Dionex 4000I IC
Operating Procedures
03July01

Start Up

1. Log in on general run log. Check Helium; should be set to 80 psi w/ at least 300 psi tank pressure for overnight run.

2. Remove eluant and regenerant carboys from instrument taking care to note fitting configuration. Prepare enough eluant and regenerant for duration of run.

3. Re-install filled carboys. Sparge eluent with He for at least 10 min. with cap off.

4. Turn on power to instrument, computer, etc.

5. Start eluent flow by starting gradient pump in local mode and regenerant flow by opening the stopcock. Pump might require priming to establish eluent flow, especially if low pressure alarm is activated.

6. While system is equilibrating, create/edit method and save.

7. Create schedule for analysis.

8. Check pump pressure and background conductivity for stability (cell in 'Local' mode with 'Total' output) and record parameters on log. If readings are normal, proceed with analysis.

9. Set up autosampler:
   - Prepare samples, standards, blanks, QC's, rinses, etc. inject and mix internal std if used. Use 5 mL total vol in large vials, 0.6 mL in small. When using undiluted Ext. Source QC, use only 0.5 mL vials!
   - Cap and load vials. Place at least one rinse (raised cap) and blank (flush cap) at start and end of run. These will rinse sample line/loop and column respectively.
   - Set autosampler to: "Local", "Run", "Loop", "Bleed = Off", "Inject / vial = 1". Select "Const" if using 5 mL vials with small (<100 uL) loop or "Prop" if using 5 mL vials with large (≥100 uL) loop or 0.5 mL vials.
   - Clear cartridges from right side to prevent unintentional shut-down

10. Set pump and detector to "Remote" mode.

11. Enter "Run" mode in software. Load schedule. Once GPM events, etc. have been loaded, start run.

Shut Down

1. Close regenerant stopcock.

2. Turn off He at tank valve.

3. Record appropriate information on logs.

4. Rinse pump with at least 30 mL of DI water through eluant line.

5. Turn off power.

6. Clean up.