

EVEN KEEL MARINE SURVEY

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 SAMPLE TYPE: OIL
 SAMPLE SHIP TIME (days): 5

COMPANY NAME : EVEN KEEL MARINE SURVEY - BILL SH.
 CUSTOMER EQUIP NUM : SEARAY 310/PORT
 COMPARTMENT NAME : ENGINE MARINE
 SERIAL NUMBER : L677286
 MANUFACTURER : MERCURISER
 MODEL : 350HORIZON_MERCURISER
 EXT WARR NUMBER :

SHOP JOB NUM :
 COMP SERIAL NUM :
 COMPARTMENT MODEL :
 COMP MANUFACTURER :
 SAMPLE LABEL NUM :
 FLUID BRAND/WEIGHT :
 FLUID TYPE :
 EXT WARR EXPIRE DATE :



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100 QUARRY DRIVE
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| LAB CONTROL NUMBER | SAMPLE DATE | PROCESS DATE | EQUIPMENT METER | METER ON FLUID | FLUID CHANGED | MAKE UP FLUID | MAKE UP FLUID UNITS | FILTER CHANGED |
|--------------------|-------------|--------------|-----------------|----------------|---------------|---------------|---------------------|----------------|
| B420-51243-0033 | 26-Aug-2021 | 31-Aug-2021 | 1200 HR | 20 HR | Unknown | | | Unknown |

Monitor Compartment PERCENT GLYCOL BY GAS CHROMATOGRAPH IS 0 (NEGATIVE) AT THIS TIME; HOWEVER, SODIUM AND POTASSIUM ARE ELEVATED. SODIUM & POTASSIUM MAY BE RESIDUALS OF A MINOR COOLANT LEAK. INSPECT FILTERS FOR GLYCOL SLUDGE BY CUTTING OPEN. MONITOR COOLANT LEVELS. THIS SAMPLE CAME BACK WITH 7.59% FUEL DILUTION. FUEL DILUTION MAY BE DUE TO EXCESSIVE IDLING. MONITOR FUEL LEVELS. IRON AND PQ APPEAR HIGH. PQ INDICATES FERROUS OR IRON PARTICLES IN THE OIL. SUGGEST CUTTING OPEN AND INSPECTING THE OIL FILTER FOR VISIBLE PARTICULATES. CHANGE OIL AND FILTER IF NOT ALREADY CHANGED AND RESAMPLE AT 1/2 THE REGULAR OIL SAMPLE INTERVAL.

| Wear Metals (ppm) | Cu | Fe | Cr | Al | Pb | Sn | Si | Na | K | B | Mo | Ni | Ag | Ti | Ca | Mg | Zn | P | Ba |
|-------------------|----|-----|----|----|----|----|----|-----|----|-----|----|----|----|----|------|-----|-----|-----|----|
| B420-51243-0033 | 7 | 218 | 17 | 0 | 1 | 0 | 10 | 844 | 42 | 193 | 45 | 3 | 0 | 0 | 2091 | 110 | 957 | 803 | 0 |

| Oil Condition / Particle Count (ct/ml) | ST | OXI | NIT | SUL | W | A | F | PFC | V100 | PQI |
|--|----|-----|-----|-----|---|---|---|------|------|-----|
| B420-51243-0033 | 0 | 14 | 8 | 19 | N | N | P | 7.59 | 12.9 | 35 |

Ag = Silver, Al = Aluminum, B = Boron, Ca = Calcium, Cr = Chromium, Cu = Copper, Fe = Iron, P = Phosphorus, K = Potassium, Mg = Magnesium, Mo = Molybdenum, Na = Sodium, Ni = Nickel, Pb = Lead, Si = Silicon, Sn = Tin, V = Vanadium, Zn = Zinc, A = Antifreeze, F = Fuel, W = Water, P = Positive, N = Negative, T = Trace, E = Excessive, NIT = Nitration, OXI = Oxidation, ST = Soot, SUL = Sulfation, ISO = ISO Rating, PFC = Percent Fuel Content, PQI = Particle Quantifying index, NaW = Salt Water, FL Pt = Flash Point, TAN = Total Acid Number, TBN = Total Base Number, H2O = Karl Fisher result, V100 = Viscosity@100C, V40 = Viscosity@40C

Notice: This analysis is intended as an aid in predicting mechanical wear. No guarantee, expressed or implied, is made against failure of this piece of equipment or a component thereof.