Sulphides

Function: Differential Pulse Voltammetry (DPV/a)

Start Potential (mV)	-200
End Potential (mV)	-1000
Current range	4,096
Scan Speed (mV/s)	20
Number of cycles	3
Delay before sweep (s)	5
Purge and stir time (s)	300
Stirring speed (rpm)	300
Drop Size (a.u.)	60

Sulphide concentrated standard solution (1 g/l)
Dissolve 7.4901 g of $Na_2S \cdot 9H_2O$ in 1 l of 0.1 M NaOH, in a volumetric flask. Prepare the solution at the moment of the analysis. ($MM_{Na2S} = 240.2$ $MM_S = 32$)

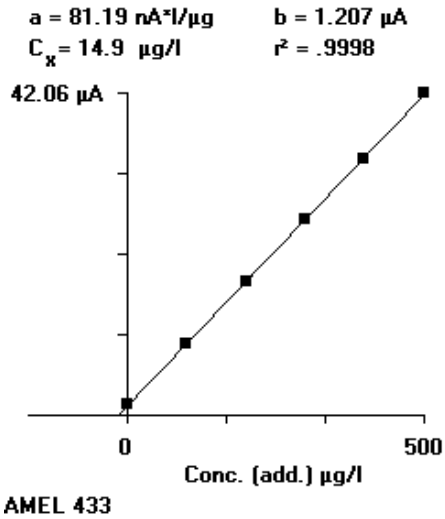
Supporting electrolyte
1 M NaOH solution
Dissolve 40 g of NaOH in 1 l of distilled water.

Procedure
Pour 10 ml of sample in the cell. Add 1 ml of supporting electrolyte**.**

Working standard solution (10 mg/l)
Dilute 1+99 the concentrated standard solution with distilled water. Prepare the solution at the moment of the analysis

Warnings
- Store samples in hermetically sealed bottles without bubble air inside. Analyse these samples as soon as possible
- For a better treatment, add 4 g of NaOH for 1 l to the sample, at the moment of sampling and analyse the solution as soon as possible.

Analytical report
Analysis: Anaerobic water plant
Sample Concentration = 14.9 µg/l
Method: 5 additions



Volumes Table

Solvent Volume	0 (ml)
Supporting Sol.	1 (ml)
Sample Volume	10 (ml)
Standard Conc.	10000 (µg/l)

Height Table

#	Peak Pot.	Height
0	-637.5	1.316 µA
1	-657.5	8.259 µA
2	-663.8	15.50 µA
3	-671.8	22.55 µA
4	-676.3	29.37 µA
5	-681.2	36.57 µA

Regression Data

#	Add.Conc.	Height x dilution
0	0 µg/l	1.448 µA
1	100 "	9.168 µA
2	200 "	17.37 µA
3	300 "	25.49 µA
4	400 "	33.49 µA
5	500 "	42.06 µA

y = ax + b
a = 81.19 nA*l/µg
b = 1.207 µA
r^2= .9998