

Answer on Question #41111 – Chemistry – Other

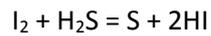
Question:

want to determine water (100 ppm) in condensate sample by Karl Fischer coulometry method but our sample has H₂S concentration 600 ppmwt which can interfere with Karl Fischer solution in ASTM E203. CORRECTION IS ONLY FOR MERCAPTAN. Can you guide me how can I?

Answer:

Actually, H₂S doesn't interfere so much while detecting water by Karl Fisher method. But if there are small amounts of water and great concentration of H₂S (as in your case), it can cause a top-heavy result.

You can oxidize H₂S previously by adding an accurate amount of I₂. The following reaction will take place



Then the precipitate S can be removed by filtration.