## 6. TROUBLESHOOTING

| Problem   | Possible Causes                     | Check/Remedy  |
|---|-------------------------------------|---|
| Meter indication is blank                                       | No power                            | Check power light.  |
|   | Blown fuse                          | Check fuse.   |
|   | No power to instrument              | Check for proper voltage on                                       |
|   |                                     | terminals 8 & 9.  |
|   | Panel plug installed incorrectly    | Make sure red dot on plug aligns                                  |
|   |                                     | with red dot on main circuit board.                               |
|   | Faulty transmitter/indicating meter | Refer to supplier.  |
| Meter will not zero   | Too much absorbed light             | Remove sensor and place in clean                                  |
|   |                                     | water. If the meter does not zero                                 |
|   |                                     | then try adjusting Zero (R9) on the                               |
|   |                                     | main circuit board.   |
|   | Poor sensor connections or          | Check connections and wiring.                                     |
|   | incorrect wiring                    |   |
|   | Sensor leads not insulated from     | Check sensor wires.   |
|   | body of sensor or conduit           | Last favorates as an description                                  |
|   | Wet connection in converter or      | Look for water or condensate on                                   |
|   | sensor housings                     | connections.  |
|   | No power to sensor                  | Voltage should be between 11 & 26 VDC across terminals 5 and 6 on |
|   |                                     | the main circuit board. Also, there                               |
|   |                                     | should be between 11 & 26 VDC                                     |
|   |                                     | across terminals 5 and 6 of the                                   |
|   |                                     | circuit board at the sensor.                                      |
|   | Faulty sensor lamp or defective     | If the proper voltage (11-26 VDC) is                              |
|   | sensor/transmitter                  | on terminals 5 and 6 at the sensor                                |
|   |                                     | and the lamp in the sensor is not                                 |
|   |                                     | on, then the lamp, lamp wiring or                                 |
|   |                                     | sensor circuit board has failed.                                  |
| No response (indication does not change and indication is high) | Faulty sensor lamp                  | Check to see if sensor lamp is on.                                |
|   |                                     | If lamp is off, check voltage across                              |
|   |                                     | terminals 5 & 6 in sensor. If the                                 |
|   |                                     | proper voltage (11-26 VDC) is on                                  |
|   |                                     | terminals 5 and 6 and the lamp in                                 |
|   |                                     | the sensor is not on, then the lamp,                              |
|   |                                     | lamp wiring or sensor circuit board                               |
|   |                                     | has failed.   |
| Unstable reading  | Insufficient dampening              | Increase dampening.   |
|   | Air bubbles or very large particles | Take sample and check for bubbles                                 |
|   | in process line                     | or large particles. If present,                                   |
|   | RFI pickup                          | relocate sensor.  Earth ground instrument properly.               |
|   | Heavy Inductive loads               | Mount instrument away from power                                  |
|   | Heavy inductive loads               | cables. Put cables in conduit.                                    |
| Reading does not agree with lab                                 | Improper calibration                | Recalibrate instrument.   |
| results   | Lab procedure error                 | Check procedure.  |
|   | Lab instrument error                | Check instrument.   |
|   | Defective sensor/transmitter        | Refer to supplier.  |
| Readings drift with time  | Converter not warmed up             | Warm up converter for 5 minutes.                                  |
| -   | Sensor/converter connections wet    | Look for water or condensate on                                   |
|   |                                     | connections. Dry connections with                                 |
|   |                                     | hair dryer.   |
|   | Deposit build-up on sensor          | Remove sensor and clean.  |
| Negative readings or negative                                   | Improper calibration                | Recalibrate instrument.   |
| output  |                                     |   |