

MBARI DuraFET DF#207 + VL#207 SO ver3-PEEK

Ver 2.0
5/19/2015

Updated:
7/6/2017

By:
hwj

PT Chamber: 6/30/2017 7/7/2017
SW cal: 1/0/1900 1/0/1900

Drift -0.080 mV/d

k2 calcs Avg from 0 to 1600 m.

k₂ used -9.73639E-04

r²= 0.9999

k₀ HCl -1.42150

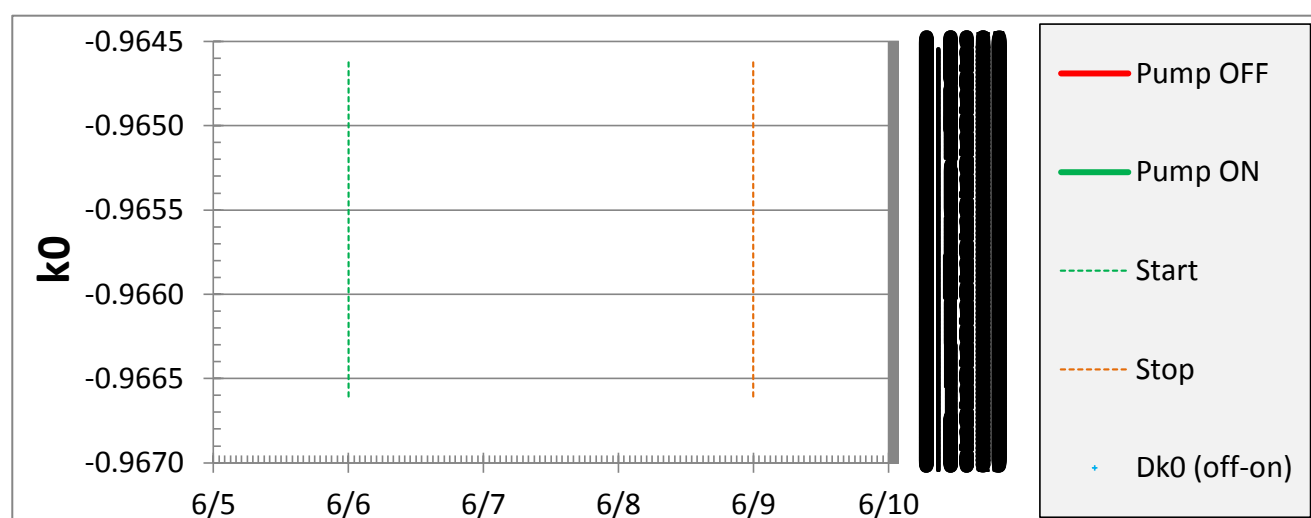
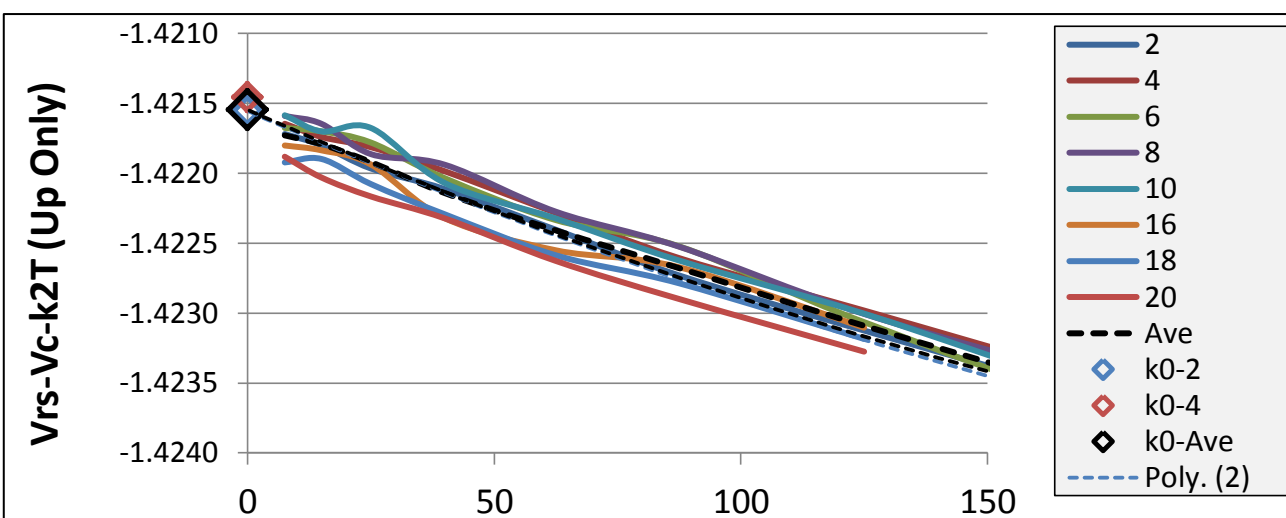
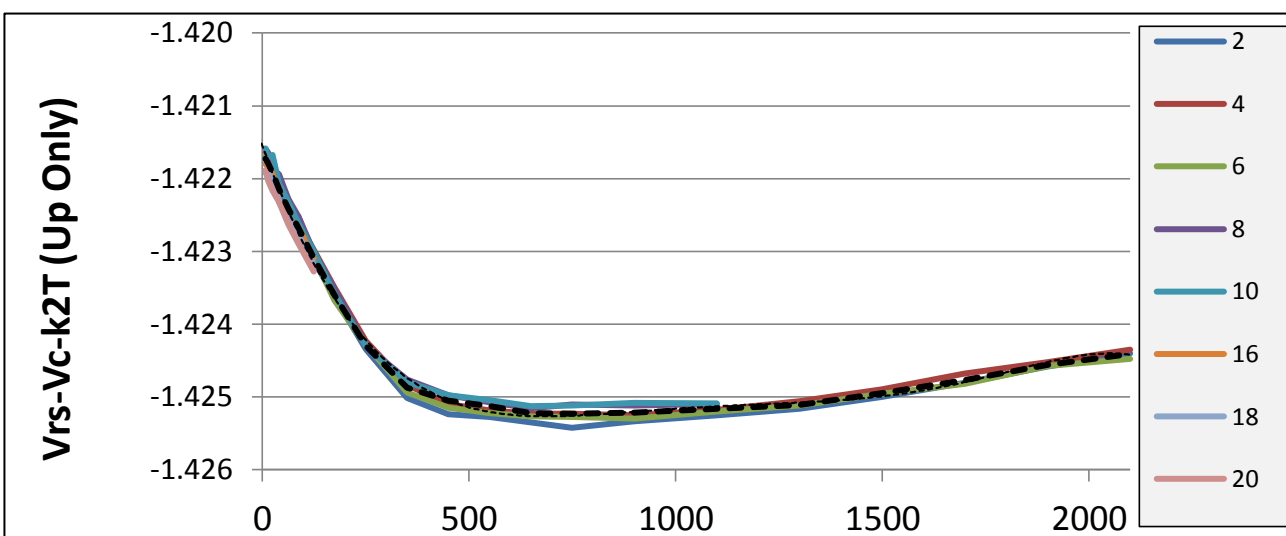
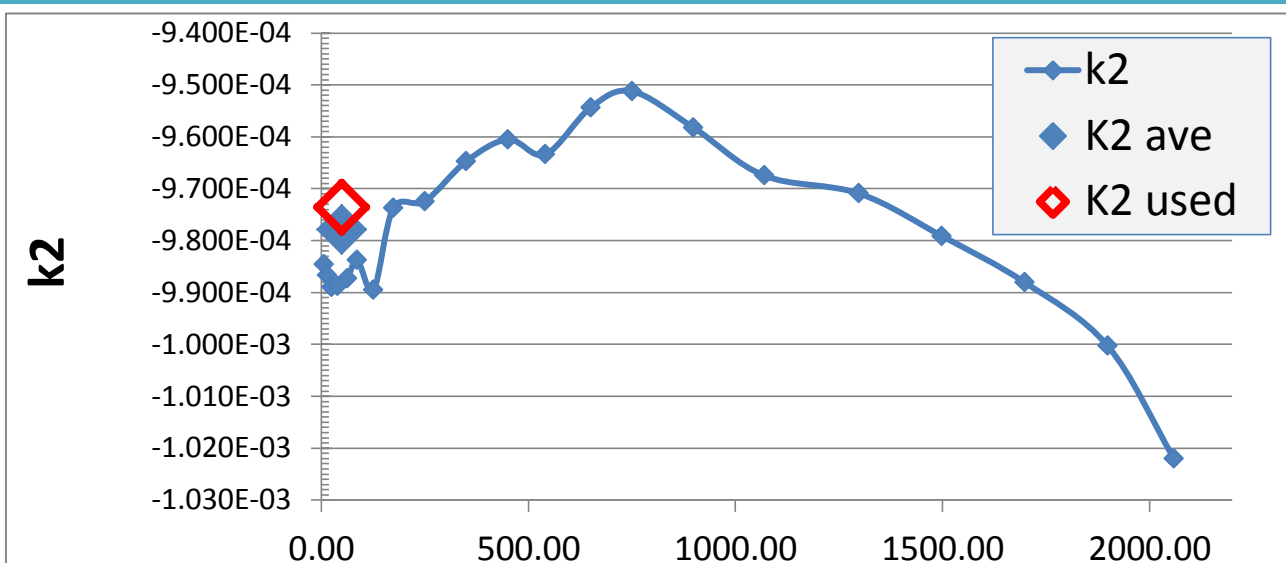
PT Channel C

MCS Logger

CTD#

APEX Float#

k₀ SW #N/A

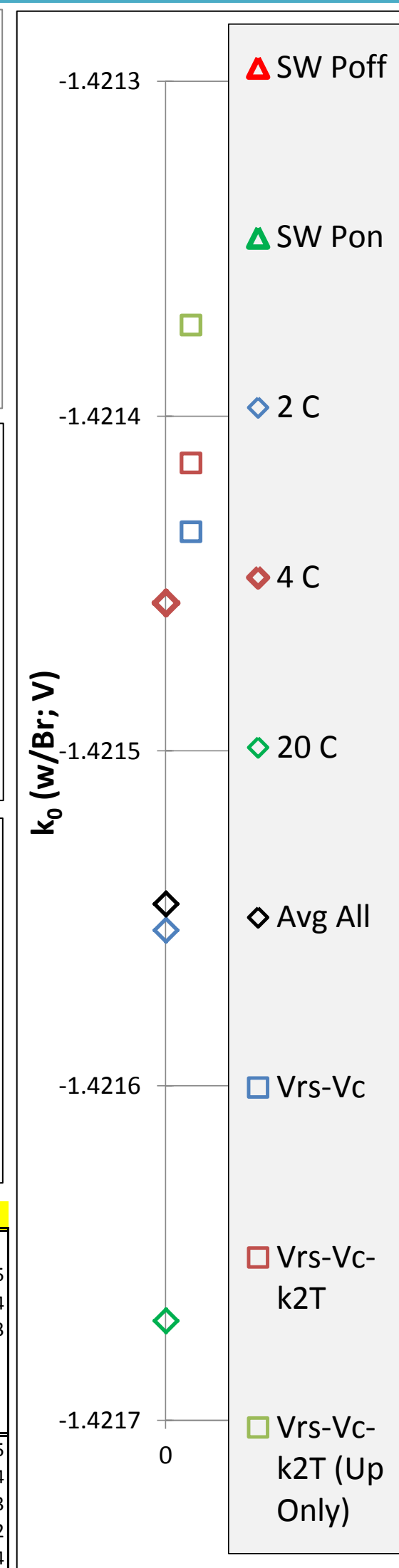


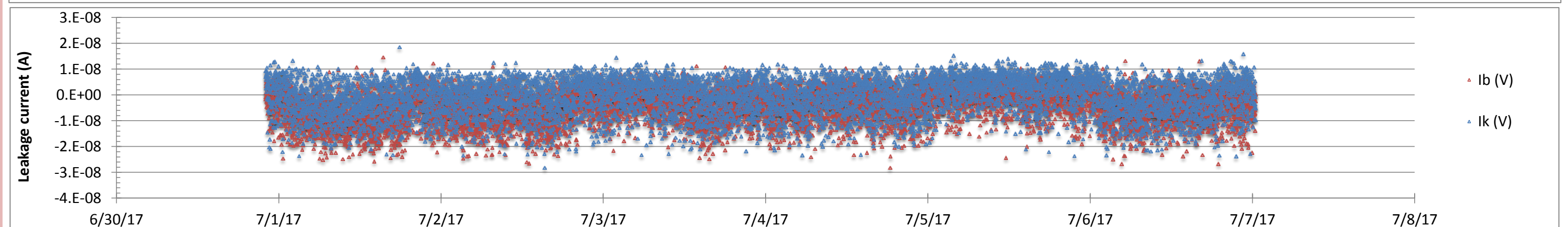
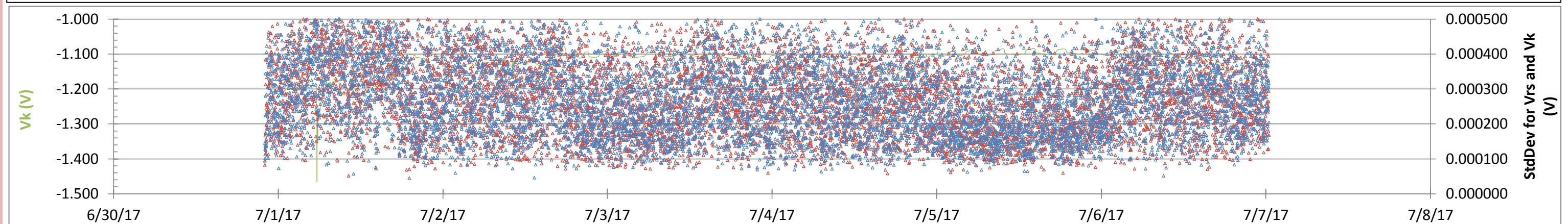
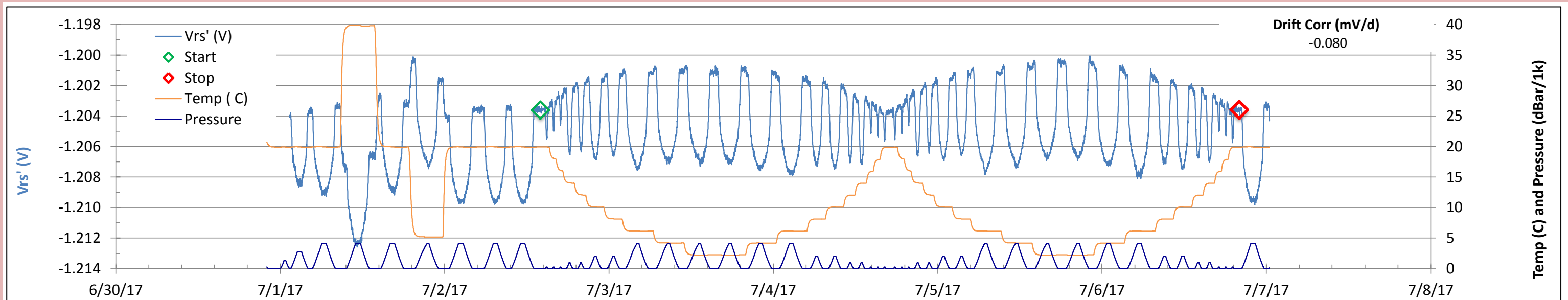
f(P) calcs	k6	k5	k4	k3	k2	k1	k0	R^2
2 C	-9.7074E-22	4.9035E-18	-6.2338E-15	-5.8025E-12	1.9863E-08	-1.5472E-05	-1.42155	0.9981949
4 C	-8.8235E-22	4.4108E-18	-5.3628E-15	-6.1541E-12	1.9452E-08	-1.5175E-05	-1.42146	0.9979493
6 C	-9.2236E-22	4.3631E-18	-4.2280E-15	-9.0971E-12	2.2288E-08	-1.6167E-05	-1.42143	0.9975553
20 C	-1.1718E-14	3.1114E-12	-2.3487E-10	-2.5139E-11	6.1517E-07	-3.2615E-05	-1.42167	1.0000000
Avg All	-6.7914E-22	2.8581E-18	-8.6155E-16	-1.2147E-11	2.2835E-08	-1.5622E-05	-1.42155	0.9983565

k0 calcs	k ₀ SW	StDev	St Dev pH	k0 comparison (PT and k0 calcs)	from f(P) calcs	k ₀ HCl w/Br	Bromine Offset
SW Pon	#N/A	#N/A	#N/A	Ave PTC/PT	-1.4215 V	2 C	-1.42155
SW Poff	#N/A	#N/A	#N/A	Ave PTC/f(P)	-1.4214 V	4 C	-1.42146
Delta	#N/A	Pump effect	#N/A	Ave SW	#N/A	6 C	-1.42143
				Delta k0	#N/A	20 C	-1.42167
				pH offset	#N/A	Avg All	-1.42155
k0 Cal run?	No						

By interpolating Vrs signals to P=0:

	k0
Vrs-Vc	-1.421435
Vrs-Vc-k2T	-1.421414
Vrs-Vc-k2T (Up Only)	-1.421373
	k ₀ w/Br
Vrs-Vc	-1.421435
Vrs-Vc-k2T	-1.421414
Vrs-Vc-k2T (Up Only)	-1.421373
Hysteresis (V)	0.000082
Hysteresis (pH)	0.0014





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Engineering Data

Time range:	7/2/2017	7/6/2017
	<u>Average</u>	<u>StDev</u>
Vrs noise	0.000264	0.000105
Vk noise	0.000261	0.000104
Ik	-5.26E-10	6.93E-09
Ib	-3.37E-09	6.05E-09
f(P) r^2	0.9990	0.0009
k0 (all)	-1.421580	0.000304
k0 (up only)	-1.421496	0.000277

