VP0973 2/16/12

TimTalk 9 Version 2.1 **US EPA NEIC - Laboratory**

Bkr#	Date/Time	Identification	Smp#	Result name		Result	
Batch identification:		Standardization					
1	2/16/12 2:54:25 PM	Aqua Solutions	1	Result 1	100 mL	923.6166	ml
2	2/16/12 3:11:44 PM	Aqua Solutions	2	Result 1	150	886.7250	ml
3	2/16/12 3:30:26 PM	Aqua Solutions	3	Result 1	200	907.8929	ml
4	2/16/12 3:50:24 PM	Aqua Solutions	4	Result 1	250	871.8357	ml
5	2/16/12 4:11:32 PM	Aqua Solutions	5	Result 1	300	876.2067	ml
6	2/16/12 4:30:37 PM	BaS Std	6	Result 1	100	928.5634	ml
7	2/16/12 4:47:24 PM	BaS Std	7	Result 1	150	853.5424	ml
8	2/16/12 5:07:27 PM	BaS Std	8	Result 1	200	846.2560	ml
9	2/16/12 5:27:47 PM	BaS Std	9	Result 1	250	860.5771	ml
10	2/16/12 5:48:40 PM	BaS Std	10	Result 1	300	799.4907	ml
				Result 2		69.2332	ml

TimTalk 9 Version 2.1 **US EPA NEIC - Laboratory**

Standardize Sulfide — Beaker number 10 — Incr. Inflection point

Sample number:	10	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.300 mL
Completed:	2/16/12 5:48:40 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.3000 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

Start potential: -865.0 mV Start temperature: 21.6 °C

mV	ml	**Final results**		
-780.4	0.748	Result 1	799.4907	ml
-626.3	0.813	Result 2	69.2332	ml

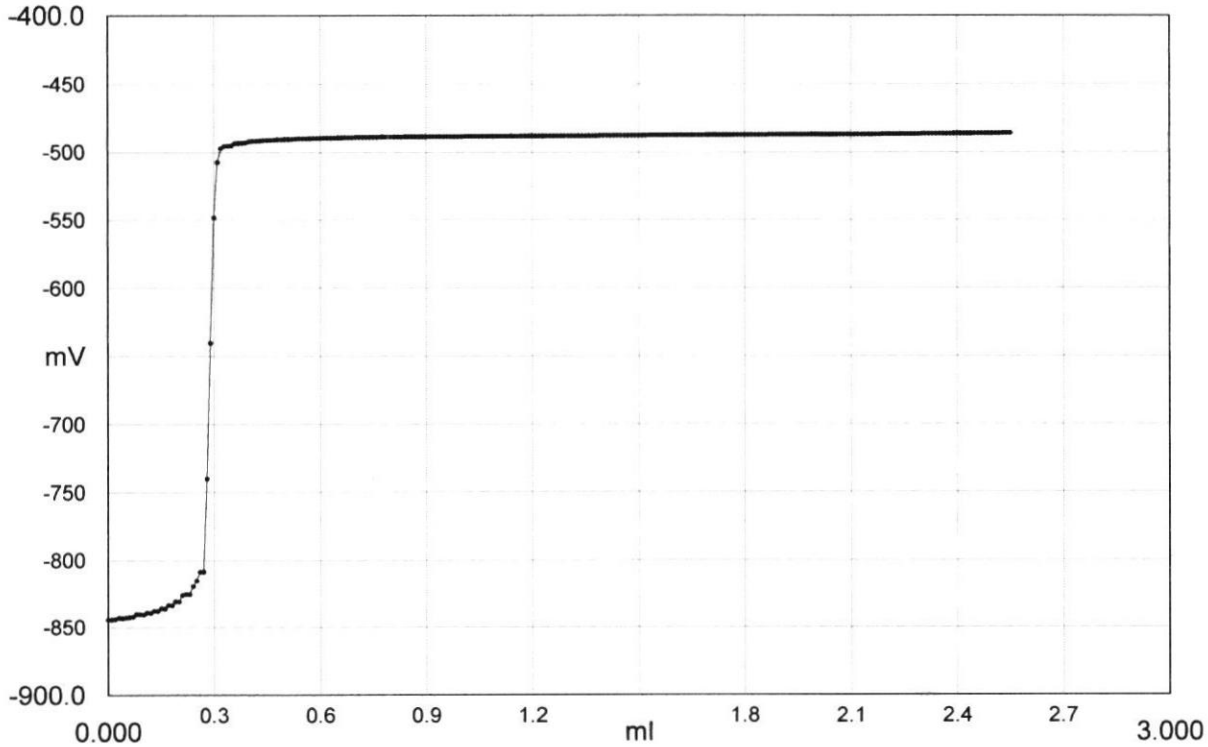
Maximum number of measuring points reached

Standardize Sulfide | Beaker number 1 | Incr. Inflection point

Sample number:	1	Sample type:	Normal
Identification:	Aqua Solutions	Identification 2:	0.100 mL
Completed:	2/16/12 2:54:25 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.1000 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

Start potential: -844.2 mV Start temperature: 21.0 °C

mV	ml	**Final results**		
-659.9	0.288	Result 1	923.6166	ml

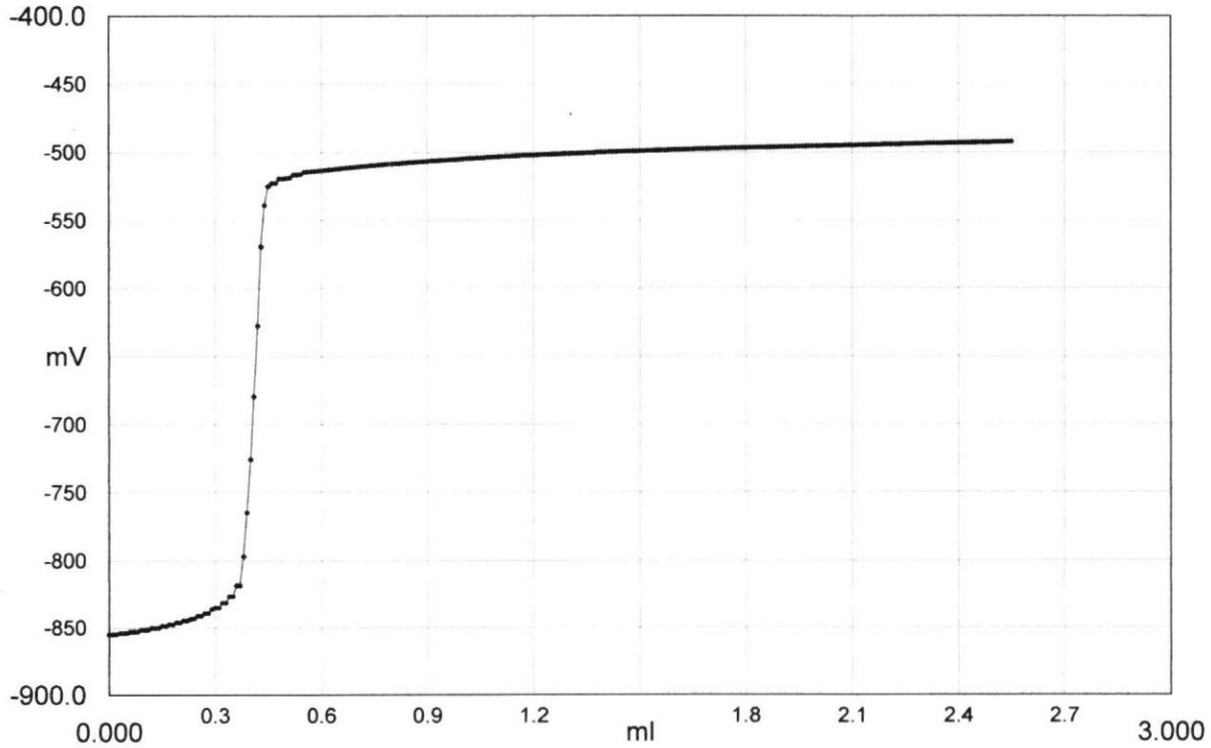


Standardize Sulfide | Beaker number 2 | Incr. Inflection point

Sample number:	2	Sample type:	Normal
Identification:	Aqua Solutions	Identification 2:	0.150 mL
Completed:	2/16/12 3:11:44 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.1500 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

Start potential: -855.2 mV Start temperature: 21.1 °C

mV	ml	**Final results**		
-654.7	0.415	Result 1	886.7250	ml

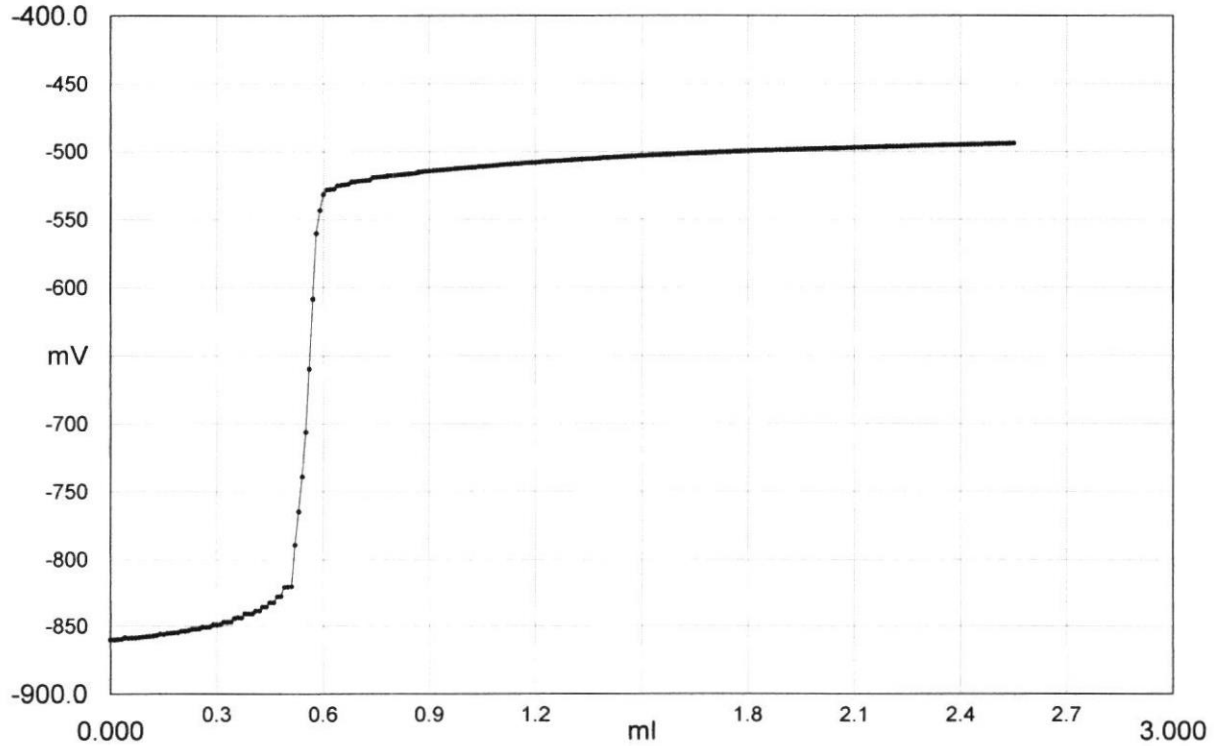


Standardize Sulfide | Beaker number 3 | Incr. Inflection point

Sample number:	3	Sample type:	Normal
Identification:	Aqua Solutions	Identification 2:	0.200 mL
Completed:	2/16/12 3:30:26 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.2000 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

Start potential: -860.0 mV Start temperature: 21.2 °C

mV	ml	**Final results**		
-627.7	0.566	Result 1	907.8929	ml

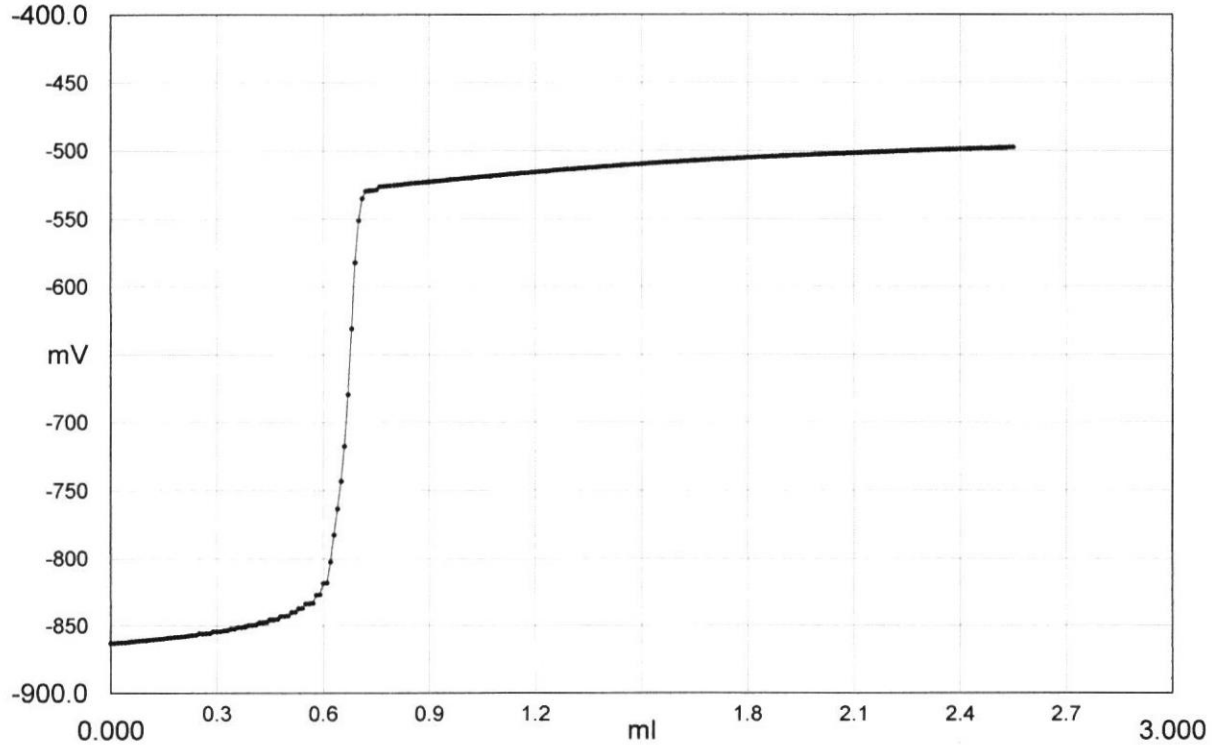


Standardize Sulfide | Beaker number 4 | Incr. Inflection point

Sample number:	4	Sample type:	Normal
Identification:	Aqua Solutions	Identification 2:	0.250 mL
Completed:	2/16/12 3:50:24 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.2500 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

Start potential: -862.8 mV Start temperature: 21.3 °C

mV	ml	**Final results**		
-632.4	0.680	Result 1	871.8357	ml

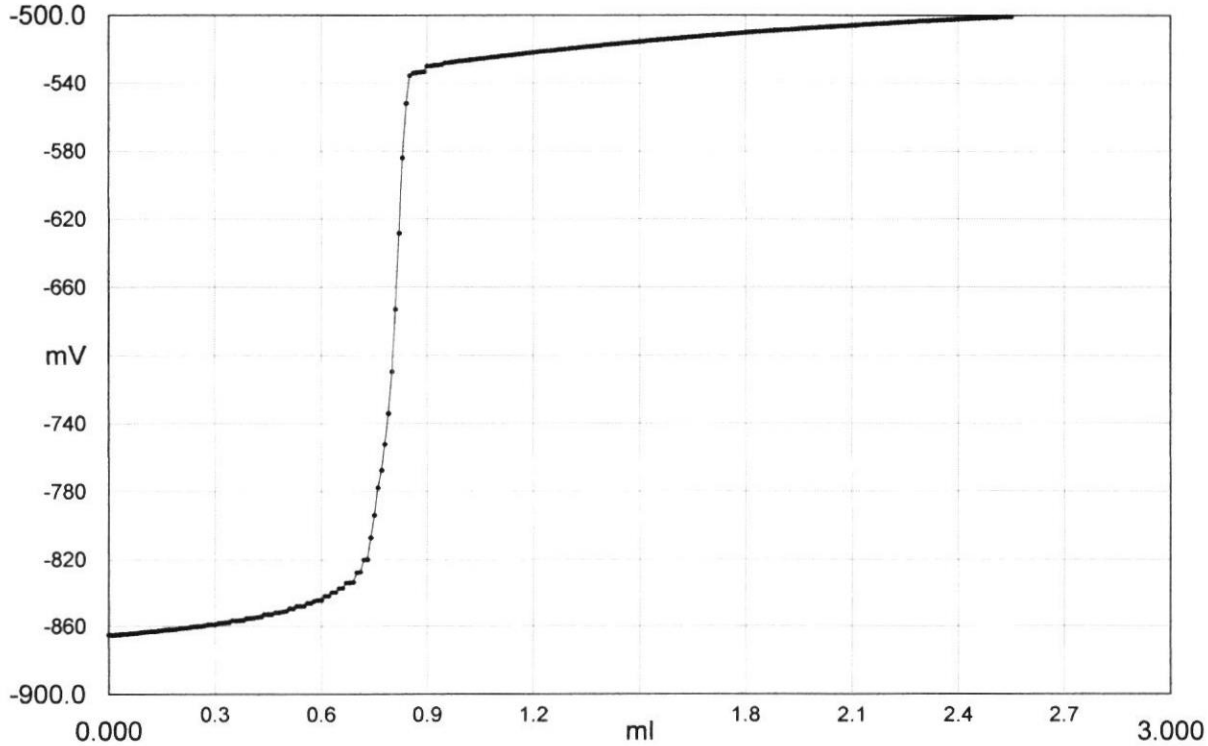


Standardize Sulfide | Beaker number 5 | Incr. Inflection point

Sample number:	5	Sample type:	Normal
Identification:	Aqua Solutions	Identification 2:	0.300 mL
Completed:	2/16/12 4:11:32 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.3000 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

Start potential: -865.1 mV Start temperature: 21.3 °C

mV	ml	**Final results**		
-629.4	0.820	Result 1	876.2067	ml

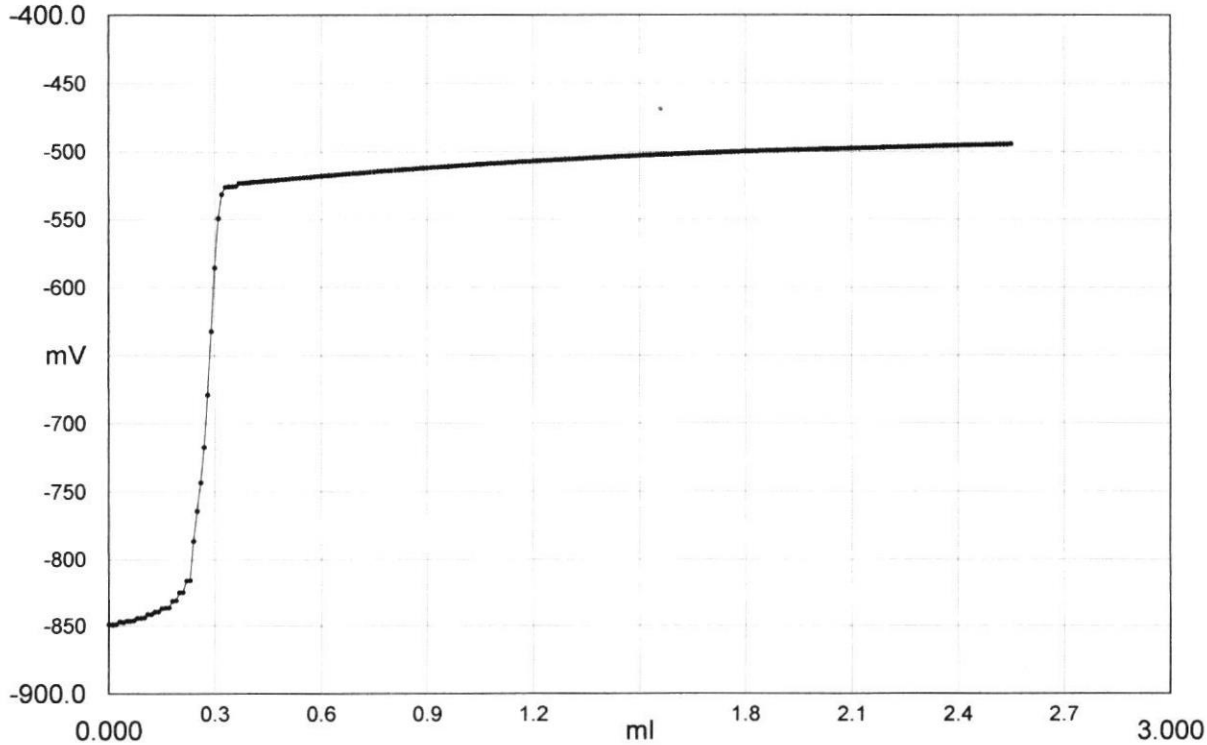


Standardize Sulfide | Beaker number 6 | Incr. Inflection point

Sample number:	6	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.100 mL
Completed:	2/16/12 4:30:37 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.1000 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

Start potential: -848.9 mV Start temperature: 21.4 °C

mV	ml	**Final results**		
-634.3	0.290	Result 1	928.5634	ml

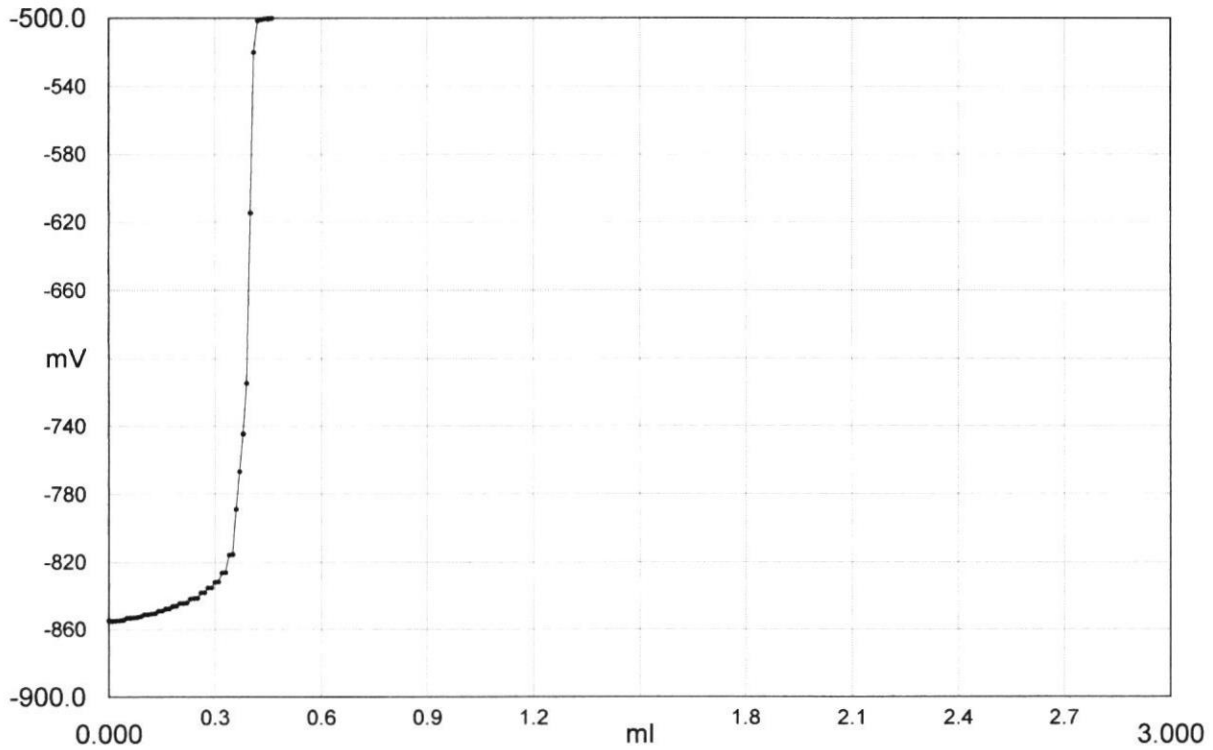


Standardize Sulfide | Beaker number 7 | Incr. Inflection point

Sample number:	7	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.150 mL
Completed:	2/16/12 4:47:24 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.1500 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

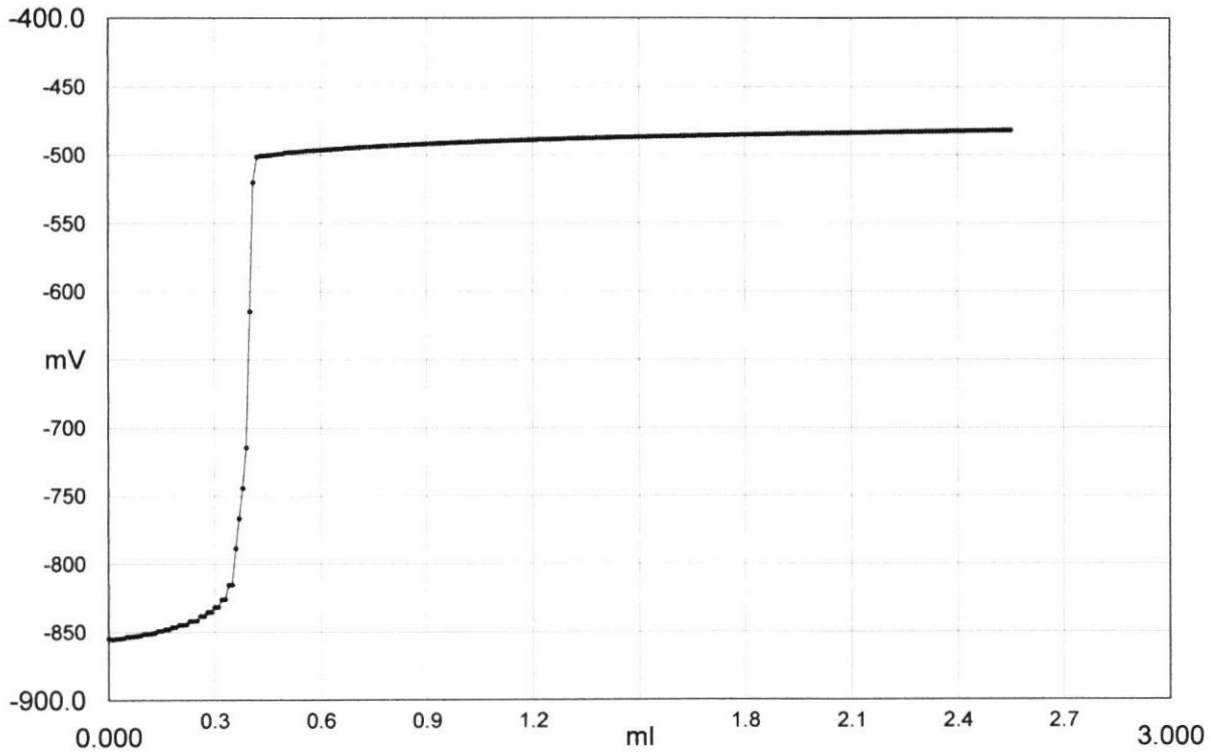
Start potential: -854.9 mV Start temperature: 21.4 °C

mV	ml	**Final results**		
-621.9	0.399	Result 1	853.5424	ml



Standardize Sulfide | Beaker number 7 | Incr. Inflection point

Sample number:	7	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.150 mL
Completed:	2/16/12 4:47:24 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.1500 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		



Standardize Sulfide | Beaker number 8 | Incr. Inflection point

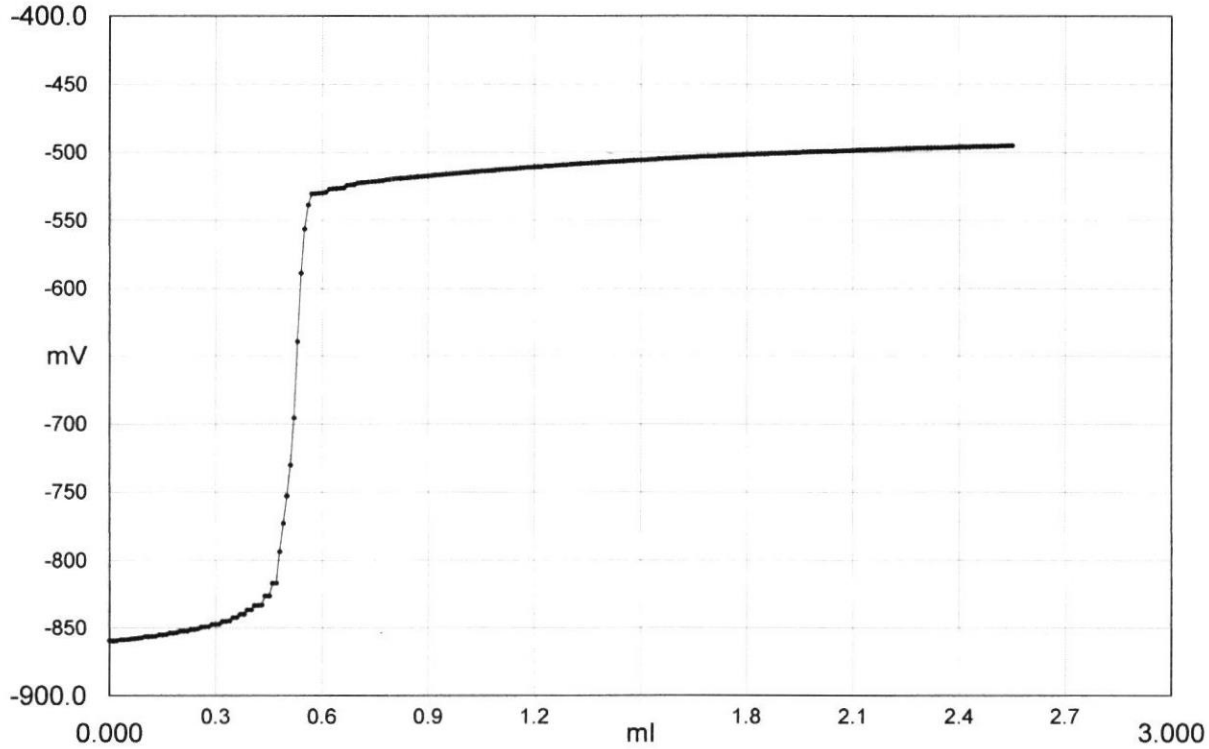
Sample number:	8	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.200 mL
Completed:	2/16/12 5:07:27 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.2000 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

Start potential: -859.4 mV Start temperature: 21.5 °C

mV	ml	**Final results**		
-651.4	0.528	Result 1	846.2560	ml

Standardize Sulfide | Beaker number 8 | Incr. Inflection point

Sample number:	8	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.200 mL
Completed:	2/16/12 5:07:27 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.2000 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		



Standardize Sulfide | Beaker number 9 | Incr. Inflection point

Sample number:	9	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.250 mL
Completed:	2/16/12 5:27:47 PM	Method:	Standardize Sulfide
Operator:	J Reschl	Sample amount:	0.2500 ml
Instrument:	NEICTitrator	Sample factor:	1.0000
Batch identification:	Standardization		

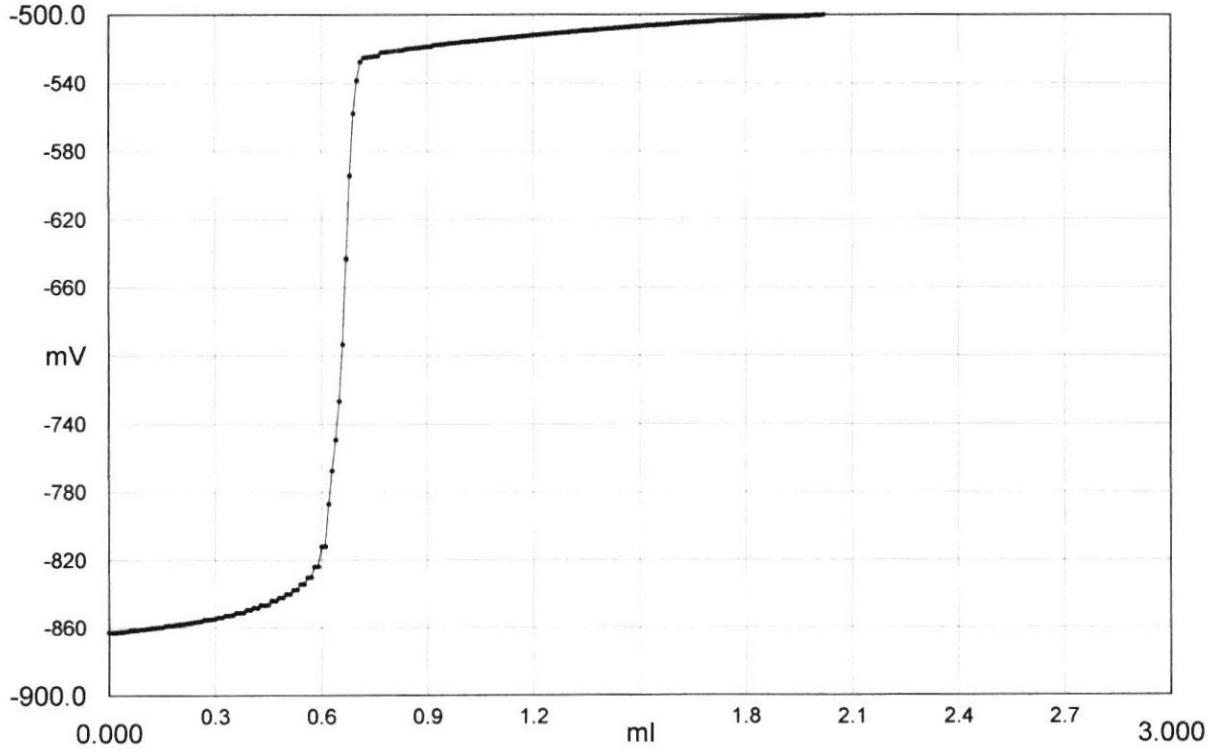
Start potential: -862.7 mV Start temperature: 21.5 °C

mV	ml	**Final results**		
-638.6	0.671	Result 1	860.5771	ml

Method: Standardize Sulfide		Unit:	mV
Created:	1/5/12 9:05:27 AM	By:	J Reschl
Last change:	1/20/12 5:14:31 PM	By:	J Reschl
Dose dynamics:	200.0	Maximum dose:	0.1 % of burette
Burette speed:	120.0 %/min.	Stability:	0.25 mV/s
Max stab. time:	60 seconds	Maximum volume:	4.0 ml
Stop point:	1000.0 mV	No predose	
Filter:	4	IP reject (slope):	70.0
Direction:	Up	Autoscaling	
Number of IP's:	0	Result unit:	mg/l
Sample amount by:	Volume	Results by:	Diff.
Factor 1:	1.0000	Molar weight 1:	32.0660
Result name 1:	Result 1	Result unit label 1:	ml
Factor 2:	1.0000	Molar weight 2:	32.0660
Result name 2:	Result 2	Result unit label 2:	ml
Factor 3:	1.0000	Molar weight 3:	32.0660
Result name 3:	Result 3	Result unit label 3:	ml
Factor 4:	1.0000	Molar weight 4:	32.0660
Result name 4:	Result 4	Result unit label 4:	ml

Standardize Sulfide | Beaker number 9 | Incr. Inflection point

Sample number:	9	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.250 mL
Completed:	2/16/12 5:27:47 PM	Method:	Standardize Sulfide



Standardize Sulfide | Beaker number 10 | Incr. Inflection point

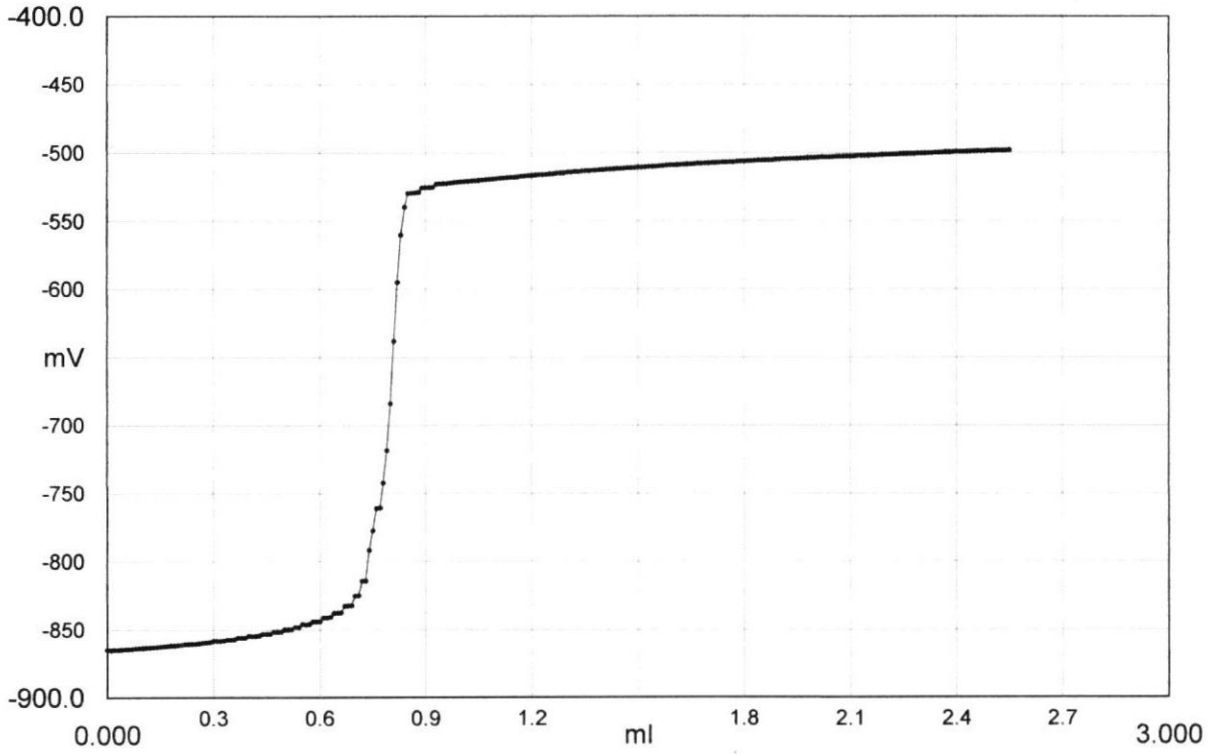
Sample number:	10	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.300 mL
Completed:	2/16/12 5:48:40 PM	Method:	Standardize Sulfide

Method: Standardize Sulfide			Unit:	mV	
Created:	1/5/12 9:05:27 AM		By:	J Reschl	
Last change:	1/20/12 5:14:31 PM		By:	J Reschl	
Dose dynamics:	200.0		Maximum dose:	0.1	% of burette
Burette speed:	120.0	%/min.	Stability:	0.25	mV/s
Max stab. time:	60	seconds	Maximum volume:	4.0	ml
Stop point:	1000.0	mV	No predose		
Filter:	4		IP reject (slope):	70.0	
Direction:	Up		Autoscaling		
Number of IP's:	0		Result unit:	mg/l	
Sample amount by:	Volume		Results by:	Diff.	
Factor 1:	1.0000		Molar weight 1:	32.0660	
Result name 1: Result 1			Result unit label 1: ml		
Factor 2:	1.0000		Molar weight 2:	32.0660	
Result name 2: Result 2			Result unit label 2: ml		
Factor 3:	1.0000		Molar weight 3:	32.0660	
Result name 3: Result 3			Result unit label 3: ml		
Factor 4:	1.0000		Molar weight 4:	32.0660	
Result name 4: Result 4			Result unit label 4: ml		

Titrant:	0.01M Cadmium	Last standardisation:	1/5/12 9:07:35 AM
Concentration:	10.0000 mmol/l	Operator:	J Reschl
		Method:	(Entered manually)
Electrode:	Orion 9616BNWP		
Reagent addition:	(None)	Stirring delay:	90 seconds
Blank:		Blank volume:	0.0000 ml

Standardize Sulfide | Beaker number 10 | Incr. Inflection point

Sample number:	10	Sample type:	Normal
Identification:	BaS Std	Identification 2:	0.300 mL
Completed:	2/16/12 5:48:40 PM	Method:	Standardize Sulfide



JJR UP0973 05/08/2012