TURNER DESIGNS
Hydrocarbon Instruments

TD-500D Trouble Shooting Guidelines

Refer to the User's Manual (P/N 100668) of the TD-500D for Calibration and Sample Extraction procedures. The TD-500D User's Manual has two parts, part I describes the operating instructions of the TD-500D in detail and part II has the actual analysis procedure. Refer to page 33 of the TD-500D User's Manual for details on the calibration procedure. The sample analysis procedure is explained on page 26.

Check the following parameters after calibrating the TD-500D for accurate operation of the TD-500D:

1) Sensitivity: Check the diagnostic screen (DIAG) on the TD-500D to check the sensitivity of the instrument. Please note the % FS-BLK and % FS-STD values. The % FS-STD value should be greater than 0.100. If the % FS-STD is less than 0.100 then use the larger cuvettes and/or use higher concentration of oil in the solvent for calibrating the TD-500D. Refer to section 3.4 (page # 16) of the attached TD-500D User's Manual for more information on the sensitivity of the TD-500D.

2) Linear Range: Check the linear range of the TD-500D after calibrating the TD-500D. Linearity of the TD-500D can be checked by diluting the calibration solution in half with the extraction solvent and then analyzing the diluted extract. If the reading is approximately half of the calibration standard value reading, then the calibration curve is linear. The procedure to check the linearity of the TD-500D is explained in section 3.3 (page # 15) of the TD-500D User's Manual.

Please record the following information and send it to us for trouble shooting purposes:

1) API gravity of your oil/condensate_____
2) Extraction solvent used_____
3) Calibration method used_____
4) Channel (A or B) used_____
5) Size of the cuvette used _____
6) Calibration standard concentration_____
7) Standard value (STD VAL) _____
8) Diagnostic screen (DIAG) readings: % FS-BLK _____and % FS-STD_____.

Please e-mail the trouble shooting information to service@oilinwatermonitors.com or call 001-559-253-1414 with the information.

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