

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ **8/13/2012 10:39:40 AM**
Start time: 8/13/2012 10:46:05 AM

Sample data

No.	Comment / ID	Start time	Sample size	Corr. f	Density
1/6	Potassium iodate	8/13/2012 10:46:05 AM	0.02921 g	1.0	0 g/mL
2/6	Potassium iodate	8/13/2012 10:57:54 AM	0.02505 g	1.0	0 g/mL
3/6	Potassium iodate	8/13/2012 11:08:34 AM	0.02443 g	1.0	0 g/mL
4/6	Potassium iodate	8/13/2012 11:19:09 AM	0.02367 g	1.0	0 g/mL
5/6	Potassium iodate	8/13/2012 11:29:37 AM	0.02382 g	1.0	0 g/mL
6/6	Potassium iodate	8/13/2012 11:40:06 AM	0.02561 g	1.0	0 g/mL

Results

No.	Comment / ID	Start time	Sample size and results		
1/6	Potassium iodate	8/13/2012 10:46:05 AM	0.02921 g		
			R1 = 0.99876		Titer
2/6	Potassium iodate	8/13/2012 10:57:54 AM	0.02505 g		
			R1 = 1.00259		Titer
3/6	Potassium iodate	8/13/2012 11:08:34 AM	0.02443 g		
			R1 = 0.99962		Titer
4/6	Potassium iodate	8/13/2012 11:19:09 AM	0.02367 g		
			R1 = 1.00234		Titer
5/6	Potassium iodate	8/13/2012 11:29:37 AM	0.02382 g		
			R1 = 1.00396		Titer
6/6	Potassium iodate	8/13/2012 11:40:06 AM	0.02561 g		
			R1 = 1.00366		Titer
-/-			R2 = 1.0018	--	Mean Titer

Titer

Titer 1.00182

Series comment

Statistics

Rx	Name	n	Mean value	Unit	s	srel [%]
R1	Titer	6	1.00182		0.00215	0.214
R2	Mean Titer	1	1.0018	--	NaN	NaN

Raw data

Sample

No. 1/6
Standard Potassium iodate
Type of standard solid
Comment
Titration stand Rondolino TTL 1
Weight m = 0.02921 g
Correction factor f = 1.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ **8/13/2012 10:39:40 AM**
Start time: 8/13/2012 10:46:05 AM

Purity p = 100.00 %
Temperature T = 25.0 oC
Sample start 8/13/2012 10:46:05 AM
Sample end 8/13/2012 10:57:53 AM

Dispense (normal) [1]

Titration 0.1M HCl cDi = 0.1 mol/L TITERDi = 1.0
Disp. volume VENDDi = 50 mL
Disp. amount QENDDi = 5.00 mmol
Time 1:46 min

Dispense (normal) [2]

Titration SAT KI cDi = 1 mol/L TITERDi = 1.0
Disp. volume VENDDi = 1.0 mL
Disp. amount QENDDi = 1.00 mmol
Time 0:06 min

EQP titration [1]

Titration Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Start potential EST = 371.2 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 8.200251 mL
Q1 = 0.841526 mmol
EEQ1 = 243.7 mV
EHN1 = 363.6 mV
Excess VEX = 0.422249 mL
QEX = 0.043332 mmol
End VEND = 8.6225 mL
QEND = 0.884858 mmol
Termination at EQPs
Time t = 8:15 min

Calculation

Result R1 = 0.99876 Titer
Formula $R1 = m / (VEQ * c * C)$
Constant $M / (10 * p * z)$
C = 0.035665
Molar mass M[Potassium iodate] = 213.99 g/mol
Equivalent number z[Potassium iodate] = 6
Duration tUSE = 10:56 min

Measured values EQP titration [1]

Titration Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Sample 1/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	371.2	NaN	NaN	0	25.0
0.0200	0.0200	372.5	1.3	NaN	2	25.0
0.0400	0.0200	372.8	0.3	NaN	4	25.0
0.0900	0.0500	373.1	0.3	NaN	7	25.0
0.1400	0.0500	373.2	0.1	NaN	9	25.0
0.1900	0.0500	373.4	0.2	0.60	12	25.0
0.2400	0.0500	373.4	0.0	0.78	14	25.0
0.2900	0.0500	373.4	0.0	0.17	16	25.0
0.3400	0.0500	373.5	0.1	-0.21	19	25.0
0.3900	0.0500	373.4	-0.1	-0.63	21	25.0
0.4400	0.0500	373.4	0.0	-0.80	24	25.0
0.4900	0.0500	373.3	-0.1	-1.21	26	25.0
0.5400	0.0500	373.3	0.0	-1.51	28	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ 8/13/2012 10:39:40 AM
Start time: 8/13/2012 10:46:05 AM

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.5900	0.0500	373.2	-0.1	-1.60	31	25.0
0.6400	0.0500	373.1	-0.1	-1.91	33	25.0
0.6900	0.0500	373.0	-0.1	-1.89	35	25.0
0.7400	0.0500	372.9	-0.1	-2.11	38	25.0
0.7900	0.0500	372.8	-0.1	-2.20	40	25.0
0.8400	0.0500	372.7	-0.1	-2.40	42	25.0
0.8900	0.0500	372.6	-0.1	-2.51	45	25.0
0.9400	0.0500	372.4	-0.2	-2.51	47	25.0
0.9900	0.0500	372.3	-0.1	-2.28	50	25.0
1.0400	0.0500	372.2	-0.1	-2.20	52	25.0
1.0900	0.0500	372.1	-0.1	-2.20	54	25.0
1.1400	0.0500	372.0	-0.1	-2.28	57	25.0
1.1900	0.0500	371.9	-0.1	-2.40	59	25.0
1.2400	0.0500	371.7	-0.2	-2.51	61	25.0
1.2900	0.0500	371.6	-0.1	-2.60	64	25.0
1.3400	0.0500	371.5	-0.1	-2.60	66	25.0
1.3900	0.0500	371.4	-0.1	-2.51	68	25.0
1.4400	0.0500	371.2	-0.2	-2.28	71	25.0
1.4900	0.0500	371.1	-0.1	-2.40	73	25.0
1.5400	0.0500	371.0	-0.1	-2.41	76	25.0
1.5900	0.0500	370.9	-0.1	-2.28	78	25.0
1.6400	0.0500	370.8	-0.1	-2.40	80	25.0
1.6900	0.0500	370.6	-0.2	-2.72	83	25.0
1.7400	0.0500	370.5	-0.1	-2.80	85	25.0
1.7900	0.0500	370.4	-0.1	-2.60	87	25.0
1.8400	0.0500	370.2	-0.2	-2.51	90	25.0
1.8900	0.0500	370.1	-0.1	-2.49	92	25.0
1.9400	0.0500	370.0	-0.1	-2.60	94	25.0
1.9900	0.0500	369.9	-0.1	-2.40	97	25.0
2.0400	0.0500	369.7	-0.2	-2.40	99	25.0
2.0900	0.0500	369.6	-0.1	-2.60	102	25.0
2.1400	0.0500	369.5	-0.1	-2.49	104	25.0
2.1900	0.0500	369.4	-0.1	-2.51	106	25.0
2.2400	0.0500	369.2	-0.2	-2.60	109	25.0
2.2900	0.0500	369.1	-0.1	-2.68	111	25.0
2.3400	0.0500	369.0	-0.1	-2.72	114	25.0
2.3900	0.0500	368.8	-0.2	-2.72	116	25.0
2.4400	0.0500	368.7	-0.1	-2.57	118	25.0
2.4900	0.0500	368.6	-0.1	-2.72	121	25.0
2.5400	0.0500	368.4	-0.2	-2.60	123	25.0
2.5900	0.0500	368.3	-0.1	-2.68	125	25.0
2.6400	0.0500	368.2	-0.1	-2.92	128	25.0
2.6900	0.0500	368.0	-0.2	-2.80	130	25.0
2.7400	0.0500	367.9	-0.1	-2.80	132	25.0
2.7900	0.0500	367.7	-0.2	-2.81	135	25.0
2.8400	0.0500	367.6	-0.1	-2.79	137	25.0
2.8900	0.0500	367.5	-0.1	-2.81	140	25.0
2.9400	0.0500	367.3	-0.2	-2.80	142	25.0
2.9900	0.0500	367.2	-0.1	-2.80	144	25.0
3.0400	0.0500	367.0	-0.2	-2.81	147	25.0
3.0900	0.0500	366.9	-0.1	-2.79	149	25.0
3.1400	0.0500	366.8	-0.1	-2.69	151	25.0
3.1900	0.0500	366.6	-0.2	-2.79	154	25.0
3.2400	0.0500	366.5	-0.1	-3.00	156	25.0
3.2900	0.0500	366.3	-0.2	-3.21	158	25.0
3.3400	0.0500	366.2	-0.1	-3.31	161	25.0
3.3900	0.0500	366.0	-0.2	-3.21	163	25.0
3.4400	0.0500	365.8	-0.2	-3.31	166	25.0
3.4900	0.0500	365.7	-0.1	-3.09	168	25.0
3.5400	0.0500	365.5	-0.2	-3.00	170	25.0
3.5900	0.0500	365.4	-0.1	-3.00	173	25.0
3.6400	0.0500	365.2	-0.2	-3.09	175	25.0
3.6900	0.0500	365.1	-0.1	-3.31	178	25.0
3.7400	0.0500	364.9	-0.2	-3.09	180	25.0
3.7900	0.0500	364.7	-0.2	-3.31	182	25.0
3.8400	0.0500	364.6	-0.1	-3.18	185	25.0
3.8900	0.0500	364.4	-0.2	-3.51	187	25.0
3.9400	0.0500	364.3	-0.1	-3.72	189	25.0
3.9900	0.0500	364.0	-0.3	-3.80	192	25.0
4.0400	0.0500	363.9	-0.1	-3.71	194	25.0
4.0900	0.0500	363.6	-0.3	-3.41	196	25.0
4.1400	0.0500	363.5	-0.1	-3.28	199	25.0
4.1900	0.0500	363.4	-0.1	-3.18	201	25.0
4.2400	0.0500	363.2	-0.2	-3.51	204	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ 8/13/2012 10:39:40 AM
Start time: 8/13/2012 10:46:05 AM

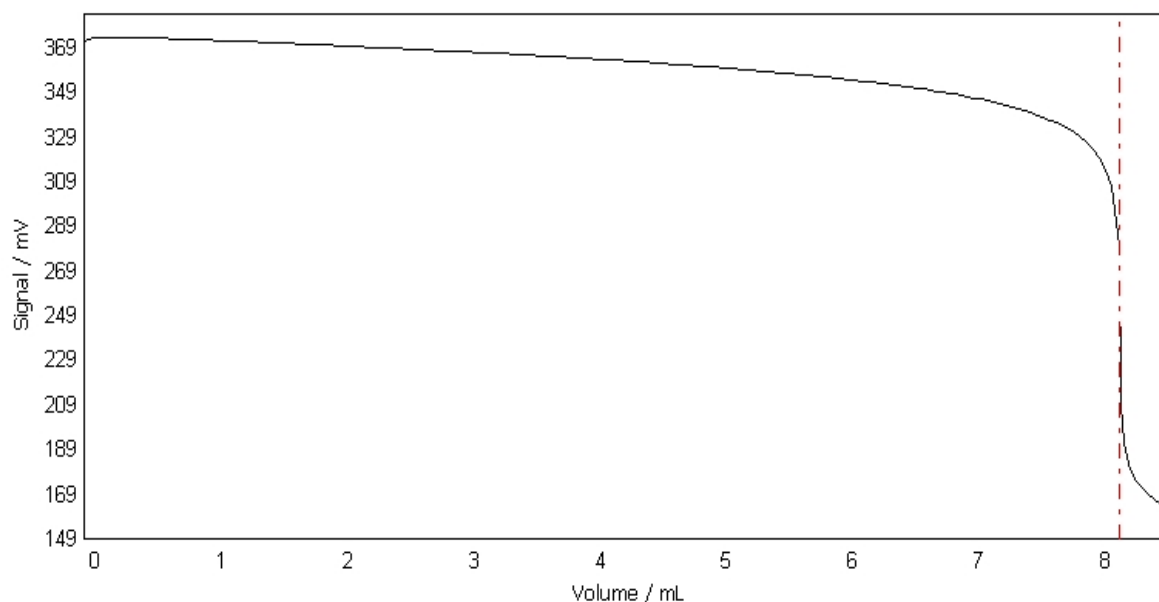
Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature °C
4.2900	0.0500	363.0	-0.2	-3.68	206	25.0
4.3400	0.0500	362.8	-0.2	-4.12	208	25.0
4.3900	0.0500	362.6	-0.2	-4.12	211	25.0
4.4400	0.0500	362.4	-0.2	-4.12	213	25.0
4.4900	0.0500	362.2	-0.2	-3.89	215	25.0
4.5400	0.0500	362.0	-0.2	-3.79	218	25.0
4.5900	0.0500	361.8	-0.2	-3.69	220	25.0
4.6400	0.0500	361.6	-0.2	-4.00	222	25.0
4.6900	0.0500	361.5	-0.1	-4.21	225	25.0
4.7400	0.0500	361.2	-0.3	-4.31	227	25.0
4.7900	0.0500	361.0	-0.2	-4.19	230	25.0
4.8400	0.0500	360.7	-0.3	-4.32	232	25.0
4.8900	0.0500	360.6	-0.1	-4.09	234	25.0
4.9400	0.0500	360.4	-0.2	-3.88	237	25.0
4.9900	0.0500	360.2	-0.2	-4.00	239	25.0
5.0400	0.0500	359.9	-0.3	-4.28	242	25.0
5.0900	0.0500	359.8	-0.1	-4.72	244	25.0
5.1400	0.0500	359.5	-0.3	-4.72	246	25.0
5.1900	0.0500	359.3	-0.2	-4.59	249	25.0
5.2400	0.0500	359.0	-0.3	-4.49	251	25.0
5.2900	0.0500	358.8	-0.2	-4.72	253	25.0
5.3400	0.0500	358.6	-0.2	-4.58	256	25.0
5.3900	0.0500	358.4	-0.2	-4.79	258	25.0
5.4400	0.0500	358.1	-0.3	-5.00	260	25.0
5.4900	0.0500	357.8	-0.3	-5.52	263	25.0
5.5400	0.0500	357.6	-0.2	-5.61	265	25.0
5.5900	0.0500	357.3	-0.3	-5.51	267	25.0
5.6400	0.0500	357.0	-0.3	-5.40	270	25.0
5.6900	0.0500	356.7	-0.3	-5.49	272	25.0
5.7400	0.0500	356.5	-0.2	-5.60	274	25.0
5.7900	0.0500	356.2	-0.3	-5.48	277	25.0
5.8400	0.0500	355.9	-0.3	-5.79	279	25.0
5.8900	0.0500	355.6	-0.3	-6.21	282	25.0
5.9400	0.0500	355.3	-0.3	-6.52	284	25.0
5.9900	0.0500	355.0	-0.3	-6.40	286	25.0
6.0400	0.0500	354.6	-0.4	-6.51	289	25.0
6.0900	0.0500	354.3	-0.3	-6.49	291	25.0
6.1400	0.0500	354.0	-0.3	-6.60	293	25.0
6.1900	0.0500	353.7	-0.3	-6.48	296	25.0
6.2400	0.0500	353.3	-0.4	-6.79	298	25.0
6.2900	0.0500	353.0	-0.3	-7.21	300	25.0
6.3400	0.0500	352.6	-0.4	-7.40	303	25.0
6.3900	0.0500	352.3	-0.3	-7.51	305	25.0
6.4400	0.0500	351.8	-0.5	-7.37	308	25.0
6.4900	0.0500	351.5	-0.3	-7.91	310	25.0
6.5400	0.0500	351.1	-0.4	-8.22	312	25.0
6.5900	0.0500	350.7	-0.4	-8.27	315	25.0
6.6400	0.0500	350.3	-0.4	-8.51	317	25.0
6.6900	0.0500	349.7	-0.6	-8.81	320	25.0
6.7400	0.0500	349.4	-0.3	-8.96	322	25.0
6.7900	0.0500	349.0	-0.4	-9.10	324	25.0
6.8400	0.0500	348.4	-0.6	-9.82	327	25.0
6.8900	0.0500	348.0	-0.4	-10.26	329	25.0
6.9400	0.0500	347.4	-0.6	-11.03	331	25.0
6.9900	0.0500	346.9	-0.5	-11.11	334	25.0
7.0400	0.0500	346.2	-0.7	-11.37	336	25.0
7.0900	0.0500	345.8	-0.4	-11.88	338	25.0
7.1400	0.0500	345.1	-0.7	-12.29	341	25.0
7.1900	0.0500	344.5	-0.6	-13.19	343	25.0
7.2400	0.0500	343.8	-0.7	-13.98	346	25.0
7.2900	0.0500	343.1	-0.7	-14.79	348	25.0
7.3400	0.0500	342.3	-0.8	-15.48	350	25.0
7.3900	0.0500	341.5	-0.8	-16.57	353	25.0
7.4400	0.0500	340.7	-0.8	-17.77	355	25.0
7.4900	0.0500	339.8	-0.9	-18.97	358	25.0
7.5400	0.0500	338.7	-1.1	-20.56	360	25.0
7.5900	0.0500	337.7	-1.0	-22.46	362	25.0
7.6400	0.0500	336.5	-1.2	-24.22	365	25.0
7.6900	0.0500	335.3	-1.2	-26.41	368	25.0
7.7400	0.0500	333.8	-1.5	-29.16	370	25.0
7.7900	0.0500	332.3	-1.5	-31.98	373	25.0
7.8400	0.0500	330.6	-1.7	-36.19	375	25.0
7.8900	0.0500	328.5	-2.1	-41.33	378	25.0
7.9400	0.0500	326.2	-2.3	-32.34	380	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

	Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
EQP1	7.9900	0.0500	323.4	-2.8	3.10	384	25.0
	8.0400	0.0500	319.3	-4.1	-66.50	386	25.0
	8.0900	0.0500	314.3	-5.0	-321.43	389	25.0
	8.1400	0.0500	306.4	-7.9	-592.52	394	25.0
	8.1900	0.0500	280.3	-26.1	-747.05	397	25.0
	8.200251	NaN	243.7	NaN	-787.88	NaN	NaN
	8.2100	0.0200	208.8	-71.5	-783.25	407	25.0
	8.2300	0.0200	192.4	-16.4	-664.24	417	25.0
	8.2725	0.0425	182.2	-10.2	-443.51	427	25.0
	8.3225	0.0500	175.8	-6.4	-177.33	437	25.0
	8.3725	0.0500	171.5	-4.3	-17.98	446	25.0
	8.4225	0.0500	168.4	-3.1	NaN	454	25.0
	8.4725	0.0500	166.1	-2.3	NaN	460	25.0
	8.5225	0.0500	164.1	-2.0	NaN	465	25.0
	8.5725	0.0500	162.4	-1.7	NaN	470	25.0
	8.6225	0.0500	161.1	-1.3	NaN	474	25.0

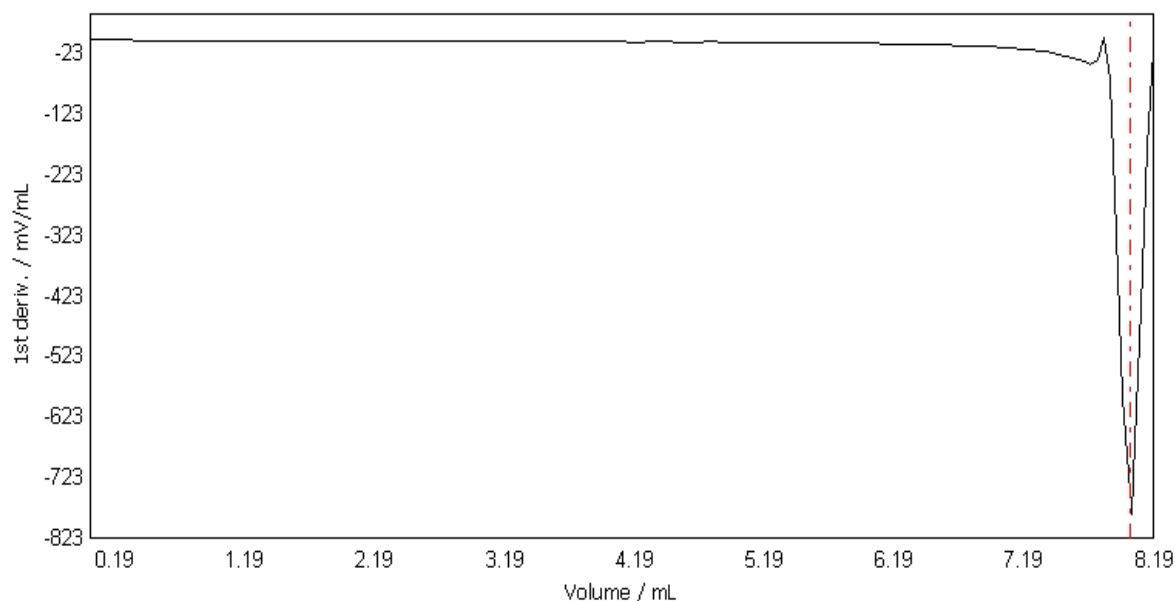
E - V curve EQP titration [1]
Sample 1/6



Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

dE/dV - V curve EQP titration [1]
Sample 1/6



Raw data

Sample

No. 2/6
Standard Potassium iodate
Type of standard solid
Comment
Titration stand Rondolino TTL 1
Weight m = 0.02505 g
Correction factor f = 1.0
Purity p = 100.00 %
Temperature T = 25.0 °C
Sample start 8/13/2012 10:57:54 AM
Sample end 8/13/2012 11:08:33 AM

Dispense (normal) [1]

Titrant 0.1M HCl cDi = 0.1 mol/L TITERDi = 1.0
Disp. volume VENDDi = 50 mL
Disp. amount QENDDi = 5.00 mmol
Time 1:45 min

Dispense (normal) [2]

Titrant SAT KI cDi = 1 mol/L TITERDi = 1.0
Disp. volume VENDDi = 1.0 mL
Disp. amount QENDDi = 1.00 mmol
Time 0:04 min

EQP titration [1]

Titrant Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Start potential EST = 373.0 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 7.005554 mL
Q1 = 0.718924 mmol
EEQ1 = 247.0 mV

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ **8/13/2012 10:39:40 AM**
Start time: 8/13/2012 10:46:05 AM

Excess EHN_{V1} = 362.2 mV
VEX = 0.387446 mL
QEX = 0.039760 mmol
End VEND = 7.3930 mL
QEND = 0.758684 mmol
Termination at EQPs
Time t = 7:19 min

Calculation

Result R1 = 1.00259 Titer
Formula $R1 = m / (VEQ \cdot c \cdot C)$
Constant $M / (10 \cdot p \cdot z)$
C = 0.035665
Molar mass M[Potassium iodate] = 213.99 g/mol
Equivalent number z[Potassium iodate] = 6
Duration tUSE = 09:47 min

Measured values EQP titration [1]

Titrant Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Sample 2/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	373.0	NaN	NaN	0	25.0
0.0200	0.0200	373.1	0.1	NaN	2	25.0
0.0400	0.0200	373.0	-0.1	NaN	4	25.0
0.0900	0.0500	372.9	-0.1	NaN	7	25.0
0.1400	0.0500	372.8	-0.1	NaN	9	25.0
0.1900	0.0500	372.7	-0.1	-2.08	12	25.0
0.2400	0.0500	372.6	-0.1	-2.17	14	25.0
0.2900	0.0500	372.5	-0.1	-2.40	16	25.0
0.3400	0.0500	372.4	-0.1	-2.40	19	25.0
0.3900	0.0500	372.2	-0.2	-2.51	21	25.0
0.4400	0.0500	372.1	-0.1	-2.60	23	25.0
0.4900	0.0500	372.0	-0.1	-2.60	26	25.0
0.5400	0.0500	371.9	-0.1	-2.40	28	25.0
0.5900	0.0500	371.7	-0.2	-2.40	31	25.0
0.6400	0.0500	371.6	-0.1	-2.49	33	25.0
0.6900	0.0500	371.5	-0.1	-2.60	35	25.0
0.7400	0.0500	371.4	-0.1	-2.72	38	25.0
0.7900	0.0500	371.2	-0.2	-2.68	40	25.0
0.8400	0.0500	371.1	-0.1	-2.91	42	25.0
0.8900	0.0500	370.9	-0.2	-2.92	45	25.0
0.9400	0.0500	370.8	-0.1	-2.68	47	25.0
0.9900	0.0500	370.7	-0.1	-2.60	50	25.0
1.0400	0.0500	370.5	-0.2	-2.60	52	25.0
1.0900	0.0500	370.4	-0.1	-2.68	54	25.0
1.1400	0.0500	370.3	-0.1	-2.81	57	25.0
1.1900	0.0500	370.1	-0.2	-2.91	59	25.0
1.2400	0.0500	370.0	-0.1	-3.00	61	25.0
1.2900	0.0500	369.8	-0.2	-3.00	64	25.0
1.3400	0.0500	369.7	-0.1	-2.91	66	25.0
1.3900	0.0500	369.5	-0.2	-2.69	68	25.0
1.4400	0.0500	369.4	-0.1	-2.79	71	25.0
1.4900	0.0500	369.3	-0.1	-2.69	73	25.0
1.5400	0.0500	369.1	-0.2	-2.91	76	25.0
1.5900	0.0500	369.0	-0.1	-2.89	78	25.0
1.6400	0.0500	368.8	-0.2	-3.12	80	25.0
1.6900	0.0500	368.7	-0.1	-3.00	83	25.0
1.7400	0.0500	368.5	-0.2	-3.00	85	25.0
1.7900	0.0500	368.4	-0.1	-3.00	87	25.0
1.8400	0.0500	368.2	-0.2	-2.88	90	25.0
1.8900	0.0500	368.1	-0.1	-3.11	92	25.0
1.9400	0.0500	367.9	-0.2	-3.09	95	25.0
1.9900	0.0500	367.8	-0.1	-3.31	97	25.0
2.0400	0.0500	367.6	-0.2	-3.21	99	25.0
2.0900	0.0500	367.4	-0.2	-3.19	102	25.0
2.1400	0.0500	367.3	-0.1	-3.20	104	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ 8/13/2012 10:39:40 AM
Start time: 8/13/2012 10:46:05 AM

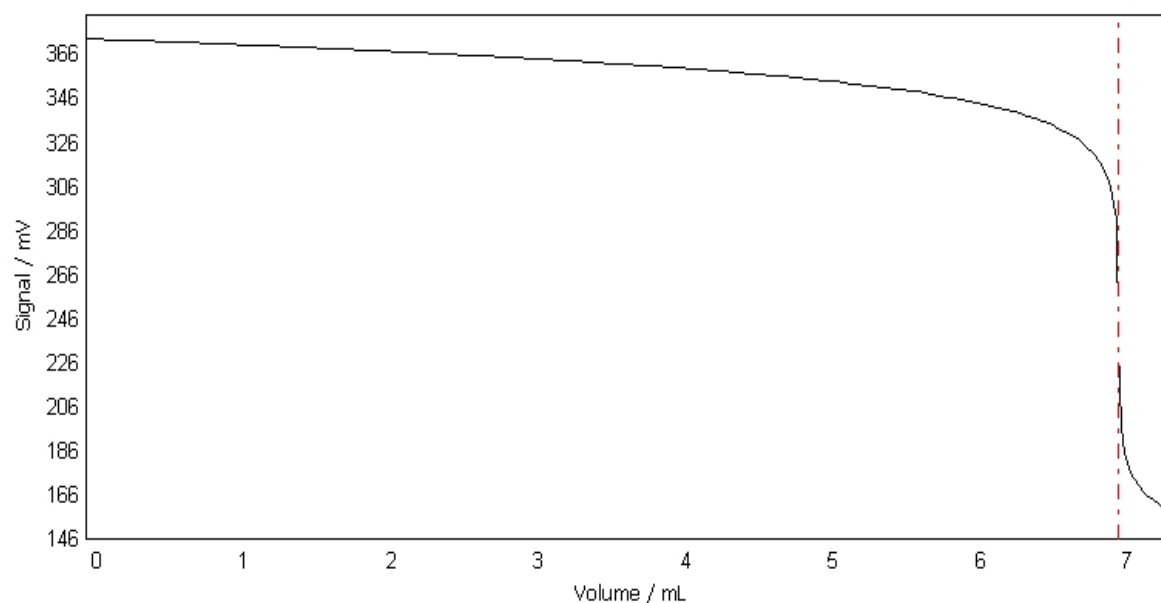
Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.1900	0.0500	367.1	-0.2	-3.20	106	25.0
2.2400	0.0500	367.0	-0.1	-3.08	109	25.0
2.2900	0.0500	366.8	-0.2	-3.20	111	25.0
2.3400	0.0500	366.6	-0.2	-3.40	114	25.0
2.3900	0.0500	366.5	-0.1	-3.60	116	25.0
2.4400	0.0500	366.3	-0.2	-3.72	118	25.0
2.4900	0.0500	366.1	-0.2	-3.59	121	25.0
2.5400	0.0500	365.9	-0.2	-3.60	123	25.0
2.5900	0.0500	365.7	-0.2	-3.72	125	25.0
2.6400	0.0500	365.6	-0.1	-3.49	128	25.0
2.6900	0.0500	365.4	-0.2	-3.40	130	25.0
2.7400	0.0500	365.2	-0.2	-3.40	132	25.0
2.7900	0.0500	365.0	-0.2	-3.49	135	25.0
2.8400	0.0500	364.9	-0.1	-3.60	137	25.0
2.8900	0.0500	364.7	-0.2	-3.60	140	25.0
2.9400	0.0500	364.5	-0.2	-3.91	142	25.0
2.9900	0.0500	364.3	-0.2	-4.00	144	25.0
3.0400	0.0500	364.1	-0.2	-3.80	147	25.0
3.0900	0.0500	363.9	-0.2	-3.71	149	25.0
3.1400	0.0500	363.7	-0.2	-3.58	151	25.0
3.1900	0.0500	363.6	-0.1	-3.79	154	25.0
3.2400	0.0500	363.4	-0.2	-3.81	156	25.0
3.2900	0.0500	363.1	-0.3	-3.99	158	25.0
3.3400	0.0500	363.0	-0.1	-4.21	161	25.0
3.3900	0.0500	362.7	-0.3	-4.32	163	25.0
3.4400	0.0500	362.6	-0.1	-4.19	166	25.0
3.4900	0.0500	362.3	-0.3	-4.21	168	25.0
3.5400	0.0500	362.1	-0.2	-4.19	170	25.0
3.5900	0.0500	361.9	-0.2	-4.09	173	25.0
3.6400	0.0500	361.7	-0.2	-4.32	175	25.0
3.6900	0.0500	361.5	-0.2	-4.17	178	25.0
3.7400	0.0500	361.3	-0.2	-4.51	180	25.0
3.7900	0.0500	361.0	-0.3	-4.72	182	25.0
3.8400	0.0500	360.8	-0.2	-4.68	185	25.0
3.8900	0.0500	360.6	-0.2	-4.72	187	25.0
3.9400	0.0500	360.3	-0.3	-4.60	189	25.0
3.9900	0.0500	360.1	-0.2	-4.68	192	25.0
4.0400	0.0500	359.9	-0.2	-4.81	194	25.0
4.0900	0.0500	359.6	-0.3	-4.79	196	25.0
4.1400	0.0500	359.4	-0.2	-5.00	199	25.0
4.1900	0.0500	359.1	-0.3	-5.21	201	25.0
4.2400	0.0500	358.9	-0.2	-5.19	204	25.0
4.2900	0.0500	358.6	-0.3	-5.20	206	25.0
4.3400	0.0500	358.3	-0.3	-5.40	208	25.0
4.3900	0.0500	358.1	-0.2	-5.49	211	25.0
4.4400	0.0500	357.8	-0.3	-5.72	213	25.0
4.4900	0.0500	357.5	-0.3	-5.80	215	25.0
4.5400	0.0500	357.2	-0.3	-6.00	218	25.0
4.5900	0.0500	356.9	-0.3	-6.12	220	25.0
4.6400	0.0500	356.6	-0.3	-6.00	222	25.0
4.6900	0.0500	356.3	-0.3	-5.88	225	25.0
4.7400	0.0500	356.0	-0.3	-6.00	227	25.0
4.7900	0.0500	355.7	-0.3	-6.09	230	25.0
4.8400	0.0500	355.4	-0.3	-6.40	232	25.0
4.8900	0.0500	355.1	-0.3	-6.49	234	25.0
4.9400	0.0500	354.7	-0.4	-6.91	237	25.0
4.9900	0.0500	354.4	-0.3	-7.21	239	25.0
5.0400	0.0500	354.0	-0.4	-7.40	242	25.0
5.0900	0.0500	353.7	-0.3	-7.51	244	25.0
5.1400	0.0500	353.2	-0.5	-7.60	246	25.0
5.1900	0.0500	352.9	-0.3	-7.68	249	25.0
5.2400	0.0500	352.5	-0.4	-7.80	251	25.0
5.2900	0.0500	352.1	-0.4	-8.11	253	25.0
5.3400	0.0500	351.7	-0.4	-8.17	256	25.0
5.3900	0.0500	351.3	-0.4	-8.63	258	25.0
5.4400	0.0500	350.8	-0.5	-8.49	260	25.0
5.4900	0.0500	350.4	-0.4	-8.68	263	25.0
5.5400	0.0500	350.0	-0.4	-8.89	265	25.0
5.5900	0.0500	349.5	-0.5	-9.16	268	25.0
5.6400	0.0500	349.1	-0.4	-10.00	270	25.0
5.6900	0.0500	348.5	-0.6	-10.93	272	25.0
5.7400	0.0500	348.0	-0.5	-11.39	275	25.0
5.7900	0.0500	347.4	-0.6	-11.72	277	25.0
5.8400	0.0500	346.7	-0.7	-12.11	279	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

	Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
	5.8900	0.0500	346.2	-0.5	-12.37	282	25.0
	5.9400	0.0500	345.6	-0.6	-12.80	284	25.0
	5.9900	0.0500	344.9	-0.7	-13.07	286	25.0
	6.0400	0.0500	344.2	-0.7	-13.77	289	25.0
	6.0900	0.0500	343.5	-0.7	-14.81	291	25.0
	6.1400	0.0500	342.8	-0.7	-15.49	294	25.0
	6.1900	0.0500	342.0	-0.8	-16.16	296	25.0
	6.2400	0.0500	341.1	-0.9	-17.16	298	25.0
	6.2900	0.0500	340.2	-0.9	-18.57	301	25.0
	6.3400	0.0500	339.3	-0.9	-19.94	303	25.0
	6.3900	0.0500	338.3	-1.0	-21.64	306	25.0
	6.4400	0.0500	337.1	-1.2	-23.73	308	25.0
	6.4900	0.0500	335.8	-1.3	-26.41	311	25.0
	6.5400	0.0500	334.5	-1.3	-29.07	313	25.0
	6.5900	0.0500	332.9	-1.6	-32.11	316	25.0
	6.6400	0.0500	331.2	-1.7	-35.86	318	25.0
	6.6900	0.0500	329.2	-2.0	-39.79	321	25.0
	6.7400	0.0500	327.0	-2.2	-36.95	323	25.0
	6.7900	0.0500	324.2	-2.8	-8.48	326	25.0
	6.8400	0.0500	320.8	-3.4	-38.49	329	25.0
	6.8900	0.0500	316.3	-4.5	-211.63	333	25.0
	6.9400	0.0500	309.1	-7.2	-533.50	336	25.0
	6.9900	0.0500	290.8	-18.3	-753.80	339	25.0
EQP1	7.005554	NaN	247.0	NaN	-875.63	NaN	NaN
	7.0100	0.0200	234.5	-56.3	-870.59	349	25.0
	7.0300	0.0200	196.9	-37.6	-816.31	359	25.0
	7.0500	0.0200	185.1	-11.8	-626.03	369	25.0
	7.0930	0.0430	176.2	-8.9	-377.84	379	25.0
	7.1430	0.0500	170.2	-6.0	-103.93	389	25.0
	7.1930	0.0500	166.1	-4.1	NaN	399	25.0
	7.2430	0.0500	163.4	-2.7	NaN	406	25.0
	7.2930	0.0500	161.0	-2.4	NaN	412	25.0
	7.3430	0.0500	159.4	-1.6	NaN	416	25.0
	7.3930	0.0500	157.7	-1.7	NaN	421	25.0

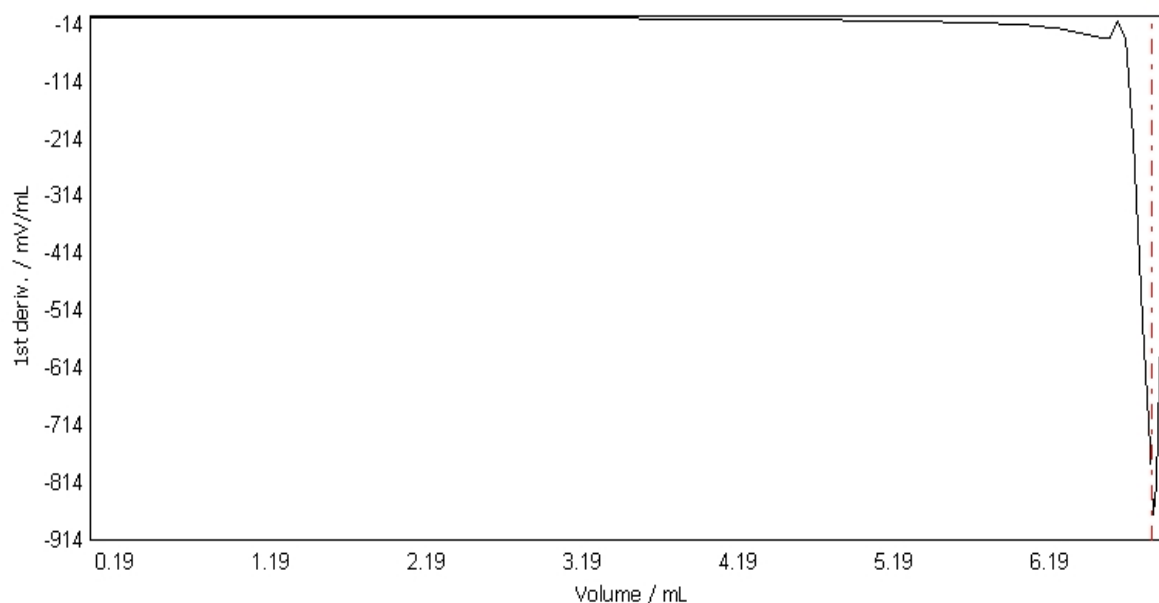
E - V curve EQP titration [1]
Sample 2/6



Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

dE/dV - V curve EQP titration [1]
Sample 2/6



Raw data

Sample

No. 3/6
Standard Potassium iodate
Type of standard solid
Comment
Titration stand Rondolino TTL 1
Weight m = 0.02443 g
Correction factor f = 1.0
Purity p = 100.00 %
Temperature T = 25.0 °C
Sample start 8/13/2012 11:08:34 AM
Sample end 8/13/2012 11:19:08 AM

Dispense (normal) [1]

Titrant 0.1M HCl cDi = 0.1 mol/L TITERDi = 1.0
Disp. volume VENDDi = 50 mL
Disp. amount QENDDi = 5.00 mmol
Time 1:45 min

Dispense (normal) [2]

Titrant SAT KI cDi = 1 mol/L TITERDi = 1.0
Disp. volume VENDDi = 1.0 mL
Disp. amount QENDDi = 1.00 mmol
Time 0:04 min

EQP titration [1]

Titrant Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Start potential EST = 373.1 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 6.852481 mL
Q1 = 0.703215 mmol
EEQ1 = 245.3 mV

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ **8/13/2012 10:39:40 AM**
Start time: 8/13/2012 10:46:05 AM

Excess EHN1 = 363.1 mV
VEX = 0.384019 mL
QEX = 0.039409 mmol
End VEND = 7.2365 mL
QEND = 0.742624 mmol
Termination at EQPs
Time t = 7:12 min

Calculation

Result R1 = 0.99962 Titer
Formula $R1 = m / (VEQ \cdot c \cdot C)$
Constant $M / (10 \cdot p \cdot z)$
C = 0.035665
Molar mass M[Potassium iodate] = 213.99 g/mol
Equivalent number z[Potassium iodate] = 6
Duration tUSE = 09:39 min

Measured values EQP titration [1]

Titrant Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Sample 3/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	373.1	NaN	NaN	0	25.0
0.0200	0.0200	373.3	0.2	NaN	2	25.0
0.0400	0.0200	373.3	0.0	NaN	4	25.0
0.0900	0.0500	373.3	0.0	NaN	7	25.0
0.1400	0.0500	373.3	0.0	NaN	9	25.0
0.1900	0.0500	373.2	-0.1	-1.55	12	25.0
0.2400	0.0500	373.1	-0.1	-1.74	14	25.0
0.2900	0.0500	373.0	-0.1	-2.00	16	25.0
0.3400	0.0500	373.0	0.0	-2.12	18	25.0
0.3900	0.0500	372.8	-0.2	-2.11	21	25.0
0.4400	0.0500	372.7	-0.1	-2.20	23	25.0
0.4900	0.0500	372.6	-0.1	-2.09	26	25.0
0.5400	0.0500	372.5	-0.1	-2.11	28	25.0
0.5900	0.0500	372.4	-0.1	-2.09	30	25.0
0.6400	0.0500	372.3	-0.1	-2.40	33	25.0
0.6900	0.0500	372.2	-0.1	-2.40	35	25.0
0.7400	0.0500	372.0	-0.2	-2.51	37	25.0
0.7900	0.0500	371.9	-0.1	-2.49	40	25.0
0.8400	0.0500	371.8	-0.1	-2.60	42	25.0
0.8900	0.0500	371.7	-0.1	-2.72	45	25.0
0.9400	0.0500	371.5	-0.2	-2.68	47	25.0
0.9900	0.0500	371.4	-0.1	-2.91	49	25.0
1.0400	0.0500	371.2	-0.2	-2.81	52	25.0
1.0900	0.0500	371.1	-0.1	-2.79	54	25.0
1.1400	0.0500	371.0	-0.1	-2.69	56	25.0
1.1900	0.0500	370.8	-0.2	-2.91	59	25.0
1.2400	0.0500	370.7	-0.1	-3.00	61	25.0
1.2900	0.0500	370.5	-0.2	-3.00	64	25.0
1.3400	0.0500	370.4	-0.1	-2.79	66	25.0
1.3900	0.0500	370.2	-0.2	-2.80	68	25.0
1.4400	0.0500	370.1	-0.1	-3.00	71	25.0
1.4900	0.0500	370.0	-0.1	-2.89	73	25.0
1.5400	0.0500	369.8	-0.2	-3.02	75	25.0
1.5900	0.0500	369.6	-0.2	-2.89	78	25.0
1.6400	0.0500	369.5	-0.1	-2.89	80	25.0
1.6900	0.0500	369.4	-0.1	-2.80	82	25.0
1.7400	0.0500	369.2	-0.2	-3.00	85	25.0
1.7900	0.0500	369.1	-0.1	-3.29	87	25.0
1.8400	0.0500	368.9	-0.2	-3.63	90	25.0
1.8900	0.0500	368.7	-0.2	-3.51	92	25.0
1.9400	0.0500	368.5	-0.2	-3.28	94	25.0
1.9900	0.0500	368.4	-0.1	-3.32	97	25.0
2.0400	0.0500	368.2	-0.2	-3.09	99	25.0
2.0900	0.0500	368.1	-0.1	-3.08	101	25.0
2.1400	0.0500	367.9	-0.2	-3.32	104	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ 8/13/2012 10:39:40 AM
Start time: 8/13/2012 10:46:05 AM

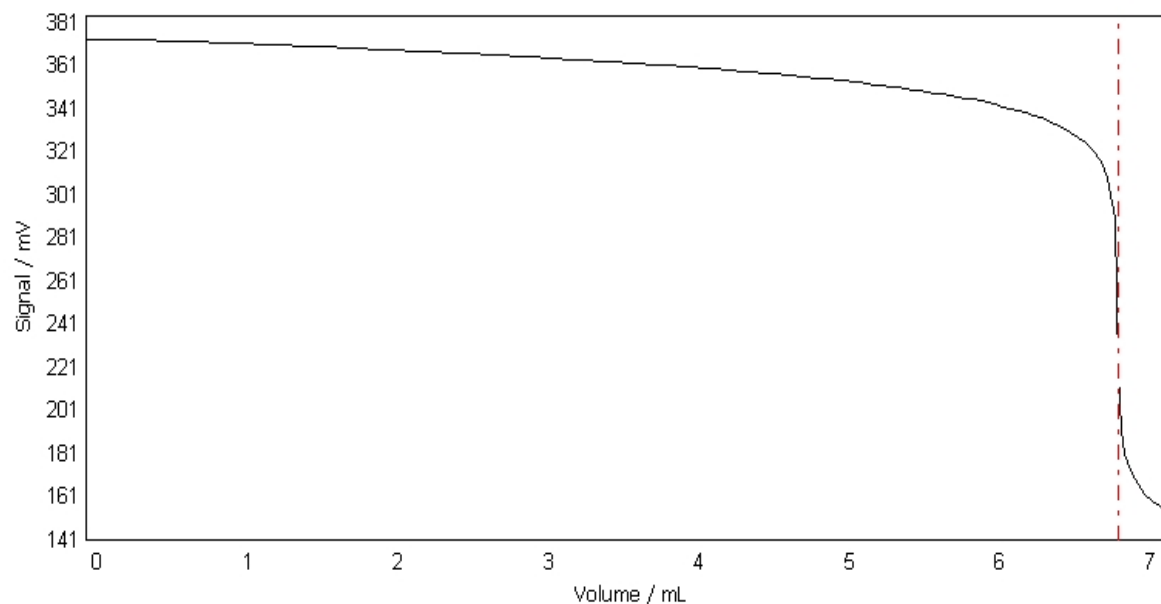
Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.1900	0.0500	367.7	-0.2	-3.40	106	25.0
2.2400	0.0500	367.6	-0.1	-3.28	108	25.0
2.2900	0.0500	367.4	-0.2	-3.32	111	25.0
2.3400	0.0500	367.2	-0.2	-3.40	113	25.0
2.3900	0.0500	367.1	-0.1	-3.49	116	25.0
2.4400	0.0500	366.9	-0.2	-3.51	118	25.0
2.4900	0.0500	366.7	-0.2	-3.40	120	25.0
2.5400	0.0500	366.5	-0.2	-3.49	123	25.0
2.5900	0.0500	366.4	-0.1	-3.60	125	25.0
2.6400	0.0500	366.2	-0.2	-3.60	128	25.0
2.6900	0.0500	366.0	-0.2	-3.80	130	25.0
2.7400	0.0500	365.8	-0.2	-4.00	132	25.0
2.7900	0.0500	365.6	-0.2	-4.12	135	25.0
2.8400	0.0500	365.4	-0.2	-4.00	137	25.0
2.8900	0.0500	365.2	-0.2	-4.12	139	25.0
2.9400	0.0500	365.0	-0.2	-3.89	142	25.0
2.9900	0.0500	364.8	-0.2	-3.79	144	25.0
3.0400	0.0500	364.6	-0.2	-3.80	146	25.0
3.0900	0.0500	364.4	-0.2	-3.89	149	25.0
3.1400	0.0500	364.3	-0.1	-4.00	151	25.0
3.1900	0.0500	364.0	-0.3	-4.11	154	25.0
3.2400	0.0500	363.8	-0.2	-4.20	156	25.0
3.2900	0.0500	363.6	-0.2	-4.09	158	25.0
3.3400	0.0500	363.4	-0.2	-4.11	161	25.0
3.3900	0.0500	363.2	-0.2	-3.97	163	25.0
3.4400	0.0500	363.0	-0.2	-4.40	165	25.0
3.4900	0.0500	362.8	-0.2	-4.72	168	25.0
3.5400	0.0500	362.5	-0.3	-4.91	170	25.0
3.5900	0.0500	362.3	-0.2	-4.91	172	25.0
3.6400	0.0500	362.0	-0.3	-4.60	175	25.0
3.6900	0.0500	361.8	-0.2	-4.40	177	25.0
3.7400	0.0500	361.6	-0.2	-4.18	180	25.0
3.7900	0.0500	361.4	-0.2	-4.28	182	25.0
3.8400	0.0500	361.2	-0.2	-4.60	184	25.0
3.8900	0.0500	360.9	-0.3	-5.00	187	25.0
3.9400	0.0500	360.7	-0.2	-5.31	189	25.0
3.9900	0.0500	360.4	-0.3	-5.32	192	25.0
4.0400	0.0500	360.1	-0.3	-5.19	194	25.0
4.0900	0.0500	359.9	-0.2	-5.09	196	25.0
4.1400	0.0500	359.6	-0.3	-5.20	199	25.0
4.1900	0.0500	359.4	-0.2	-5.28	201	25.0
4.2400	0.0500	359.1	-0.3	-5.60	203	25.0
4.2900	0.0500	358.8	-0.3	-5.91	206	25.0
4.3400	0.0500	358.5	-0.3	-6.00	208	25.0
4.3900	0.0500	358.2	-0.3	-6.00	210	25.0
4.4400	0.0500	357.9	-0.3	-6.11	213	25.0
4.4900	0.0500	357.6	-0.3	-6.09	215	25.0
4.5400	0.0500	357.3	-0.3	-6.19	218	25.0
4.5900	0.0500	357.0	-0.3	-6.20	220	25.0
4.6400	0.0500	356.6	-0.4	-6.40	222	25.0
4.6900	0.0500	356.4	-0.2	-6.60	225	25.0
4.7400	0.0500	356.0	-0.4	-6.60	227	25.0
4.7900	0.0500	355.7	-0.3	-6.59	229	25.0
4.8400	0.0500	355.3	-0.4	-6.69	232	25.0
4.8900	0.0500	355.0	-0.3	-7.00	234	25.0
4.9400	0.0500	354.7	-0.3	-7.09	236	25.0
4.9900	0.0500	354.3	-0.4	-7.40	239	25.0
5.0400	0.0500	353.9	-0.4	-7.68	241	25.0
5.0900	0.0500	353.5	-0.4	-8.44	244	25.0
5.1400	0.0500	353.1	-0.4	-8.61	246	25.0
5.1900	0.0500	352.7	-0.4	-8.59	248	25.0
5.2400	0.0500	352.2	-0.5	-8.72	251	25.0
5.2900	0.0500	351.7	-0.5	-9.00	253	25.0
5.3400	0.0500	351.4	-0.3	-8.86	256	25.0
5.3900	0.0500	350.9	-0.5	-9.11	258	25.0
5.4400	0.0500	350.4	-0.5	-9.48	260	25.0
5.4900	0.0500	349.9	-0.5	-10.29	263	25.0
5.5400	0.0500	349.5	-0.4	-10.72	265	25.0
5.5900	0.0500	348.8	-0.7	-10.91	267	25.0
5.6400	0.0500	348.3	-0.5	-11.28	270	25.0
5.6900	0.0500	347.7	-0.6	-11.69	272	25.0
5.7400	0.0500	347.2	-0.5	-12.00	275	25.0
5.7900	0.0500	346.5	-0.7	-12.37	277	25.0
5.8400	0.0500	345.9	-0.6	-13.28	279	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

	Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
	5.8900	0.0500	345.2	-0.7	-14.09	282	25.0
	5.9400	0.0500	344.5	-0.7	-15.11	284	25.0
	5.9900	0.0500	343.7	-0.8	-15.65	287	25.0
	6.0400	0.0500	342.9	-0.8	-16.79	289	25.0
	6.0900	0.0500	342.0	-0.9	-17.89	292	25.0
	6.1400	0.0500	341.1	-0.9	-19.05	294	25.0
	6.1900	0.0500	340.2	-0.9	-20.25	296	25.0
	6.2400	0.0500	339.0	-1.2	-21.96	299	25.0
	6.2900	0.0500	337.9	-1.1	-23.67	302	25.0
	6.3400	0.0500	336.7	-1.2	-26.42	304	25.0
	6.3900	0.0500	335.3	-1.4	-29.62	306	25.0
	6.4400	0.0500	333.7	-1.6	-32.53	309	25.0
	6.4900	0.0500	332.0	-1.7	-36.10	311	25.0
	6.5400	0.0500	329.8	-2.2	-40.03	314	25.0
	6.5900	0.0500	327.6	-2.2	-38.43	316	25.0
	6.6400	0.0500	325.0	-2.6	1.39	319	25.0
	6.6900	0.0500	321.3	-3.7	-47.68	321	25.0
	6.7400	0.0500	316.2	-5.1	-241.51	324	25.0
	6.7900	0.0500	308.4	-7.8	-568.00	326	25.0
	6.8400	0.0500	289.6	-18.8	-791.97	329	25.0
EQP1	6.852481	NaN	245.3	NaN	-917.01	NaN	NaN
	6.8600	0.0200	218.6	-71.0	-907.29	339	25.0
	6.8800	0.0200	192.0	-26.6	-846.55	349	25.0
	6.9000	0.0200	181.1	-10.9	-634.96	359	25.0
	6.9365	0.0365	172.9	-8.2	-400.62	369	25.0
	6.9865	0.0500	166.6	-6.3	-120.54	379	25.0
	7.0365	0.0500	162.2	-4.4	NaN	389	25.0
	7.0865	0.0500	159.0	-3.2	NaN	397	25.0
	7.1365	0.0500	156.7	-2.3	NaN	403	25.0
	7.1865	0.0500	154.7	-2.0	NaN	409	25.0
	7.2365	0.0500	153.0	-1.7	NaN	414	25.0

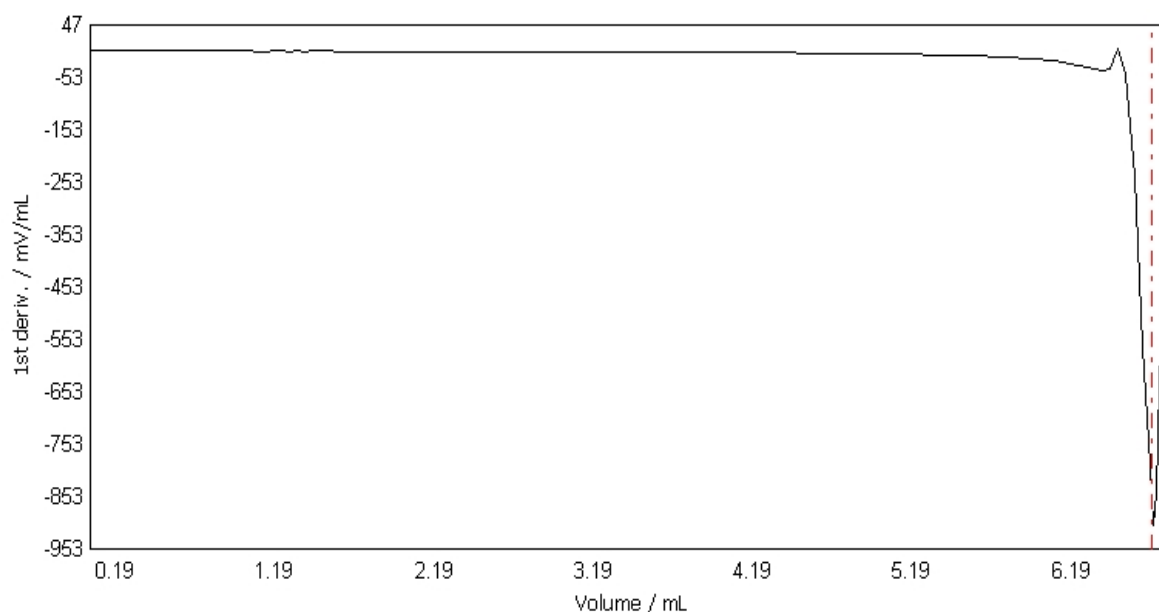
E - V curve EQP titration [1]
Sample 3/6



Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

dE/dV - V curve EQP titration [1]
Sample 3/6



Raw data

Sample

No.	4/6
Standard	Potassium iodate
Type of standard	solid
Comment	
Titration stand	Rondolino TTL 1
Weight	m = 0.02367 g
Correction factor	f = 1.0
Purity	p = 100.00 %
Temperature	T = 25.0 °C
Sample start	8/13/2012 11:19:09 AM
Sample end	8/13/2012 11:29:36 AM

Dispense (normal) [1]

Titrant	0.1M HCl cDi = 0.1 mol/L TITERDi = 1.0
Disp. volume	VENDDi = 50 mL
Disp. amount	QENDDi = 5.00 mmol
Time	1:46 min

Dispense (normal) [2]

Titrant	SAT KI cDi = 1 mol/L TITERDi = 1.0
Disp. volume	VENDDi = 1.0 mL
Disp. amount	QENDDi = 1.00 mmol
Time	0:04 min

EQP titration [1]

Titrant	Na ₂ S ₂ O ₃ c = 0.1 mol/L TITER = 1.02622
Sensor	DM140-SC
Start potential	EST = 371.4 mV
No. of EQPs and cand.	nEQ = 1
Consumption	VEQ1 = 6.621284 mL
	Q1 = 0.679489 mmol
	EEQ1 = 241.8 mV

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ **8/13/2012 10:39:40 AM**
Start time: 8/13/2012 10:46:05 AM

Excess EHN_{V1} = 362.0 mV
VEX = 0.421216 mL
QEX = 0.043226 mmol
End VEND = 7.0425 mL
QEND = 0.722715 mmol
Termination at EQPs
Time t = 7:04 min

Calculation

Result R1 = 1.00234 Titer
Formula $R1 = m / (VEQ \cdot c \cdot C)$
Constant $M / (10 \cdot p \cdot z)$
C = 0.035665
Molar mass M[Potassium iodate] = 213.99 g/mol
Equivalent number z[Potassium iodate] = 6
Duration tUSE = 09:31 min

Measured values EQP titration [1]

Titrant Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Sample 4/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	371.4	NaN	NaN	0	25.0
0.0200	0.0200	371.8	0.4	NaN	2	25.0
0.0400	0.0200	371.9	0.1	NaN	4	25.0
0.0900	0.0500	371.9	0.0	NaN	7	25.0
0.1400	0.0500	371.9	0.0	NaN	9	25.0
0.1900	0.0500	371.9	0.0	-0.79	12	25.0
0.2400	0.0500	371.9	0.0	-0.91	14	25.0
0.2900	0.0500	371.8	-0.1	-1.32	16	25.0
0.3400	0.0500	371.7	-0.1	-1.80	19	25.0
0.3900	0.0500	371.7	0.0	-2.12	21	25.0
0.4400	0.0500	371.5	-0.2	-2.11	23	25.0
0.4900	0.0500	371.4	-0.1	-2.19	26	25.0
0.5400	0.0500	371.3	-0.1	-2.41	28	25.0
0.5900	0.0500	371.2	-0.1	-2.51	30	25.0
0.6400	0.0500	371.1	-0.1	-2.28	33	25.0
0.6900	0.0500	370.9	-0.2	-2.51	35	25.0
0.7400	0.0500	370.8	-0.1	-2.49	38	25.0
0.7900	0.0500	370.7	-0.1	-2.60	40	25.0
0.8400	0.0500	370.6	-0.1	-2.72	42	25.0
0.8900	0.0500	370.4	-0.2	-2.68	45	25.0
0.9400	0.0500	370.3	-0.1	-2.80	47	25.0
0.9900	0.0500	370.1	-0.2	-2.92	49	25.0
1.0400	0.0500	370.0	-0.1	-3.00	52	25.0
1.0900	0.0500	369.9	-0.1	-2.89	54	25.0
1.1400	0.0500	369.7	-0.2	-3.02	56	25.0
1.1900	0.0500	369.5	-0.2	-2.89	59	25.0
1.2400	0.0500	369.4	-0.1	-3.00	61	25.0
1.2900	0.0500	369.3	-0.1	-2.80	64	25.0
1.3400	0.0500	369.1	-0.2	-2.68	66	25.0
1.3900	0.0500	369.0	-0.1	-3.00	68	25.0
1.4400	0.0500	368.8	-0.2	-3.21	71	25.0
1.4900	0.0500	368.7	-0.1	-3.31	73	25.0
1.5400	0.0500	368.5	-0.2	-3.32	76	25.0
1.5900	0.0500	368.3	-0.2	-3.20	78	25.0
1.6400	0.0500	368.2	-0.1	-2.88	80	25.0
1.6900	0.0500	368.0	-0.2	-2.80	83	25.0
1.7400	0.0500	367.9	-0.1	-2.88	85	25.0
1.7900	0.0500	367.8	-0.1	-3.09	87	25.0
1.8400	0.0500	367.6	-0.2	-3.42	90	25.0
1.8900	0.0500	367.4	-0.2	-3.40	92	25.0
1.9400	0.0500	367.2	-0.2	-3.40	94	25.0
1.9900	0.0500	367.1	-0.1	-3.20	97	25.0
2.0400	0.0500	366.9	-0.2	-3.20	99	25.0
2.0900	0.0500	366.8	-0.1	-3.28	102	25.0
2.1400	0.0500	366.6	-0.2	-3.40	104	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ 8/13/2012 10:39:40 AM
Start time: 8/13/2012 10:46:05 AM

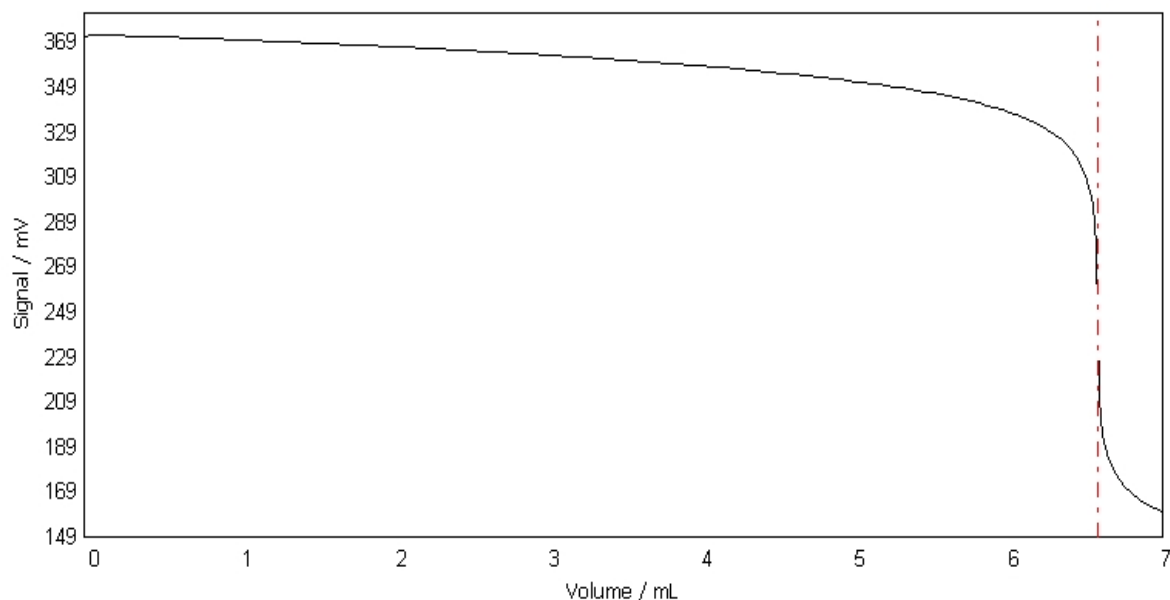
Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.1900	0.0500	366.4	-0.2	-3.63	106	25.0
2.2400	0.0500	366.2	-0.2	-3.37	109	25.0
2.2900	0.0500	366.1	-0.1	-3.51	111	25.0
2.3400	0.0500	365.9	-0.2	-3.41	113	25.0
2.3900	0.0500	365.7	-0.2	-3.48	116	25.0
2.4400	0.0500	365.6	-0.1	-3.60	118	25.0
2.4900	0.0500	365.3	-0.3	-3.72	120	25.0
2.5400	0.0500	365.2	-0.1	-3.68	123	25.0
2.5900	0.0500	365.0	-0.2	-3.81	125	25.0
2.6400	0.0500	364.8	-0.2	-3.91	128	25.0
2.6900	0.0500	364.6	-0.2	-3.89	130	25.0
2.7400	0.0500	364.4	-0.2	-4.12	132	25.0
2.7900	0.0500	364.2	-0.2	-4.00	135	25.0
2.8400	0.0500	364.0	-0.2	-4.00	137	25.0
2.8900	0.0500	363.8	-0.2	-4.00	140	25.0
2.9400	0.0500	363.6	-0.2	-4.00	142	25.0
2.9900	0.0500	363.4	-0.2	-4.00	144	25.0
3.0400	0.0500	363.2	-0.2	-3.88	147	25.0
3.0900	0.0500	363.0	-0.2	-4.00	149	25.0
3.1400	0.0500	362.8	-0.2	-4.20	151	25.0
3.1900	0.0500	362.6	-0.2	-4.28	154	25.0
3.2400	0.0500	362.4	-0.2	-4.51	156	25.0
3.2900	0.0500	362.1	-0.3	-4.72	158	25.0
3.3400	0.0500	361.9	-0.2	-4.80	161	25.0
3.3900	0.0500	361.7	-0.2	-4.60	163	25.0
3.4400	0.0500	361.4	-0.3	-4.39	166	25.0
3.4900	0.0500	361.2	-0.2	-4.49	168	25.0
3.5400	0.0500	361.0	-0.2	-4.69	170	25.0
3.5900	0.0500	360.8	-0.2	-4.91	173	25.0
3.6400	0.0500	360.5	-0.3	-5.00	175	25.0
3.6900	0.0500	360.2	-0.3	-5.20	177	25.0
3.7400	0.0500	360.0	-0.2	-5.32	180	25.0
3.7900	0.0500	359.7	-0.3	-5.20	182	25.0
3.8400	0.0500	359.5	-0.2	-5.08	184	25.0
3.8900	0.0500	359.2	-0.3	-5.32	187	25.0
3.9400	0.0500	358.9	-0.3	-5.40	189	25.0
3.9900	0.0500	358.7	-0.2	-5.28	192	25.0
4.0400	0.0500	358.4	-0.3	-5.32	194	25.0
4.0900	0.0500	358.1	-0.3	-5.28	196	25.0
4.1400	0.0500	357.9	-0.2	-5.49	199	25.0
4.1900	0.0500	357.6	-0.3	-5.60	201	25.0
4.2400	0.0500	357.3	-0.3	-5.79	204	25.0
4.2900	0.0500	357.0	-0.3	-6.09	206	25.0
4.3400	0.0500	356.7	-0.3	-6.51	208	25.0
4.3900	0.0500	356.4	-0.3	-6.72	211	25.0
4.4400	0.0500	356.0	-0.4	-6.80	213	25.0
4.4900	0.0500	355.7	-0.3	-6.80	215	25.0
4.5400	0.0500	355.3	-0.4	-6.80	218	25.0
4.5900	0.0500	355.0	-0.3	-7.00	220	25.0
4.6400	0.0500	354.7	-0.3	-7.09	222	25.0
4.6900	0.0500	354.3	-0.4	-7.31	225	25.0
4.7400	0.0500	353.9	-0.4	-7.40	227	25.0
4.7900	0.0500	353.5	-0.4	-7.49	230	25.0
4.8400	0.0500	353.2	-0.3	-7.60	232	25.0
4.8900	0.0500	352.8	-0.4	-7.69	234	25.0
4.9400	0.0500	352.4	-0.4	-8.08	237	25.0
4.9900	0.0500	352.0	-0.4	-8.72	239	25.0
5.0400	0.0500	351.5	-0.5	-9.12	241	25.0
5.0900	0.0500	351.1	-0.4	-9.20	244	25.0
5.1400	0.0500	350.6	-0.5	-9.20	246	25.0
5.1900	0.0500	350.1	-0.5	-9.28	248	25.0
5.2400	0.0500	349.7	-0.4	-9.57	251	25.0
5.2900	0.0500	349.2	-0.5	-10.20	253	25.0
5.3400	0.0500	348.7	-0.5	-10.80	256	25.0
5.3900	0.0500	348.1	-0.6	-11.28	258	25.0
5.4400	0.0500	347.5	-0.6	-12.03	260	25.0
5.4900	0.0500	346.9	-0.6	-12.29	263	25.0
5.5400	0.0500	346.3	-0.6	-12.68	265	25.0
5.5900	0.0500	345.7	-0.6	-13.20	268	25.0
5.6400	0.0500	344.9	-0.8	-13.88	270	25.0
5.6900	0.0500	344.3	-0.6	-14.56	272	25.0
5.7400	0.0500	343.5	-0.8	-15.40	275	25.0
5.7900	0.0500	342.7	-0.8	-16.28	277	25.0
5.8400	0.0500	341.9	-0.8	-17.25	279	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

	Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
	5.8900	0.0500	341.0	-0.9	-18.48	282	25.0
	5.9400	0.0500	340.0	-1.0	-19.65	284	25.0
	5.9900	0.0500	339.0	-1.0	-21.45	287	25.0
	6.0400	0.0500	337.9	-1.1	-23.22	289	25.0
	6.0900	0.0500	336.7	-1.2	-25.29	292	25.0
	6.1400	0.0500	335.3	-1.4	-28.30	294	25.0
	6.1900	0.0500	333.8	-1.5	-31.49	297	25.0
	6.2400	0.0500	332.2	-1.6	-34.94	299	25.0
	6.2900	0.0500	330.2	-2.0	-38.14	302	25.0
	6.3400	0.0500	327.9	-2.3	-42.55	304	25.0
	6.3900	0.0500	325.4	-2.5	-46.57	307	25.0
	6.4400	0.0500	322.0	-3.4	-24.33	309	25.0
	6.4900	0.0500	317.4	-4.6	-138.45	312	25.0
	6.5400	0.0500	309.8	-7.6	-429.62	314	25.0
	6.5900	0.0500	297.3	-12.5	-674.15	318	25.0
	6.6105	0.0205	278.5	-18.8	-817.01	323	25.0
EQP1	6.621284	NaN	241.8	NaN	-826.86	NaN	NaN
	6.6305	0.0200	210.4	-68.1	-826.36	333	25.0
	6.6505	0.0200	194.3	-16.1	-675.70	343	25.0
	6.6925	0.0420	183.7	-10.6	-457.51	353	25.0
	6.7425	0.0500	176.8	-6.9	-158.69	363	25.0
	6.7925	0.0500	171.9	-4.9	-31.08	373	25.0
	6.8425	0.0500	168.3	-3.6	NaN	382	25.0
	6.8925	0.0500	165.6	-2.7	NaN	390	25.0
	6.9425	0.0500	163.5	-2.1	NaN	396	25.0
	6.9925	0.0500	161.8	-1.7	NaN	401	25.0
	7.0425	0.0500	160.2	-1.6	NaN	406	25.0

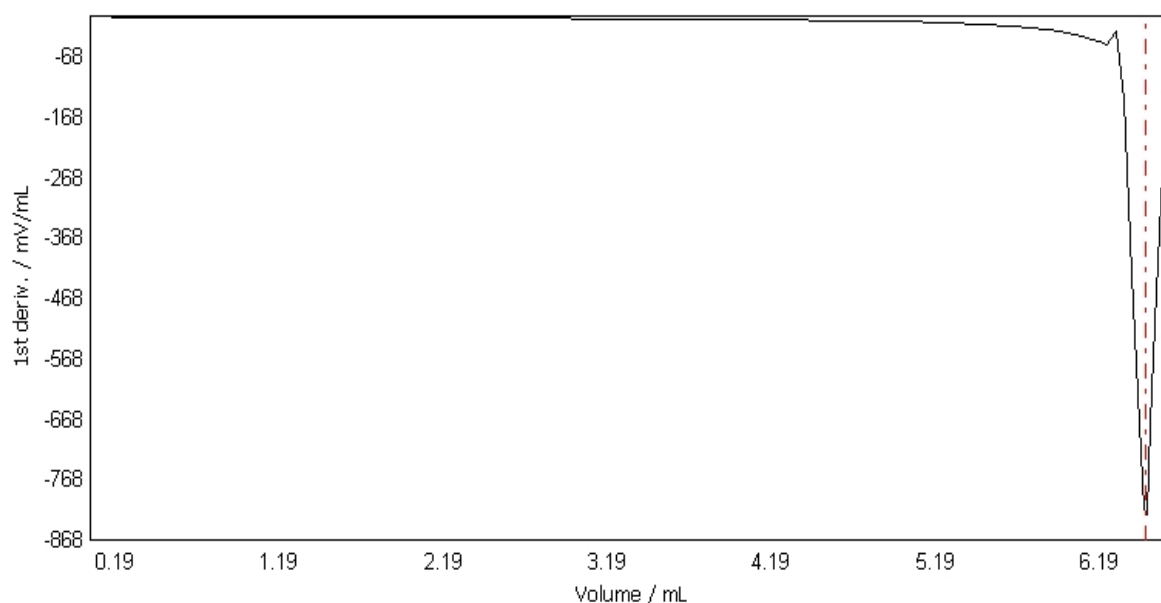
E - V curve EQP titration [1]
Sample 4/6



Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

dE/dV - V curve EQP titration [1]
Sample 4/6



Raw data

Sample

No. 5/6
Standard Potassium iodate
Type of standard solid
Comment
Titration stand Rondolino TTL 1
Weight m = 0.02382 g
Correction factor f = 1.0
Purity p = 100.00 %
Temperature T = 25.0 oC
Sample start 8/13/2012 11:29:37 AM
Sample end 8/13/2012 11:40:05 AM

Dispense (normal) [1]

Titrant 0.1M HCl cDi = 0.1 mol/L TITERDi = 1.0
Disp. volume VENDDi = 50 mL
Disp. amount QENDDi = 5.00 mmol
Time 1:45 min

Dispense (normal) [2]

Titrant SAT KI cDi = 1 mol/L TITERDi = 1.0
Disp. volume VENDDi = 1.0 mL
Disp. amount QENDDi = 1.00 mmol
Time 0:04 min

EQP titration [1]

Titrant Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Start potential EST = 374.4 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 6.652479 mL
Q1 = 0.682691 mmol
EEQ1 = 248.2 mV

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ **8/13/2012 10:39:40 AM**
Start time: 8/13/2012 10:46:05 AM

Excess EHN1 = 363.8 mV
VEX = 0.385521 mL
QEX = 0.039563 mmol
End VEND = 7.0380 mL
QEND = 0.722254 mmol
Termination at EQPs
Time t = 7:04 min

Calculation

Result R1 = 1.00396 Titer
Formula $R1 = m / (VEQ \cdot c \cdot C)$
Constant $M / (10 \cdot p \cdot z)$
C = 0.035665
Molar mass M[Potassium iodate] = 213.99 g/mol
Equivalent number z[Potassium iodate] = 6
Duration tUSE = 09:31 min

Measured values EQP titration [1]

Titrant Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Sample 5/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	374.4	NaN	NaN	0	25.0
0.0200	0.0200	374.3	-0.1	NaN	2	25.0
0.0400	0.0200	374.3	0.0	NaN	4	25.0
0.0900	0.0500	374.2	-0.1	NaN	7	25.0
0.1400	0.0500	374.1	-0.1	NaN	9	25.0
0.1900	0.0500	374.0	-0.1	-2.55	12	25.0
0.2400	0.0500	373.8	-0.2	-2.42	14	25.0
0.2900	0.0500	373.7	-0.1	-2.40	16	25.0
0.3400	0.0500	373.6	-0.1	-2.29	19	25.0
0.3900	0.0500	373.5	-0.1	-2.40	21	25.0
0.4400	0.0500	373.4	-0.1	-2.60	23	25.0
0.4900	0.0500	373.2	-0.2	-2.91	26	25.0
0.5400	0.0500	373.1	-0.1	-2.80	28	25.0
0.5900	0.0500	372.9	-0.2	-2.72	30	25.0
0.6400	0.0500	372.8	-0.1	-2.49	33	25.0
0.6900	0.0500	372.7	-0.1	-2.49	35	25.0
0.7400	0.0500	372.6	-0.1	-2.72	38	25.0
0.7900	0.0500	372.4	-0.2	-2.68	40	25.0
0.8400	0.0500	372.3	-0.1	-2.91	42	25.0
0.8900	0.0500	372.1	-0.2	-2.92	45	25.0
0.9400	0.0500	372.0	-0.1	-2.68	47	25.0
0.9900	0.0500	371.9	-0.1	-2.48	49	25.0
1.0400	0.0500	371.7	-0.2	-2.71	52	25.0
1.0900	0.0500	371.6	-0.1	-2.89	54	25.0
1.1400	0.0500	371.5	-0.1	-3.00	56	25.0
1.1900	0.0500	371.3	-0.2	-2.91	59	25.0
1.2400	0.0500	371.1	-0.2	-3.00	61	25.0
1.2900	0.0500	371.0	-0.1	-3.09	64	25.0
1.3400	0.0500	370.9	-0.1	-3.11	66	25.0
1.3900	0.0500	370.7	-0.2	-3.00	68	25.0
1.4400	0.0500	370.5	-0.2	-3.20	71	25.0
1.4900	0.0500	370.4	-0.1	-3.21	73	25.0
1.5400	0.0500	370.2	-0.2	-3.11	75	25.0
1.5900	0.0500	370.1	-0.1	-2.88	78	25.0
1.6400	0.0500	369.9	-0.2	-2.88	80	25.0
1.6900	0.0500	369.8	-0.1	-3.11	82	25.0
1.7400	0.0500	369.6	-0.2	-3.09	85	25.0
1.7900	0.0500	369.5	-0.1	-3.19	87	25.0
1.8400	0.0500	369.3	-0.2	-3.32	90	25.0
1.8900	0.0500	369.1	-0.2	-3.40	92	25.0
1.9400	0.0500	369.0	-0.1	-3.28	94	25.0
1.9900	0.0500	368.8	-0.2	-3.43	97	25.0
2.0400	0.0500	368.6	-0.2	-3.28	99	25.0
2.0900	0.0500	368.5	-0.1	-3.28	101	25.0
2.1400	0.0500	368.3	-0.2	-3.32	104	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ 8/13/2012 10:39:40 AM
Start time: 8/13/2012 10:46:05 AM

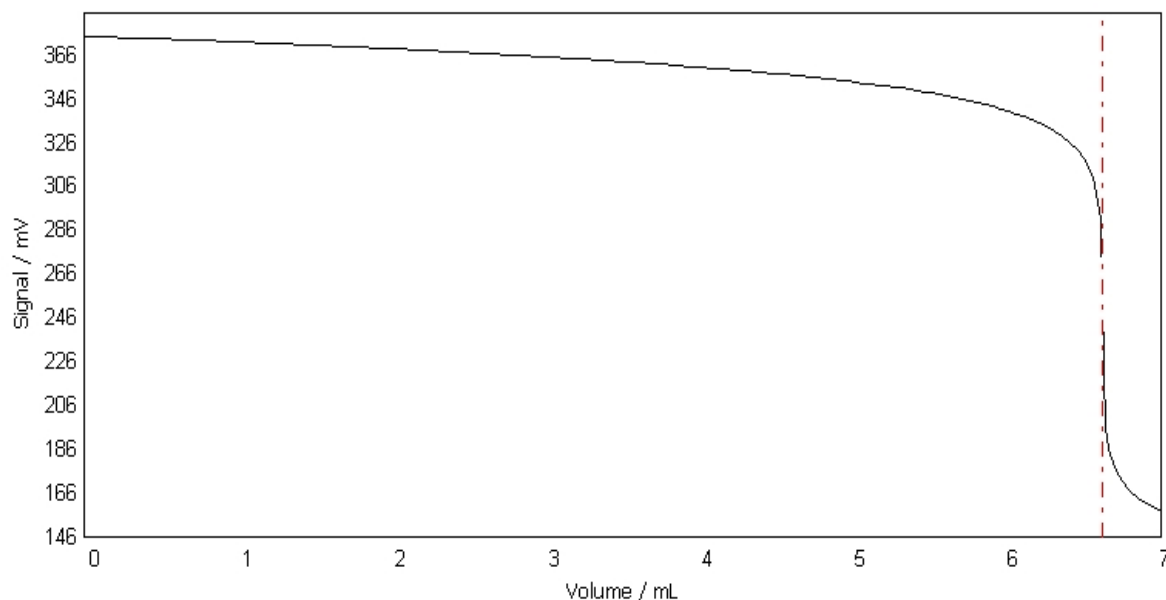
Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.1900	0.0500	368.1	-0.2	-3.28	106	25.0
2.2400	0.0500	368.0	-0.1	-3.49	108	25.0
2.2900	0.0500	367.8	-0.2	-3.72	111	25.0
2.3400	0.0500	367.6	-0.2	-3.91	113	25.0
2.3900	0.0500	367.4	-0.2	-4.00	116	25.0
2.4400	0.0500	367.2	-0.2	-3.91	118	25.0
2.4900	0.0500	367.0	-0.2	-3.60	120	25.0
2.5400	0.0500	366.8	-0.2	-3.49	123	25.0
2.5900	0.0500	366.7	-0.1	-3.49	125	25.0
2.6400	0.0500	366.5	-0.2	-3.60	128	25.0
2.6900	0.0500	366.3	-0.2	-3.80	130	25.0
2.7400	0.0500	366.1	-0.2	-4.00	132	25.0
2.7900	0.0500	365.9	-0.2	-4.23	135	25.0
2.8400	0.0500	365.7	-0.2	-3.89	137	25.0
2.8900	0.0500	365.5	-0.2	-3.79	139	25.0
2.9400	0.0500	365.3	-0.2	-3.80	142	25.0
2.9900	0.0500	365.1	-0.2	-3.89	144	25.0
3.0400	0.0500	365.0	-0.1	-4.00	146	25.0
3.0900	0.0500	364.7	-0.3	-4.11	149	25.0
3.1400	0.0500	364.5	-0.2	-4.08	151	25.0
3.1900	0.0500	364.3	-0.2	-4.20	154	25.0
3.2400	0.0500	364.1	-0.2	-4.32	156	25.0
3.2900	0.0500	363.9	-0.2	-4.28	158	25.0
3.3400	0.0500	363.7	-0.2	-4.40	161	25.0
3.3900	0.0500	363.4	-0.3	-4.51	163	25.0
3.4400	0.0500	363.2	-0.2	-4.49	165	25.0
3.4900	0.0500	363.0	-0.2	-4.60	168	25.0
3.5400	0.0500	362.8	-0.2	-4.60	170	25.0
3.5900	0.0500	362.5	-0.3	-4.68	172	25.0
3.6400	0.0500	362.3	-0.2	-5.12	175	25.0
3.6900	0.0500	362.0	-0.3	-5.21	177	25.0
3.7400	0.0500	361.8	-0.2	-5.31	180	25.0
3.7900	0.0500	361.5	-0.3	-5.21	182	25.0
3.8400	0.0500	361.2	-0.3	-5.19	184	25.0
3.8900	0.0500	361.0	-0.2	-5.20	187	25.0
3.9400	0.0500	360.7	-0.3	-5.20	189	25.0
3.9900	0.0500	360.5	-0.2	-4.96	192	25.0
4.0400	0.0500	360.2	-0.3	-5.32	194	25.0
4.0900	0.0500	359.9	-0.3	-5.60	196	25.0
4.1400	0.0500	359.7	-0.2	-5.68	199	25.0
4.1900	0.0500	359.4	-0.3	-5.83	201	25.0
4.2400	0.0500	359.0	-0.4	-5.80	203	25.0
4.2900	0.0500	358.8	-0.2	-5.77	206	25.0
4.3400	0.0500	358.5	-0.3	-5.92	208	25.0
4.3900	0.0500	358.2	-0.3	-5.88	210	25.0
4.4400	0.0500	357.9	-0.3	-6.28	213	25.0
4.4900	0.0500	357.6	-0.3	-6.72	215	25.0
4.5400	0.0500	357.2	-0.4	-6.91	218	25.0
4.5900	0.0500	356.9	-0.3	-6.89	220	25.0
4.6400	0.0500	356.5	-0.4	-7.11	222	25.0
4.6900	0.0500	356.2	-0.3	-7.20	225	25.0
4.7400	0.0500	355.8	-0.4	-7.17	227	25.0
4.7900	0.0500	355.5	-0.3	-7.63	229	25.0
4.8400	0.0500	355.0	-0.5	-7.69	232	25.0
4.8900	0.0500	354.7	-0.3	-7.76	234	25.0
4.9400	0.0500	354.3	-0.4	-8.24	236	25.0
4.9900	0.0500	353.8	-0.5	-8.72	239	25.0
5.0400	0.0500	353.5	-0.3	-8.65	241	25.0
5.0900	0.0500	353.0	-0.5	-9.06	244	25.0
5.1400	0.0500	352.4	-0.6	-8.77	246	25.0
5.1900	0.0500	352.1	-0.3	-9.05	248	25.0
5.2400	0.0500	351.7	-0.4	-9.53	251	25.0
5.2900	0.0500	351.1	-0.6	-9.99	253	25.0
5.3400	0.0500	350.7	-0.4	-10.57	255	25.0
5.3900	0.0500	350.0	-0.7	-11.35	258	25.0
5.4400	0.0500	349.5	-0.5	-11.40	260	25.0
5.4900	0.0500	348.9	-0.6	-11.46	262	25.0
5.5400	0.0500	348.4	-0.5	-12.11	265	25.0
5.5900	0.0500	347.7	-0.7	-12.57	267	25.0
5.6400	0.0500	347.1	-0.6	-13.59	270	25.0
5.6900	0.0500	346.4	-0.7	-14.09	272	25.0
5.7400	0.0500	345.6	-0.8	-14.91	274	25.0
5.7900	0.0500	344.9	-0.7	-15.46	277	25.0
5.8400	0.0500	344.1	-0.8	-16.37	279	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

	Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
	5.8900	0.0500	343.3	-0.8	-17.36	281	25.0
	5.9400	0.0500	342.3	-1.0	-18.97	284	25.0
	5.9900	0.0500	341.4	-0.9	-20.65	286	25.0
	6.0400	0.0500	340.3	-1.1	-22.25	289	25.0
	6.0900	0.0500	339.1	-1.2	-24.36	292	25.0
	6.1400	0.0500	337.8	-1.3	-26.48	294	25.0
	6.1900	0.0500	336.5	-1.3	-29.15	296	25.0
	6.2400	0.0500	334.9	-1.6	-32.40	299	25.0
	6.2900	0.0500	333.1	-1.8	-36.51	301	25.0
	6.3400	0.0500	331.2	-1.9	-40.95	304	25.0
	6.3900	0.0500	328.8	-2.4	-38.49	306	25.0
	6.4400	0.0500	325.9	-2.9	0.22	309	25.0
	6.4900	0.0500	322.4	-3.5	-47.64	311	25.0
	6.5400	0.0500	317.6	-4.8	-236.48	314	25.0
	6.5900	0.0500	310.1	-7.5	-554.65	317	25.0
	6.6400	0.0500	291.1	-19.0	-770.55	321	25.0
EQP1	6.652479	NaN	248.2	NaN	-890.68	NaN	NaN
	6.6600	0.0200	222.3	-68.8	-881.75	331	25.0
	6.6800	0.0200	196.4	-25.9	-819.24	341	25.0
	6.7000	0.0200	186.0	-10.4	-615.32	351	25.0
	6.7380	0.0380	177.8	-8.2	-381.89	361	25.0
	6.7880	0.0500	171.7	-6.1	-113.20	371	25.0
	6.8380	0.0500	167.1	-4.6	NaN	381	25.0
	6.8880	0.0500	164.1	-3.0	NaN	388	25.0
	6.9380	0.0500	161.8	-2.3	NaN	395	25.0
	6.9880	0.0500	159.7	-2.1	NaN	401	25.0
	7.0380	0.0500	157.9	-1.8	NaN	406	25.0

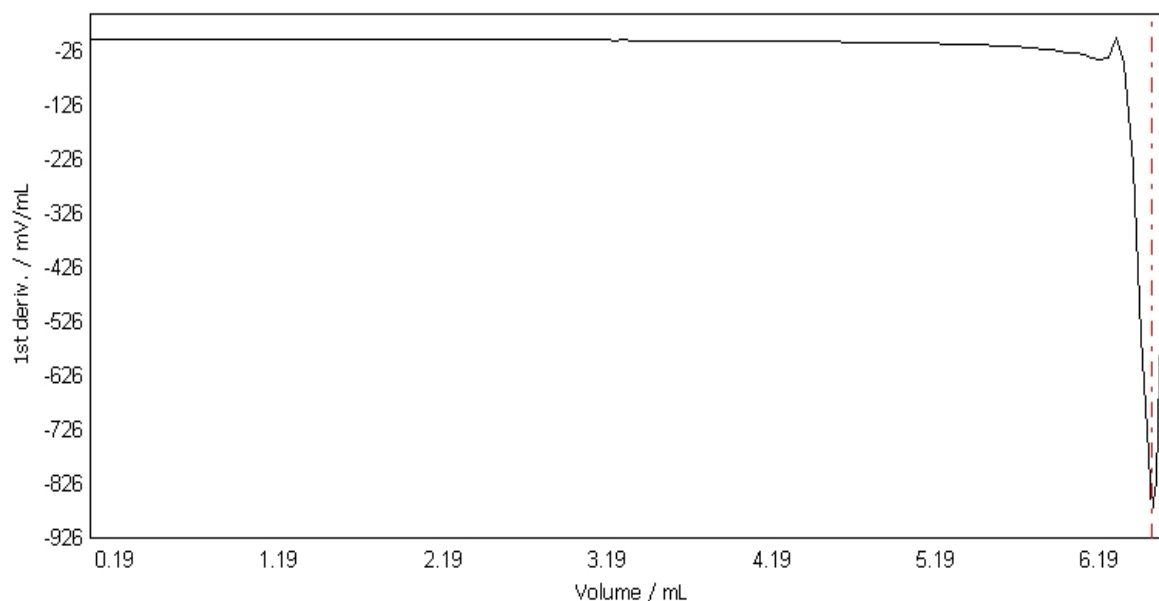
E - V curve EQP titration [1]
Sample 5/6



Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

dE/dV - V curve EQP titration [1]
Sample 5/6



Raw data

Sample

No.	6/6
Standard	Potassium iodate
Type of standard	solid
Comment	
Titration stand	Rondolino TTL 1
Weight	m = 0.02561 g
Correction factor	f = 1.0
Purity	p = 100.00 %
Temperature	T = 25.0 °C
Sample start	8/13/2012 11:40:06 AM
Sample end	8/13/2012 11:50:26 AM

Dispense (normal) [1]

Titrant	0.1M HCl cDi = 0.1 mol/L TITERDi = 1.0
Disp. volume	VENDDi = 50 mL
Disp. amount	QENDDi = 5.00 mmol
Time	1:45 min

Dispense (normal) [2]

Titrant	SAT KI cDi = 1 mol/L TITERDi = 1.0
Disp. volume	VENDDi = 1.0 mL
Disp. amount	QENDDi = 1.00 mmol
Time	0:04 min

EQP titration [1]

Titrant	Na ₂ S ₂ O ₃ c = 0.1 mol/L TITER = 1.02622
Sensor	DM140-SC
Start potential	EST = 375.1 mV
No. of EQPs and cand.	nEQ = 1
Consumption	VEQ1 = 7.154514 mL
	Q1 = 0.734211 mmol
	EEQ1 = 249.0 mV

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ **8/13/2012 10:39:40 AM**
Start time: 8/13/2012 10:46:05 AM

Excess EHN1 = 364.7 mV
VEX = 0.384986 mL
QEX = 0.039508 mmol
End VEND = 7.5395 mL
QEND = 0.773719 mmol
Termination at EQPs
Time t = 7:31 min

Calculation

Result R1 = 1.00366 Titer
Formula $R1 = m / (VEQ \cdot c \cdot C)$
Constant $M / (10 \cdot p \cdot z)$
C = 0.035665
Molar mass M[Potassium iodate] = 213.99 g/mol
Equivalent number z[Potassium iodate] = 6
Duration tUSE = 09:59 min

Measured values EQP titration [1]

Titrant Na₂S₂O₃ c = 0.1 mol/L TITER = 1.02622
Sensor DM140-SC
Sample 6/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	375.1	NaN	NaN	0	25.0
0.0200	0.0200	375.2	0.1	NaN	2	25.0
0.0400	0.0200	375.3	0.1	NaN	5	25.0
0.0900	0.0500	375.2	-0.1	NaN	7	25.0
0.1400	0.0500	375.1	-0.1	NaN	9	25.0
0.1900	0.0500	375.0	-0.1	-2.19	12	25.0
0.2400	0.0500	374.9	-0.1	-1.98	14	25.0
0.2900	0.0500	374.8	-0.1	-2.00	16	25.0
0.3400	0.0500	374.7	-0.1	-2.20	19	25.0
0.3900	0.0500	374.6	-0.1	-2.40	21	25.0
0.4400	0.0500	374.5	-0.1	-2.51	24	25.0
0.4900	0.0500	374.3	-0.2	-2.40	26	25.0
0.5400	0.0500	374.2	-0.1	-2.40	28	25.0
0.5900	0.0500	374.1	-0.1	-2.41	31	25.0
0.6400	0.0500	374.0	-0.1	-2.40	33	25.0
0.6900	0.0500	373.9	-0.1	-2.28	35	25.0
0.7400	0.0500	373.7	-0.2	-2.51	38	25.0
0.7900	0.0500	373.6	-0.1	-2.60	40	25.0
0.8400	0.0500	373.5	-0.1	-2.49	42	25.0
0.8900	0.0500	373.4	-0.1	-2.51	45	25.0
0.9400	0.0500	373.2	-0.2	-2.60	47	25.0
0.9900	0.0500	373.1	-0.1	-2.68	50	25.0
1.0400	0.0500	373.0	-0.1	-2.72	52	25.0
1.0900	0.0500	372.8	-0.2	-2.60	54	25.0
1.1400	0.0500	372.7	-0.1	-2.68	57	25.0
1.1900	0.0500	372.6	-0.1	-2.92	59	25.0
1.2400	0.0500	372.4	-0.2	-2.80	62	25.0
1.2900	0.0500	372.3	-0.1	-2.68	64	25.0
1.3400	0.0500	372.1	-0.2	-2.92	66	25.0
1.3900	0.0500	372.0	-0.1	-3.00	69	25.0
1.4400	0.0500	371.9	-0.1	-2.89	71	25.0
1.4900	0.0500	371.7	-0.2	-3.02	73	25.0
1.5400	0.0500	371.5	-0.2	-2.89	76	25.0
1.5900	0.0500	371.4	-0.1	-3.00	78	25.0
1.6400	0.0500	371.3	-0.1	-2.80	80	25.0
1.6900	0.0500	371.1	-0.2	-2.79	83	25.0
1.7400	0.0500	371.0	-0.1	-3.00	85	25.0
1.7900	0.0500	370.8	-0.2	-3.00	88	25.0
1.8400	0.0500	370.7	-0.1	-2.79	90	25.0
1.8900	0.0500	370.5	-0.2	-2.80	92	25.0
1.9400	0.0500	370.4	-0.1	-2.89	95	25.0
1.9900	0.0500	370.3	-0.1	-3.00	97	25.0
2.0400	0.0500	370.1	-0.2	-3.11	99	25.0
2.0900	0.0500	369.9	-0.2	-3.08	102	25.0
2.1400	0.0500	369.8	-0.1	-3.32	104	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃ 8/13/2012 10:39:40 AM
Start time: 8/13/2012 10:46:05 AM

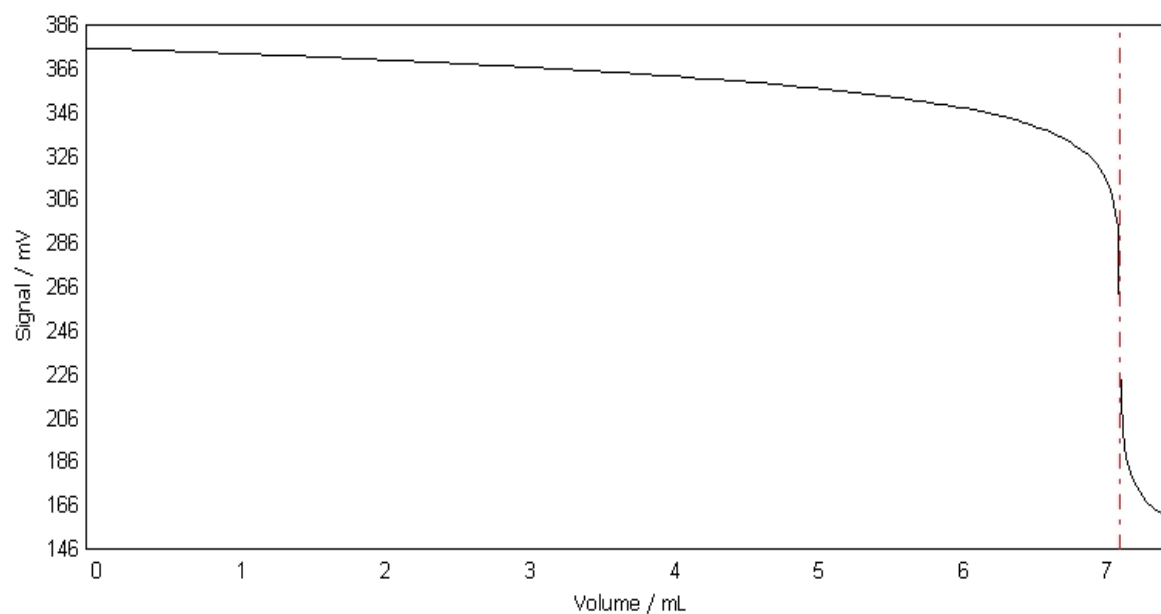
Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.1900	0.0500	369.6	-0.2	-3.20	106	25.0
2.2400	0.0500	369.5	-0.1	-3.19	109	25.0
2.2900	0.0500	369.3	-0.2	-3.21	111	25.0
2.3400	0.0500	369.1	-0.2	-3.19	114	25.0
2.3900	0.0500	369.0	-0.1	-3.20	116	25.0
2.4400	0.0500	368.8	-0.2	-3.20	118	25.0
2.4900	0.0500	368.7	-0.1	-3.08	121	25.0
2.5400	0.0500	368.5	-0.2	-3.32	123	25.0
2.5900	0.0500	368.3	-0.2	-3.40	126	25.0
2.6400	0.0500	368.2	-0.1	-3.17	128	25.0
2.6900	0.0500	368.0	-0.2	-3.43	130	25.0
2.7400	0.0500	367.8	-0.2	-3.49	133	25.0
2.7900	0.0500	367.7	-0.1	-3.80	135	25.0
2.8400	0.0500	367.5	-0.2	-3.83	137	25.0
2.8900	0.0500	367.2	-0.3	-3.59	140	25.0
2.9400	0.0500	367.1	-0.1	-3.49	142	25.0
2.9900	0.0500	366.9	-0.2	-3.41	144	25.0
3.0400	0.0500	366.8	-0.1	-3.28	147	25.0
3.0900	0.0500	366.6	-0.2	-3.49	149	25.0
3.1400	0.0500	366.4	-0.2	-3.91	152	25.0
3.1900	0.0500	366.2	-0.2	-4.00	154	25.0
3.2400	0.0500	366.0	-0.2	-4.12	156	25.0
3.2900	0.0500	365.8	-0.2	-4.00	159	25.0
3.3400	0.0500	365.6	-0.2	-4.00	161	25.0
3.3900	0.0500	365.4	-0.2	-4.00	163	25.0
3.4400	0.0500	365.2	-0.2	-4.00	166	25.0
3.4900	0.0500	365.0	-0.2	-4.00	168	25.0
3.5400	0.0500	364.8	-0.2	-4.00	170	25.0
3.5900	0.0500	364.6	-0.2	-4.00	173	25.0
3.6400	0.0500	364.4	-0.2	-3.88	175	25.0
3.6900	0.0500	364.2	-0.2	-4.00	178	25.0
3.7400	0.0500	364.0	-0.2	-4.20	180	25.0
3.7900	0.0500	363.8	-0.2	-4.28	182	25.0
3.8400	0.0500	363.6	-0.2	-4.51	185	25.0
3.8900	0.0500	363.3	-0.3	-4.60	187	25.0
3.9400	0.0500	363.1	-0.2	-4.80	190	25.0
3.9900	0.0500	362.9	-0.2	-4.81	192	25.0
4.0400	0.0500	362.6	-0.3	-4.91	194	25.0
4.0900	0.0500	362.4	-0.2	-4.89	197	25.0
4.1400	0.0500	362.1	-0.3	-5.12	199	25.0
4.1900	0.0500	361.9	-0.2	-5.00	201	25.0
4.2400	0.0500	361.6	-0.3	-4.88	204	25.0
4.2900	0.0500	361.4	-0.2	-5.11	206	25.0
4.3400	0.0500	361.1	-0.3	-5.09	208	25.0
4.3900	0.0500	360.9	-0.2	-5.19	211	25.0
4.4400	0.0500	360.6	-0.3	-5.32	213	25.0
4.4900	0.0500	360.3	-0.3	-5.28	216	25.0
4.5400	0.0500	360.1	-0.2	-5.40	218	25.0
4.5900	0.0500	359.8	-0.3	-5.41	220	25.0
4.6400	0.0500	359.5	-0.3	-5.47	223	25.0
4.6900	0.0500	359.3	-0.2	-5.81	225	25.0
4.7400	0.0500	358.9	-0.4	-6.12	227	25.0
4.7900	0.0500	358.7	-0.2	-6.20	230	25.0
4.8400	0.0500	358.3	-0.4	-6.32	232	25.0
4.8900	0.0500	358.0	-0.3	-6.19	234	25.0
4.9400	0.0500	357.7	-0.3	-5.97	237	25.0
4.9900	0.0500	357.4	-0.3	-6.32	239	25.0
5.0400	0.0500	357.1	-0.3	-6.37	242	25.0
5.0900	0.0500	356.8	-0.3	-6.80	244	25.0
5.1400	0.0500	356.4	-0.4	-7.23	246	25.0
5.1900	0.0500	356.0	-0.4	-7.40	249	25.0
5.2400	0.0500	355.7	-0.3	-7.28	251	25.0
5.2900	0.0500	355.3	-0.4	-7.43	254	25.0
5.3400	0.0500	354.9	-0.4	-7.37	256	25.0
5.3900	0.0500	354.6	-0.3	-7.68	258	25.0
5.4400	0.0500	354.2	-0.4	-7.92	261	25.0
5.4900	0.0500	353.7	-0.5	-8.08	263	25.0
5.5400	0.0500	353.4	-0.3	-8.60	265	25.0
5.5900	0.0500	352.9	-0.5	-8.81	268	25.0
5.6400	0.0500	352.5	-0.4	-8.99	270	25.0
5.6900	0.0500	352.0	-0.5	-9.41	272	25.0
5.7400	0.0500	351.5	-0.5	-9.80	275	25.0
5.7900	0.0500	351.1	-0.4	-9.77	277	25.0
5.8400	0.0500	350.5	-0.6	-10.43	280	25.0

Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

	Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
	5.8900	0.0500	350.0	-0.5	-10.77	282	25.0
	5.9400	0.0500	349.5	-0.5	-11.28	284	25.0
	5.9900	0.0500	348.9	-0.6	-11.83	287	25.0
	6.0400	0.0500	348.2	-0.7	-12.17	289	25.0
	6.0900	0.0500	347.7	-0.5	-12.77	292	25.0
	6.1400	0.0500	347.0	-0.7	-13.64	294	25.0
	6.1900	0.0500	346.3	-0.7	-14.28	296	25.0
	6.2400	0.0500	345.6	-0.7	-14.96	299	25.0
	6.2900	0.0500	344.8	-0.8	-15.71	301	25.0
	6.3400	0.0500	343.9	-0.9	-16.37	303	25.0
	6.3900	0.0500	343.2	-0.7	-17.34	306	25.0
	6.4400	0.0500	342.3	-0.9	-18.57	308	25.0
	6.4900	0.0500	341.3	-1.0	-20.27	311	25.0
	6.5400	0.0500	340.2	-1.1	-22.02	313	25.0
	6.5900	0.0500	339.1	-1.1	-24.16	316	25.0
	6.6400	0.0500	337.8	-1.3	-25.79	318	25.0
	6.6900	0.0500	336.4	-1.4	-28.54	321	25.0
	6.7400	0.0500	335.0	-1.4	-31.98	323	25.0
	6.7900	0.0500	333.2	-1.8	-36.26	326	25.0
	6.8400	0.0500	331.3	-1.9	-40.61	328	25.0
	6.8900	0.0500	328.8	-2.5	-39.21	331	25.0
	6.9400	0.0500	326.1	-2.7	-6.38	333	25.0
	6.9900	0.0500	322.6	-3.5	-40.71	336	25.0
	7.0400	0.0500	318.0	-4.6	-216.68	338	25.0
	7.0900	0.0500	310.8	-7.2	-533.26	342	25.0
	7.1400	0.0500	293.3	-17.5	-756.06	346	25.0
EQP1	7.154514	NaN	249.0	NaN	-879.52	NaN	NaN
	7.1600	0.0200	232.3	-61.0	-873.52	356	25.0
	7.1800	0.0200	199.1	-33.2	-823.39	366	25.0
	7.2000	0.0200	187.5	-11.6	-629.63	376	25.0
	7.2395	0.0395	178.7	-8.8	-394.62	386	25.0
	7.2895	0.0500	172.4	-6.3	-120.17	396	25.0
	7.3395	0.0500	167.7	-4.7	NaN	406	25.0
	7.3895	0.0500	164.5	-3.2	NaN	414	25.0
	7.4395	0.0500	162.1	-2.4	NaN	421	25.0
	7.4895	0.0500	160.1	-2.0	NaN	427	25.0
	7.5395	0.0500	158.3	-1.8	NaN	432	25.0

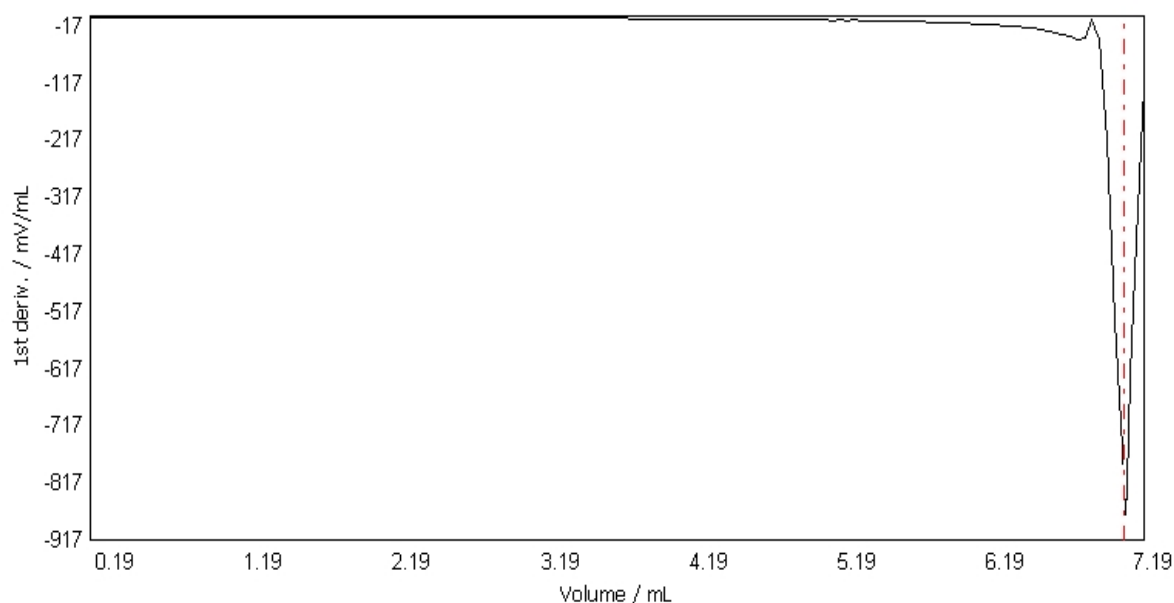
E - V curve EQP titration [1]
Sample 6/6



Method: Sodiumthiosulfate 0.1 M Na₂S₂O₃
Start time: 8/13/2012 10:46:05 AM

8/13/2012 10:39:40 AM

dE/dV - V curve EQP titration [1]
Sample 6/6



Raw data

Calculation

Result	R2 = 1.0018 -- Mean Titer
Formula	R2=Mean[R1]
Constant	1
	C = 1
Molar mass	M[None] = 1 g/mol
Equivalent number	z[None] = 1

Titer

Titrant	Na ₂ S ₂ O ₃ c = 0.1 mol/L
Titer	1.00182

- (1) Modified
- (2) Excluded
- (3) Outside limits
- (4) Resource expired
- (5) srel above max srel
- (6) srel above max srel for multiple determination
- (7) Value outside limits, not saved in setup
- (8) Sample data outside limits
- (9) Standard evaluation used
- (10) Result from buffer

Created: Development Administrator (admin), 8/13/2012 10:57:58 AM