>1.6</b>  | <1.0 | 7.4   |

## CIC CORROSION

|               |   |                 |          |          |
|---------------|---|-----------------|----------|----------|
| CIC Dilution  |   | <b>AS REC'D</b> | AS REC'D | AS REC'D |
| CIC Corrosion | % | <b>■ 0.0</b>    | ■ 0.0    | ■ 0.0    |

## GRAVIMETRIC, MG/L

|               |      |             |      |      |
|---------------|------|-------------|------|------|
| Filter Micron | μ    | <b>0.45</b> | 0.45 | 0.45 |
| Gravimetric   | mg/L | <b>■ 16</b> | ■ 2  | ■ 18 |

## BACTERIA COUNT (CLASS RANGE 0 TO 6)

|                |           |            |     |     |
|----------------|-----------|------------|-----|-----|
| Bacteria Class | Scale 0-6 | <b>■ 0</b> | ■ 1 | ● 5 |
|----------------|-----------|------------|-----|-----|

## FUNGUS COUNT (CLASS RANGES: YEAST 0 TO 4/MOLD 0 TO 3)

|             |           |            |     |     |
|-------------|-----------|------------|-----|-----|
| Yeast Class | Scale 0-4 | <b>■ 0</b> | ■ 0 | ■ 1 |
| Mold Class  | Scale 0-3 | <b>■ 0</b> | ■ 0 | ■ 0 |

## ENERGY DISPERSIVE XRF (\*BELOW MINIMUM DETECTION LIMIT)

|                   |     |   |   |   |
|-------------------|-----|---|---|---|
| ppm Chlorine (Cl) | ppm | * | * | * |
|-------------------|-----|---|---|---|

## CONTAMINATION

|       |  |            |     |     |
|-------|--|------------|-----|-----|
| Water |  | <b>NEG</b> | NEG | NEG |
|-------|--|------------|-----|-----|

Customer Id: MOTMCA  
 Sample No.: EN23100649  
 Lab Number: 23100649  
 Test Package: TEST



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To discuss the diagnosis or test data:  
 Brian Klutenkamper +1 (314)872-9540  
[bklutenkamper@englube.com](mailto:bklutenkamper@englube.com)

To change component or sample information:  
 Tracy Weaks +1 (314)872-9540  
[tweaks@englube.com](mailto:tweaks@englube.com)

# FUEL REPORT