LI-7000 CO_2/H_2O Analyzer

Calibration Certificate

Serial Number IRG4-0738

Date: 27 May 2008 **Technician _____**

The following values have been entered into the analyzer, and are accessible by pressing the 'Coeffs...' fct key.

--- CO2 values ---
a1 = 925.141
a2 = 150364
a3 = 1.48959e+08
a4 = -2.87218e+10
a5 = 3.40336e+12
\+ gamma = 1
* Z = 0.95225
Zt = -5.21e-05
* Zm = 5.06e-07
* S = 1.00087
* W0' = 1.2134e+07
W0'_d = 1.21022e+07
AGC = 0.539795
\+ VpCrr = 1.57

\# --- Pressure ---
a0 = 57.63
a1 = 30.7

--- H2O values ---
a1 = 34.0228
a2 = 23926.1
a3 = 687135
\+ gamma = 1
* Z = 1.14355
Zt = -0.000149
* Zm = -1.74e-05
* S = 0.995704
* W0' = 1.33461e+07
W0'_d = 1.32732e+07
AGC = 0.589844

--- Temperature ---
\+ A = 8.28003E-4
\+ B = 2.08687E-4
\+ C = 8.0874E-8

--- Humidity ---
\+ a0 = -24.22
\+ a1 = 30.28

* Values subject to change in response to user calibrations.
\+ Standard values for all LI-7000 analyzers.
\# Pressure sensor S/N is PX-1717 last calibrated 23 Oct 2007

LI-7000 IRG4-0738 Calibrated 27 May 2008 / Checked 28 May 2008
Calibration file: L:\MICHAEL\CALS\IRG4\0738\20080527.raw

CO2 Measurements

	Type__	Time	CO2(ppm)	CO2A_W	CO2B_W	CO2Abs	CO2SD	CO2Slp	H2OA_W	H2OB_W	H2OAbs	TOven(C)	T(C)	RH(%)	Pa(kPa)	Press	F(l/m)	CAgc	HAgc	Diag
1	CO2/70	17:03:15	0	13251869	14150421	0.00065	1.11E-5	4.67E-5	14448637	13127494	-0.00157	16.10	19.58	3.92	97.98	97.99	0.5000	0.59130	0.64360	0C
2	CO2/70	17:04:44	114.3	13519806	13879857	0.03918	9.28E-6	-9.75E-6	14455500	13123299	-0.00073	16.10	19.53	3.90	97.98	97.99	0.5000	0.60350	0.64330	0C
3	CO2/70	17:05:48	192.4	13679523	13720929	0.06127	7.15E-6	3.06E-5	14457171	13122290	-0.00051	16.10	19.50	3.90	97.99	98.00	0.5000	0.61060	0.64310	0C
4	CO2/70	17:07:06	299.1	13875168	13528733	0.08748	6.66E-6	6.08E-5	14457805	13120419	-0.00032	16.10	19.46	3.88	98.00	98.00	0.5000	0.61960	0.64310	0
5	CO2/70	17:08:10	400.3	14038126	13363772	0.10906	8.95E-6	3.83E-5	14457962	13119438	-0.00023	16.00	19.43	3.87	97.99	98.01	0.5000	0.62700	0.64280	0C
6	CO2/70	17:09:14	496.7	14180874	13221990	0.12739	7.14E-6	3.79E-5	14457648	13118493	-0.00017	15.90	19.41	3.86	98.00	98.01	0.5000	0.63330	0.64280	0C
7	CO2/70	17:10:18	599.4	14320200	13081609	0.14506	6.31E-6	2.84E-5	14459342	13118991	-0.00009	15.90	19.38	3.85	98.00	98.01	0.5000	0.63960	0.64280	0CH
8	CO2/70	17:11:22	752.8	14510871	12889722	0.16868	7.40E-6	2.76E-5	14460052	13119094	-0.00005	15.90	19.34	3.84	98.00	98.02	0.5000	0.64840	0.64280	0CH
9	CO2/70	17:12:26	1001	14784444	12614130	0.20149	6.37E-6	4.20E-5	14461032	13119307	0.00001	15.90	19.31	3.84	98.00	98.01	0.5000	0.66060	0.64280	0C
10	CO2/70	17:13:33	1504	14881122	11835433	0.25564	1.00E-5	3.40E-5	14460836	13118651	0.00002	15.80	19.29	3.83	98.01	98.02	0.5000	0.66500	0.64280	0C
11	CO2/70	17:14:42	2001	14411393	10804146	0.29836	7.56E-6	3.56E-5	14460925	13118608	0.00006	15.80	19.25	3.82	98.01	98.02	0.5000	0.64450	0.64280	0CH
12	CO2/70	17:15:58	2380	14117901	10159140	0.32653	6.92E-6	3.80E-5	14461063	13118356	0.00009	15.80	19.22	3.81	98.01	98.02	0.5000	0.63110	0.64310	0C
13	CO2/70	17:17:02	2984	13726866	9302202	0.36577	6.27E-6	4.72E-5	14461029	13118228	0.00010	15.80	19.19	3.80	98.01	98.02	0.5000	0.61400	0.64280	0C
14	CO2/70	21:14:51	0	13247056	14153947	0.00002	9.79E-6	2.37E-5	14447212	13143847	-0.00284	29.90	32.45	6.58	98.07	98.08	0.5000	0.58860	0.63890	0C
15	CO2/70	21:15:55	114.3	13504030	13896090	0.03694	6.68E-6	4.32E-5	14448800	13140796	-0.00251	30.00	32.46	6.58	98.07	98.08	0.5000	0.60060	0.63890	0C
16	CO2/70	21:16:59	192.4	13656223	13741815	0.05824	7.50E-6	3.09E-5	14451024	13141398	-0.00238	30.00	32.47	6.58	98.07	98.08	0.5000	0.60740	0.63890	0C
17	CO2/70	21:18:03	299.1	13844170	13555482	0.08364	9.71E-6	-5.10E-6	14450543	13139805	-0.00229	30.00	32.48	6.57	98.08	98.08	0.5000	0.61570	0.63870	0C
18	CO2/70	21:19:07	400.3	14002211	13395346	0.10466	6.67E-6	1.31E-5	14449134	13138100	-0.00226	30.00	32.50	6.57	98.08	98.08	0.5000	0.62260	0.63870	0C
19	CO2/70	21:20:11	496.7	14140142	13256842	0.12258	6.22E-6	6.82E-6	14452644	13141115	-0.00225	30.00	32.51	6.56	98.08	98.08	0.5000	0.62890	0.63870	0C
20	CO2/70	21:21:15	599.4	14276643	13120945	0.13987	5.47E-6	9.40E-6	14452721	13139884	-0.00216	30.00	32.51	6.56	98.08	98.09	0.5000	0.63500	0.63870	0C
21	CO2/70	21:22:19	752.8	14463242	12933764	0.16308	7.39E-6	3.78E-5	14451439	13139044	-0.00214	30.00	32.52	6.56	98.09	98.09	0.5000	0.64330	0.63870	0C
22	CO2/70	21:23:23	1001	14731167	12664592	0.19540	5.82E-6	3.94E-5	14452267	13139580	-0.00214	30.00	32.53	6.55	98.09	98.09	0.5000	0.65550	0.63870	0C
23	CO2/70	21:24:31	1504	14961129	12005654	0.24899	5.22E-6	4.99E-5	14451867	13138828	-0.00210	29.90	32.54	6.55	98.09	98.10	0.5000	0.66580	0.63870	0C
24	CO2/70	21:25:36	2001	14489445	10969980	0.29143	4.94E-6	4.99E-5	14451392	13138218	-0.00211	30.00	32.55	6.54	98.10	98.10	0.5000	0.64500	0.63870	0C
25	CO2/70	21:26:45	2380	14192331	10319784	0.31949	6.16E-6	4.75E-5	14451801	13138188	-0.00209	30.00	32.55	6.53	98.09	98.10	0.5000	0.63210	0.63840	0C
26	CO2/70	21:27:49	2984	13799229	9455435	0.35872	6.03E-6	8.25E-6	14452029	13138291	-0.00207	30.00	32.56	6.53	98.09	98.10	0.5000	0.61450	0.63870	0C
27	CO2/70	01:24:17	0	13246712	14165819	-0.00083	1.32E-5	-3.03E-6	14460415	13189336	-0.00548	45.00	48.05	10.12	98.24	98.23	0.5000	0.58720	0.63700	0C
28	CO2/70	01:25:30	114.3	13493694	13922042	0.03440	6.62E-6	-1.65E-6	14463790	13185412	-0.00489	45.00	48.06	10.11	98.24	98.23	0.5000	0.59810	0.63650	0C
29	CO2/70	01:26:34	192.4	13640125	13774438	0.05489	6.87E-6	1.61E-5	14465556	13185079	-0.00472	45.00	48.07	10.10	98.25	98.23	0.5000	0.60470	0.63650	0C
30	CO2/70	01:27:38	299.1	13819658	13592112	0.07951	5.29E-6	1.61E-5	14465033	13183286	-0.00460	45.10	48.09	10.08	98.24	98.23	0.5000	0.61280	0.63650	0C
31	CO2/70	01:28:42	400.3	13974170	13438428	0.09998	6.46E-6	1.12E-5	14465292	13182766	-0.00455	45.00	48.10	10.08	98.24	98.23	0.5000	0.62010	0.63650	0C
32	CO2/70	01:29:46	496.7	14105867	13301359	0.11748	6.41E-6	3.53E-5	14466184	13182627	-0.00447	44.90	48.12	10.07	98.24	98.24	0.5000	0.62570	0.63650	0CH
33	CO2/70	01:30:50	599.4	14240106	13170436	0.13442	8.00E-6	-1.39E-5	14466411	13182019	-0.00441	45.00	48.13	10.06	98.24	98.23	0.5000	0.63180	0.63650	0C
34	CO2/70	01:31:54	752.8	14422515	12987722	0.15721	7.74E-6	2.71E-5	14467237	13182452	-0.00437	45.00	48.14	10.04	98.24	98.23	0.5000	0.63990	0.63620	0C
35	CO2/70	01:32:58	1001	14685954	12725265	0.18907	8.10E-6	2.68E-5	14468801	13183167	-0.00432	45.00	48.15	10.03	98.24	98.23	0.5000	0.65190	0.63650	0C
36	CO2/70	01:34:05	1504	15030183	12172144	0.24207	6.14E-6	3.77E-5	14466806	13180967	-0.00429	45.00	48.16	10.02	98.24	98.23	0.5000	0.66700	0.63650	0C
37	CO2/70	01:35:09	2001	14557351	11133560	0.28423	6.71E-6	2.57E-5	14469101	13182951	-0.00428	45.00	48.17	10.01	98.24	98.23	0.5000	0.64620	0.63650	0C
38	CO2/70	01:36:13	2380	14259535	10479986	0.31217	4.58E-6	3.40E-5	14468300	13181971	-0.00427	45.00	48.18	10.00	98.24	98.23	0.5000	0.63330	0.63650	0C
39	CO2/70	01:37:17	2984	13862388	9606402	0.35142	6.68E-6	4.61E-5	14466794	13180369	-0.00425	45.00	48.19	9.99	98.24	98.23	0.5000	0.61570	0.63620	0C

CO2(ppm) - CO2 concentration (tank value)
CO2A_W - raw detector output for cell A
CO2B_W - raw detector output for cell B
CO2Abs - CO2 absorptance (unfiltered)
CO2SD - Standard deviation of CO2Abs (50 samples over 10 seconds).
H2OAbs - H2O absorptance (unfiltered)
TOven(C) - Oven temperature
T(C) - LI-7000's temperature measurement
Pa(kPa) - Atmospheric pressure (measured by Ruska 6200)
F(l/m) - Flow through cell B, liters/min.
CAgc - CO2 AGC value
HAGC - H2O AGC value
Diag - LI-7000's diagnostic value (0 = normal), plus. 'C' indicates CO2 stability achieved, and 'H' indicates H2O stability achieved.

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CO2 Computations

Num	ppm	abs / kPa	ppm/K	Coeffs	Predicted	Error	%Error	Temp	Drift at 370 ppm	%/C
1	0	0E0	0	9.25141E2	0	0	0.000	19C	0.595	-0.032
2	114.3	3.93499E-4	0.39053	1.50364E5	0.39574	0.00522	1.336	32C	0.038	
3	192.4	6.19037E-4	0.65744	1.48959E8	0.66174	0.0043	0.655	48C	-0.332	
4	299.1	8.86597E-4	1.02218	-2.87218E10	1.02635	0.00417	0.408			
5	400.3	1.10706E-3	1.36817	3.40336E12	1.37309	0.00492	0.359			
6	496.7	1.29411E-3	1.69777		1.70368	0.00591	0.348			
7	599.4	1.47453E-3	2.04902		2.05658	0.00756	0.369			
8	752.8	1.71571E-3	2.57376		2.58392	0.01016	0.395			
9	1001	2.05072E-3	3.42269		3.42968	0.00699	0.204			
10	1504	2.60337E-3	5.14294		5.14352	0.00059	0.011			
11	2001	3.03952E-3	6.84337		6.81555	-0.02781	-0.406			
12	2380	3.32713E-3	8.14037		8.09682	-0.04355	-0.535			
13	2984	3.72776E-3	10.20729		10.1581	-0.04919	-0.482			
14	0	0E0	0		0	0	0.000			
15	114.3	3.76473E-4	0.37401		0.377	0.00299	0.800			
16	192.4	5.93669E-4	0.62954		0.63007	0.00053	0.085			
17	299.1	8.52586E-4	0.97863		0.97674	-0.0019	-0.194			
18	400.3	1.06691E-3	1.30967		1.30659	-0.00308	-0.235			
19	496.7	1.24962E-3	1.62501		1.62188	-0.00313	-0.193			
20	599.4	1.42591E-3	1.961		1.95807	-0.00293	-0.150			
21	752.8	1.66238E-3	2.46279		2.46166	-0.00113	-0.046			
22	1001	1.99188E-3	3.27467		3.27116	-0.0035	-0.107			
23	1504	2.53823E-3	4.92002		4.91926	-0.00076	-0.015			
24	2001	2.9706E-3	6.54563		6.53059	-0.01504	-0.230			
25	2380	3.25697E-3	7.78541		7.77001	-0.0154	-0.198			
26	2984	3.65692E-3	9.76088		9.76794	0.00706	0.072			
27	0	0E0	0		0	0	0.000			
28	114.3	3.58314E-4	0.35584		0.3572	0.00135	0.380			
29	192.4	5.66654E-4	0.59897		0.59686	-0.00211	-0.352			
30	299.1	8.17115E-4	0.93108		0.92604	-0.00504	-0.541			
31	400.3	1.02531E-3	1.24607		1.2393	-0.00677	-0.543			
32	496.7	1.2033E-3	1.54605		1.53883	-0.00722	-0.467			
33	599.4	1.37559E-3	1.86566		1.85879	-0.00687	-0.368			
34	752.8	1.60738E-3	2.34305		2.33895	-0.0041	-0.175			
35	1001	1.93142E-3	3.11547		3.11277	-0.00269	-0.086			
36	1504	2.47047E-3	4.68084		4.69252	0.01169	0.250			
37	2001	2.89926E-3	6.22744		6.24415	0.01671	0.268			
38	2380	3.18343E-3	7.40672		7.43753	0.03081	0.416			
39	2984	3.58263E-3	9.28611		9.37112	0.08501	0.915			

ppm - CO2 concentration (tank value) in cell B

abs/kPa - CO2 absorptance / pressure

ppml/K - CO2 concentration / temperature in degrees K

Coeffs - computed calibration coeffs (fit 5th order poly to previous 2 columns)

Predicted - predicted CO2 (umol/mol/K)

%Error - percent error of the predicted value.

LI-7000 IRG4-0738 Calibrated 27 May 2008 / Checked 28 May 2008
Calibration file: L:\MICHAEL\CALS\IRG4\0738\20080527.raw

H2O Measurements

	Type__	Time	H2O(C)	610kPa	H2O(ppt)	H2OA_W	H2OB_W	H2OAbs	H2OSD	H2OSlp	CO2A_W	CO2B_W	CO2Abs	TOven(C)	T(C)	RH(%)	Pa(kPa)	Press	CAgc	HAgc	Diag
1	H2O/70	17:20:13	-99.00	-4.36	0.00	14461020	13119036	0.00001	1.02E-5	4.98E-5	13253661	14150645	0.00077	15.70	19.10	3.77	98.01	98.02	0.59130	0.64280	0C
2	H2O/70	17:45:26	1.67	17.40	6.00	14776800	12803374	0.04494	9.83E-6	2.00E-5	13253873	14150377	0.00081	15.20	18.48	3.58	98.03	98.04	0.59160	0.65650	0C
3	H2O/70	18:05:29	4.68	17.42	7.42	14836993	12743924	0.05322	1.21E-5	8.50E-5	13255240	14151084	0.00087	15.00	18.05	3.45	98.03	98.03	0.59160	0.65940	0
4	H2O/70	18:25:32	7.63	17.44	9.09	14901832	12676589	0.06235	1.09E-5	-2.65E-5	13255307	14150240	0.00092	15.00	17.80	3.38	98.03	98.04	0.59180	0.66210	0C
5	H2O/70	18:45:35	10.63	17.53	11.12	14977440	12601378	0.07259	9.00E-6	-3.15E-5	13255188	14150240	0.00092	15.00	17.67	3.34	98.02	98.03	0.59180	0.66530	0C
6	H2O/70	19:05:38	14.37	17.57	14.21	15083043	12496484	0.08674	1.47E-5	5.29E-5	13253114	14147116	0.00097	15.00	17.61	3.31	98.06	98.07	0.59180	0.66990	0C
7	H2O/70	21:31:00	-99.00	-0.73	0.00	14451807	13139578	-0.00220	1.17E-5	-3.26E-5	13246806	14152894	0.00009	30.00	32.58	6.51	98.08	98.08	0.58860	0.63870	0C
8	H2O/70	21:56:13	3.11	18.58	6.57	14777121	12815642	0.04406	1.42E-5	3.61E-5	13246723	14153334	0.00007	30.00	32.70	6.38	98.12	98.12	0.58860	0.65280	0C
9	H2O/70	22:16:16	9.11	18.71	9.93	14907487	12689449	0.06174	1.33E-5	-3.24E-5	13247154	14153491	0.00008	30.00	32.75	6.27	98.15	98.16	0.58860	0.65840	0C
10	H2O/70	22:36:19	15.11	18.83	14.73	15065543	12527895	0.08340	7.56E-6	-4.70E-5	13248918	14154987	0.00012	30.00	32.77	6.15	98.16	98.17	0.58860	0.66530	0C
11	H2O/70	22:56:22	21.12	19.01	21.46	14876623	12021141	0.10932	1.16E-5	-3.69E-5	13248370	14153568	0.00017	30.00	32.79	6.05	98.18	98.17	0.58860	0.65700	0C
12	H2O/70	23:16:25	28.63	19.35	33.49	14515474	11222327	0.14782	9.49E-6	-7.38E-5	13247648	14151389	0.00026	30.00	32.80	5.94	98.18	98.18	0.58840	0.64090	0C
13	H2O/70	01:40:28	-99.00	-0.10	0.00	14466459	13181542	-0.00436	6.85E-6	-2.12E-5	13248627	14166550	-0.00073	45.00	48.21	9.95	98.24	98.23	0.58720	0.63650	0
14	H2O/70	02:05:41	4.62	20.13	7.21	14805152	12851646	0.04319	1.10E-5	1.25E-5	13248255	14166288	-0.00074	45.00	48.36	9.67	98.24	98.24	0.58720	0.65090	0C
15	H2O/70	02:25:44	13.62	20.38	13.19	15009869	12644603	0.07144	1.13E-5	3.12E-5	13247802	14165608	-0.00072	45.00	48.41	9.45	98.26	98.25	0.58690	0.65990	0C
16	H2O/70	02:45:47	22.61	20.66	23.16	14838954	11998718	0.10870	7.92E-6	-3.36E-6	13247504	14163697	-0.00062	45.00	48.44	9.23	98.31	98.30	0.58740	0.65230	0CH
17	H2O/70	03:05:50	31.62	21.11	39.14	14397943	11023248	0.15609	8.47E-6	-2.84E-5	13249209	14164131	-0.00053	45.00	48.46	9.02	98.30	98.29	0.58720	0.63280	0C

H2O(C) - LI-610 Dewpoint generator set point
610kPa - Overpressure (kPa) in the LI-610
H2OA_W - raw detector output for cell A
H2OB_W - raw detector output for cell B
H2OAbs - H2O absorptance (unfiltered)
H2OSD - Standard deviation of H2OAbs (50 samples over 10 seconds).
CO2Abs - CO2 absorptance (unfiltered)
TOven(C) - Oven temperature
T(C) - LI-7000's temperature measurement
Pa(kPa) - Atmospheric pressure (measured by Ruska 6200)
F(l/m) - Flow through cell B, liters/min.
CAgc - CO2 AGC value
HAGC - H2O AGC value
Diag - LI-7000's diagnostic value (0 = normal), plus. 'C' indicates CO2 stability achieved, and 'H' indicates H2O stability achieved.

H2O Computations

Num	ppt	abs / kPa	ppt / K	Coeffs	Predicted	Error	%Error	Temp	Drift at 10 ppt	%/C
1	0	0E0	0	3.34087E1	0	0	0.000	19C	0.890	-0.081
2	6	4.58334E-4	0.02057	2.54098E4	0.02064	0.00006	0.312	32C	-0.169	
3	7.4	5.42798E-4	0.02548	-1.25217E5	0.0256	0.00012	0.471	48C	-1.448	
4	9.1	6.35934E-4	0.03124		0.03149	0.00025	0.791			
5	11.1	7.40469E-4	0.03824		0.03862	0.00038	1.001			
6	14.2	8.84467E-4	0.04887		0.04934	0.00047	0.958			
7	0	0E0	0		0	0	0.000			
8	6.6	4.70429E-4	0.02148		0.02133	-0.00015	-0.719			
9	9.9	6.50022E-4	0.03246		0.03242	-0.00004	-0.133			
10	14.7	8.70131E-4	0.04815		0.04823	0.00008	0.158			
11	21.5	1.13338E-3	0.07014		0.07032	0.00018	0.254			
12	33.5	1.52466E-3	0.10946		0.10956	0.0001	0.089			
13	0	0E0	0		0	0	0.000			
14	7.2	4.81918E-4	0.02243		0.02199	-0.00044	-1.953			
15	13.2	7.68074E-4	0.04102		0.04059	-0.00042	-1.036			
16	23.2	1.14504E-3	0.07202		0.07138	-0.00064	-0.882			
17	39.1	1.62516E-3	0.1217		0.12087	-0.00083	-0.684			

mmolH2O/mol - H2O concentration in cell B
abs/kPa - H2O absorptance / pressure
pptl/K - H2O concentration / temperature in degrees K
Coeffs - computed calibration coeffs (fit 3rd order poly to previous 2 columns)
Predicted - predicted H2O (mmol/mol/K)
%Error - percent error of the predicted value.

LI-7000 IRG4-0738 Calibrated 27 May 2008 / Checked 28 May 2008
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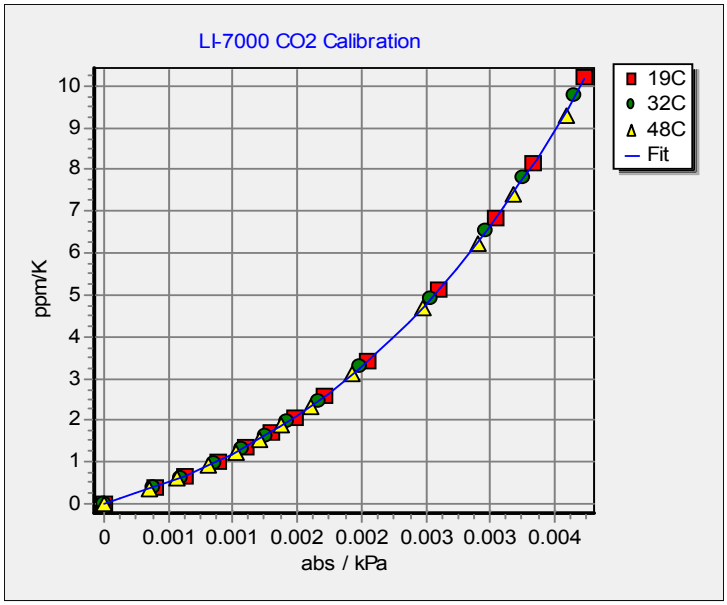
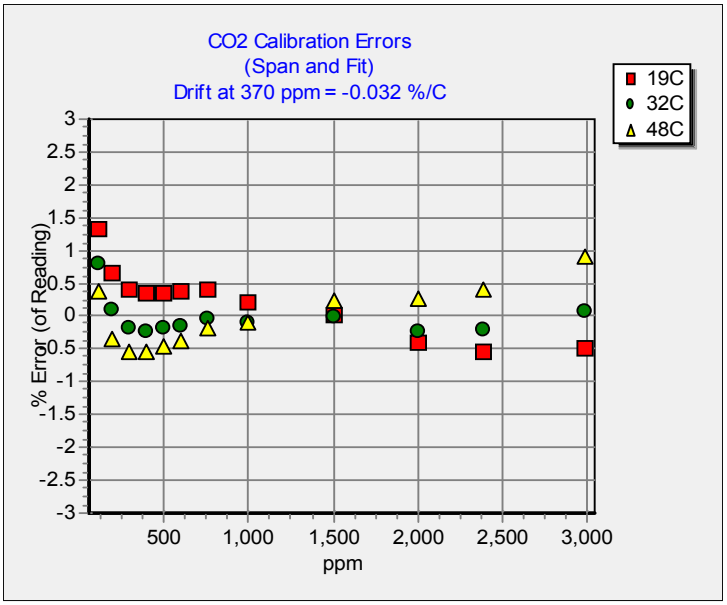
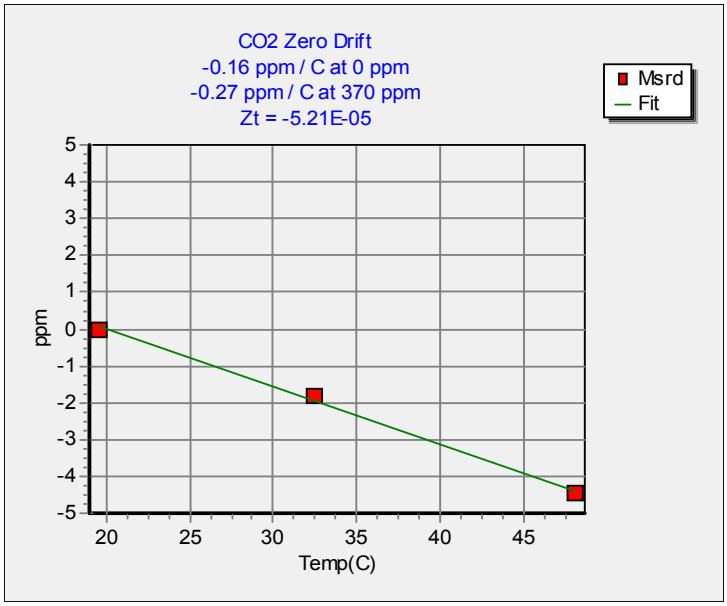
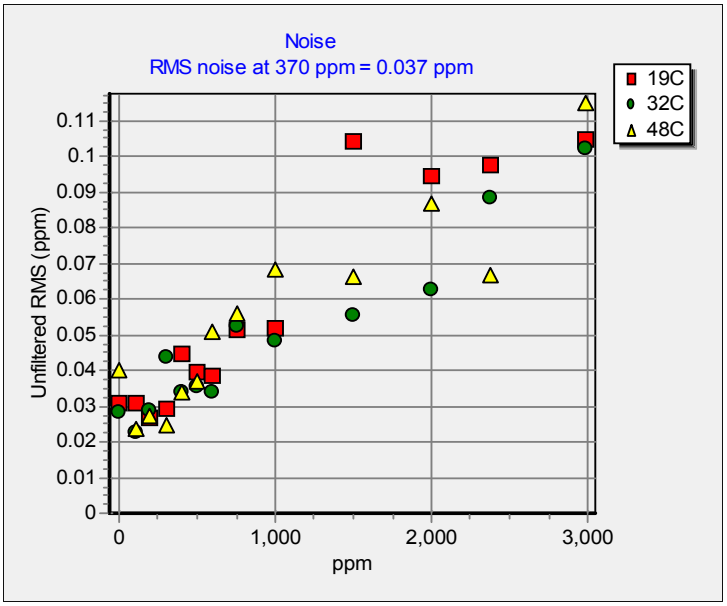
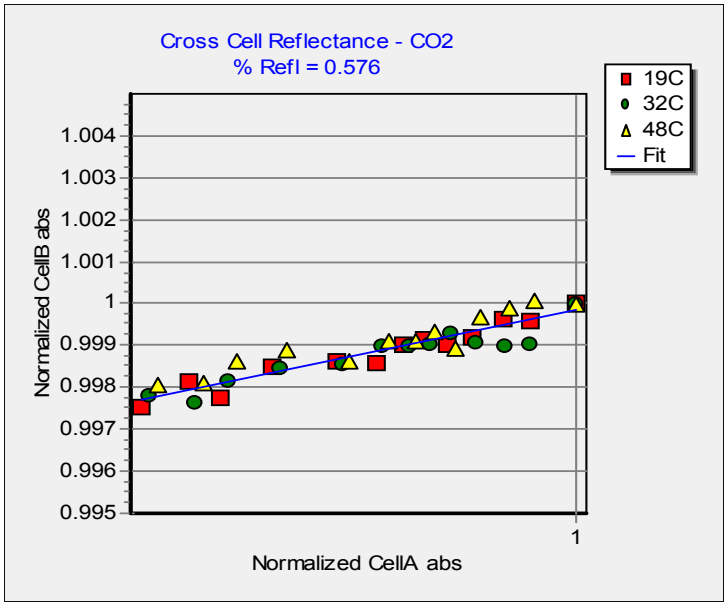
CO2 Calibration Plots

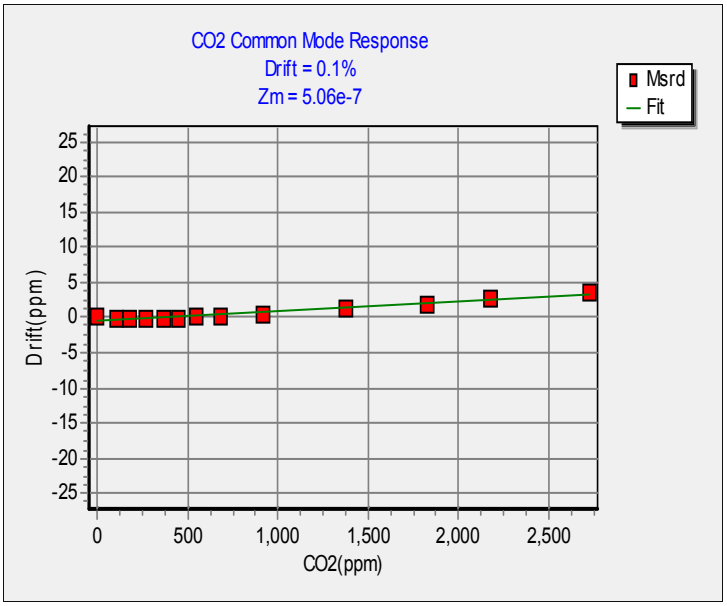












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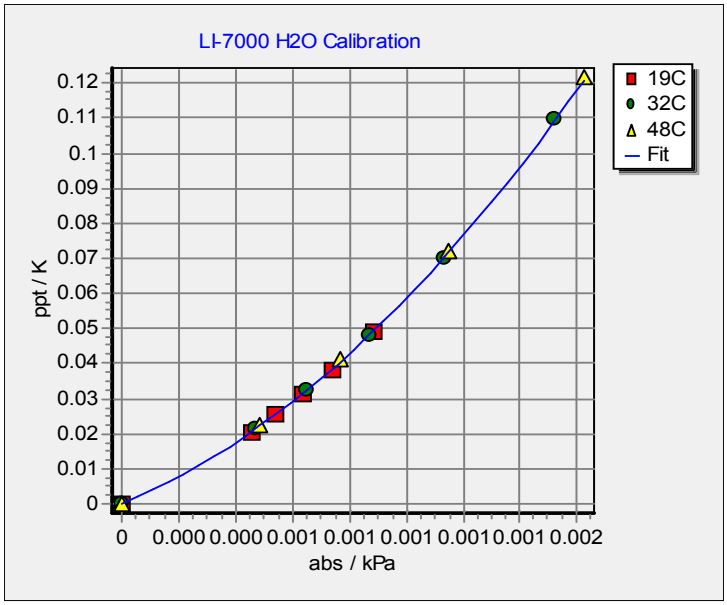
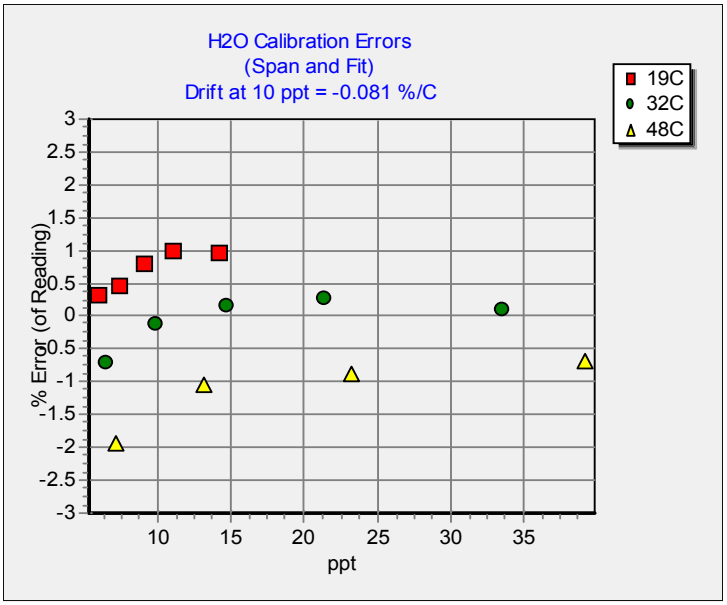
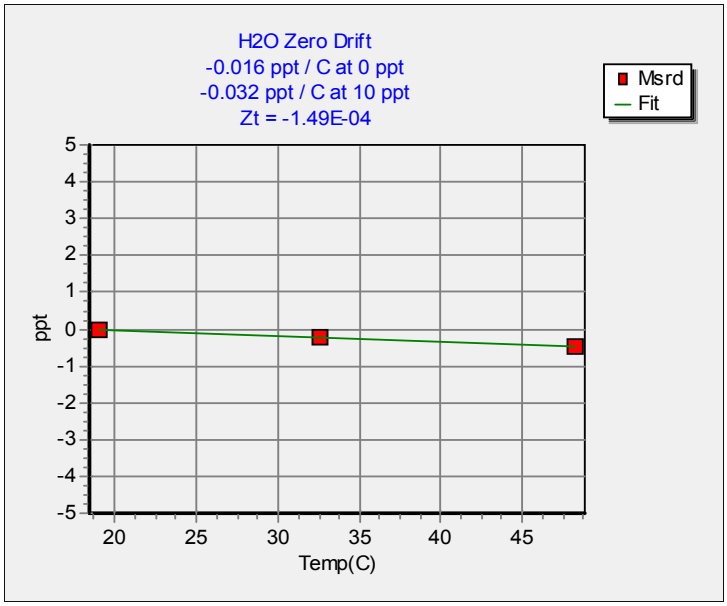
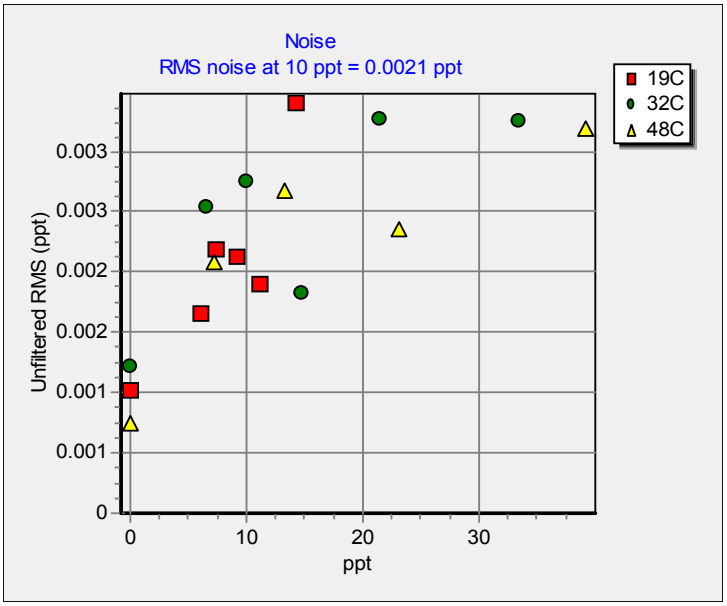
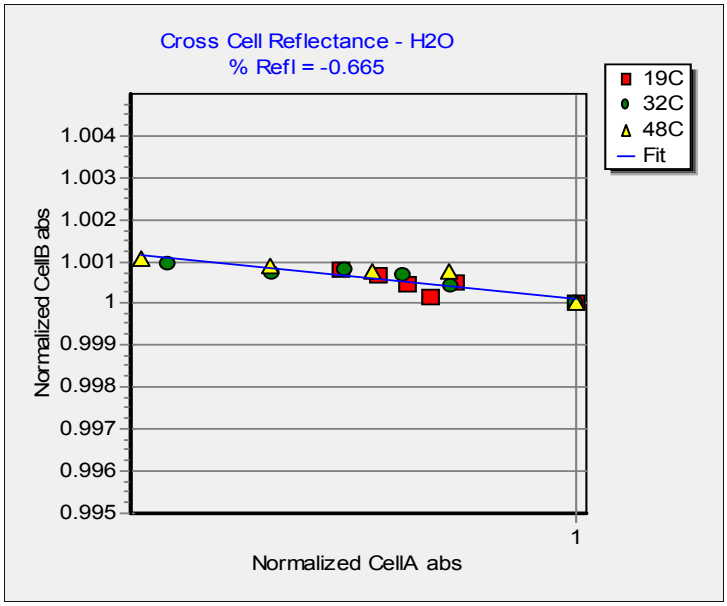
H2O Calibration Plots

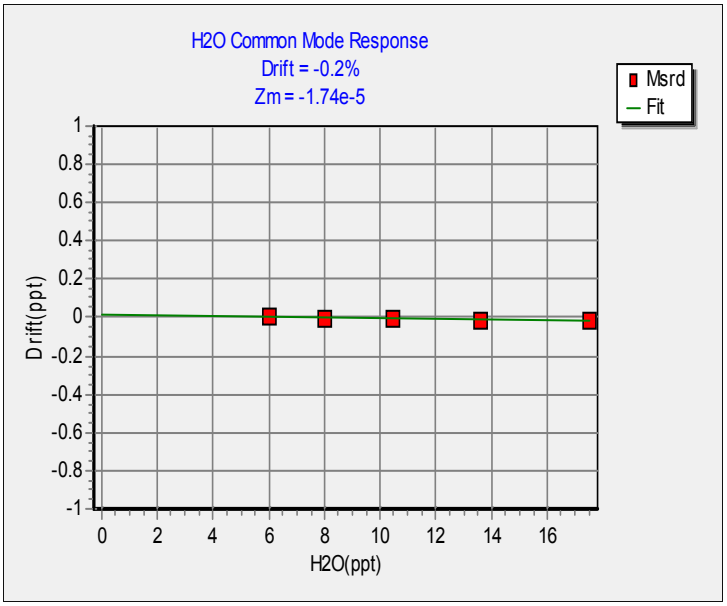












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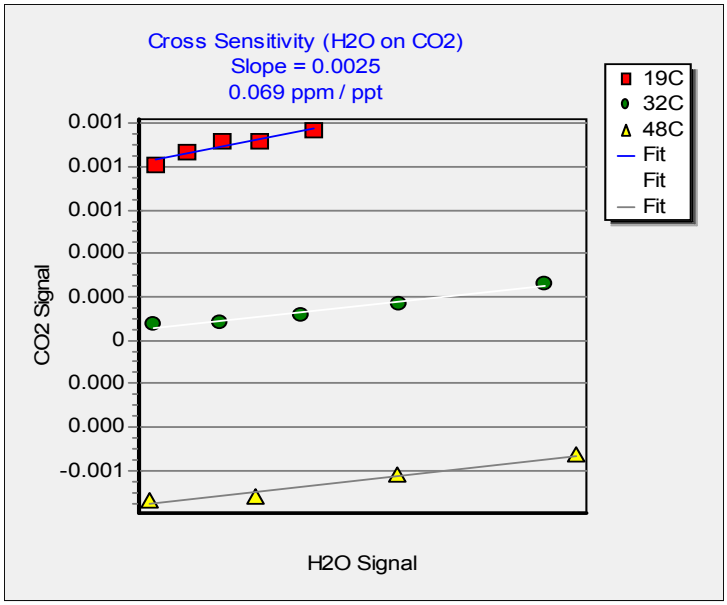
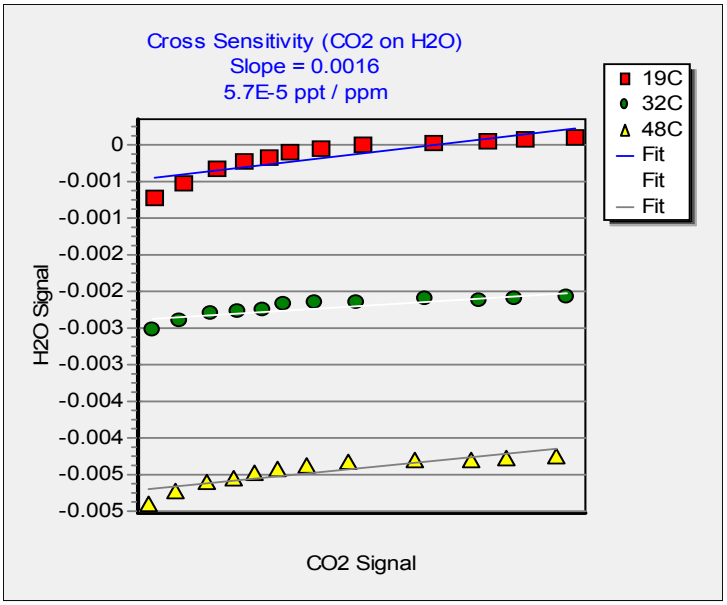
Cross Sensitivity Plots





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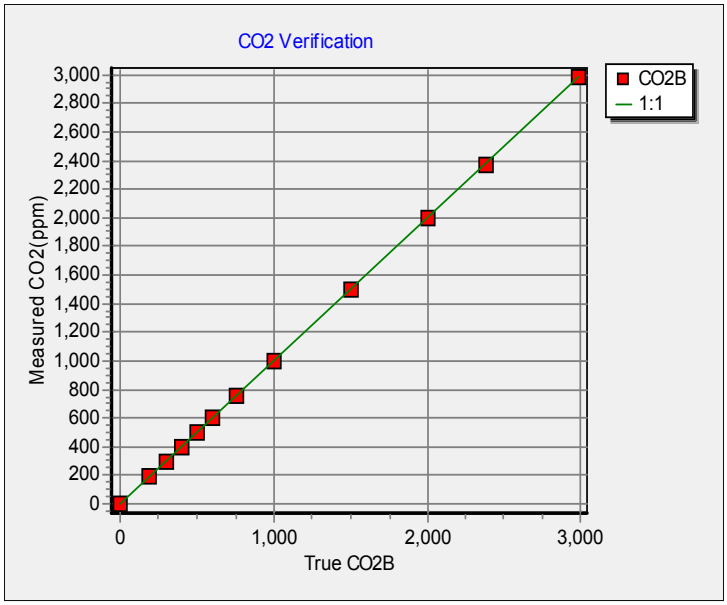
CO2 Final Check



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	Type__	Time	CO2(ppm)	CO2Abs	CO2SD	CO2Slp	CO2A	CO2B	CO2BSD	H2OAbs	H2OB	TOven(C)	T(C)	RH(%)	Pa(kPa)	Press	F(l/m)	CAgc	HAgc	Diag
1	CO2/70	07:37:47	0	0.00004	1.19E-5	-3.52E-5	0.00	0.10	0.033	0.00025	0.026	25.00	27.85	2.86	98.43	98.41	0.5000	0.58960	0.63770	0C
2	CO2/70	07:38:51	192.4	0.05927	6.27E-6	3.97E-5	0.00	193.06	0.021	0.00034	0.036	25.00	27.85	2.85	98.42	98.41	0.5000	0.60840	0.63770	0CH
3	CO2/70	07:39:55	299.1	0.08503	6.37E-6	2.30E-5	0.00	299.31	0.026	0.00039	0.041	25.00	27.85	2.85	98.43	98.41	0.5000	0.61690	0.63790	0C
4	CO2/70	07:40:59	400.3	0.10632	9.20E-6	2.40E-5	0.00	400.39	0.044	0.00040	0.042	25.00	27.84	2.85	98.42	98.41	0.5000	0.62400	0.63790	0C
5	CO2/70	07:42:03	496.7	0.12444	9.96E-6	3.03E-5	0.00	496.91	0.056	0.00041	0.043	25.00	27.84	2.85	98.43	98.41	0.5000	0.63040	0.63750	0C
6	CO2/70	07:43:07	599.4	0.14192	6.21E-6	5.32E-6	0.00	599.87	0.032	0.00041	0.043	25.00	27.84	2.85	98.43	98.42	0.5000	0.63670	0.63770	0C
7	CO2/70	07:44:13	752.8	0.16534	7.37E-6	3.92E-5	0.00	753.95	0.048	0.00042	0.044	25.00	27.83	2.85	98.43	98.42	0.5000	0.64530	0.63770	0C
8	CO2/70	07:45:17	1001	0.19794	5.15E-6	2.34E-5	0.00	1001.41	0.037	0.00040	0.042	25.00	27.83	2.85	98.44	98.42	0.5000	0.65750	0.63770	0C
9	CO2/70	07:46:24	1504	0.25187	6.40E-6	2.18E-5	0.00	1504.10	0.066	0.00043	0.045	25.00	27.82	2.84	98.44	98.43	0.5000	0.66480	0.63750	0C
10	CO2/70	07:47:45	2001	0.29452	5.33E-6	4.91E-5	0.00	1995.07	0.050	0.00043	0.045	25.00	27.82	2.84	98.45	98.44	0.5000	0.64400	0.63770	0C
11	CO2/70	07:48:56	2380	0.32269	6.79E-6	4.69E-5	0.00	2371.67	0.102	0.00044	0.046	25.00	27.82	2.84	98.46	98.44	0.5000	0.63130	0.63770	0C
12	CO2/70	07:50:00	2984	0.36203	6.77E-6	3.14E-5	0.00	2978.88	0.132	0.00044	0.046	25.00	27.81	2.84	98.46	98.44	0.5000	0.61350	0.63770	0C

CO2(ppm) - CO2 concentration (tank value)
CO2Abs - CO2 absorptance (unfiltered)
CO2SD - Standard deviation of CO2Abs (50 samples over 10 seconds).
CO2A - Concentration in cell A (ppm)
CO2B - Concentration in cell B (ppm)
CO2BSD - Std deviation of CO2B (ppm) (50 samples over 10 secs, IRGA operating at 0.5 Hz band width)
T(C) - LI-7000's temperature measurement
Pa(kPa) - Atmospheric pressure (measured by Ruska 6200)
Press - LI-7000's pressure measurement (kPa)
F(l/m) - Flow through cell B, liters/min.
CAgc - CO2 AGC value
HAGC - H2O AGC value
Diag - LI-7000's diagnostic value (0 = normal), plus. 'C' indicates CO2 stability achieved, and 'H' indicates H2O stability achieved.

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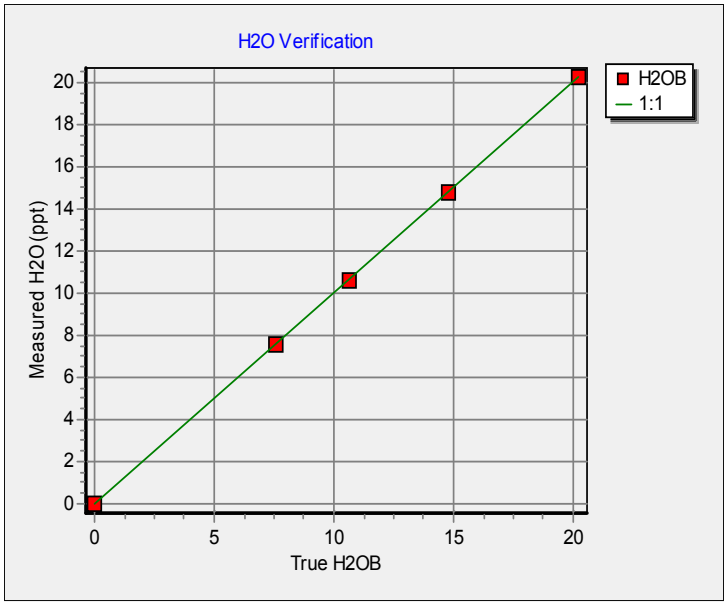
H2O Final Check



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	Type__	Time	H2O(C)	610kPa	H2O(ppt)	H2OAbs	H2OSD	H2OSlp	H2OA	H2OB	H2OBSD	CO2Abs	CO2B	TOven(C)	T(C)	RH(%)	Pa(kPa)	Press	CAgc	HAgc	Diag
1	H2O/70	07:57:41	-99.00	0.62	0.00	-0.00001	1.18E-5	5.66E-6	0.000	-0.001	0.0012	0.00004	0.11	25.00	27.79	2.83	98.46	98.45	0.58960	0.63750	0CH
2	H2O/70	08:13:34	15.12	18.18	14.78	0.08734	1.05E-5	5.86E-5	0.000	14.802	0.0025	0.00008	0.22	25.00	27.77	2.81	98.47	98.45	0.58940	0.66530	0C
3	H2O/70	08:28:37	20.13	18.43	20.23	0.10880	1.10E-5	6.03E-6	0.000	20.254	0.0028	0.00007	0.19	25.00	27.75	2.80	98.48	98.47	0.58960	0.65840	0CH
4	H2O/70	08:43:40	10.12	18.24	10.64	0.06864	1.08E-5	-1.06E-5	0.000	10.642	0.0023	0.00006	0.16	25.10	27.75	2.78	98.49	98.47	0.58960	0.65920	0C
5	H2O/70	08:58:43	5.12	18.18	7.57	0.05277	1.03E-5	-4.63E-5	0.000	7.542	0.0020	0.00006	0.17	25.00	27.74	2.77	98.50	98.48	0.58960	0.65410	0C

H2O(C) - LI-610 Dewpoint generator set point
610kPa - Overpressure (kPa) in the LI-610
H2O(ppt) - Water concentration in cell B, mmol/mol
H2OAbs - H2O absorptance (unfiltered)
H2OSD - Standard deviation of H2OAbs (50 samples over 10 seconds).
H2OA - water concentration (mmol/mol) in cell A
H2OB - water concentration (mmol/mol) in cell B
H2OBSD - std deviation of H2OB (50 samples over 10 seconds, IRGA operating at 0.5 Hz band width)
T(C) - LI-7000's temperature measurement
Pa(kPa) - Atmospheric pressure (measured by Ruska 6200)
Press - LI-7000's pressure measurement (kPa)
F(l/m) - Flow through cell B, liters/min.
CAgc - CO2 AGC value
HAGC - H2O AGC value
Diag - LI-7000's diagnostic value (0 = normal), plus. 'C' indicates CO2 stability achieved, and 'H' indicates H2O stability achieved.