

LI-7000 CO₂/H₂O Analyzer

Calibration Certificate

Serial Number IRG4-0132

Date: 30 Jan 2001

Technician _____

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

--- CO2 values ---	--- H2O values ---
a1 = 953.906	a1 = 33.4389
a2 = 304092	a2 = 21347.6
a3 = 8.30306e+07	a3 = 2.39394e+06
a4 = -5.30381e+09	+ gamma = 1
a5 = 1.4649e+12	* Z = 0.994621
+ gamma = 1	Zt = -3.76e-05
* Z = 0.944305	* Zm = -1.82e-05
Zt = 7.24e-06	* S = 0.995646
* Zm = -2.81e-06	* W0' = 1.41714e+06
* S = 0.994224	W0'_d = 1.4131e+06
* W0' = 1.37078e+06	AGC = 0.56
W0'_d = 1.366e+06	--- Temperature ---
AGC = 0.54	+ A = 8.28003E-4
+ VpCrr = 1.57	+ B = 2.08687E-4
# --- Pressure ---	+ C = 8.0874E-8
a0 = 58.949	--- Humidity ---
a1 = 30.72	+ 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-840 last calibrated 02 Oct 2000

CO2 Measurements

	Type	Time	CO2(ppm)	CO2A_W	CO2B_W	CO2Abs	CO2SD	H2OAbs	TOven(C)	T(C)	Pa(kPa)	Press	F(l/m)	CAgc	HAgc	Diag
1	CO2/70	20:34:34	0	1503607	1587902	-0.05603	5.89E-5	-0.01910	25.00	27.49	96.56	1.23	0.5000	0.59440	0.61120	0C
2	CO2/70	20:35:18	100.2	1527848	1564140	-0.02379	5.05E-5	-0.01859	25.00	27.49	96.56	1.22	0.5000	0.60390	0.61120	0C
3	CO2/70	20:36:06	200.5	1548108	1543006	0.00332	5.59E-5	-0.01854	25.00	27.50	96.56	1.22	0.5000	0.61200	0.61100	0C
4	CO2/70	20:36:52	299.8	1566510	1525268	0.02631	5.29E-5	-0.01841	25.10	27.49	96.57	1.22	0.5000	0.61930	0.61100	0CH
5	CO2/70	20:37:40	401.4	1582637	1508511	0.04687	5.61E-5	-0.01833	25.00	27.49	96.57	1.22	0.5000	0.62560	0.61070	0C
6	CO2/70	20:38:18	499.7	1597571	1494451	0.06454	5.80E-5	-0.01818	25.10	27.50	96.57	1.22	0.5000	0.63150	0.61050	0C
7	CO2/70	20:39:00	599.5	1611771	1481424	0.08088	5.00E-5	-0.01822	25.00	27.50	96.57	1.22	0.5000	0.63710	0.61030	0CH
8	CO2/70	20:39:45	753.0	1630019	1461457	0.10335	5.83E-5	-0.01822	25.00	27.49	96.57	1.22	0.5000	0.64440	0.61100	0C
9	CO2/70	20:40:34	999.7	1657929	1434695	0.13464	5.26E-5	-0.01818	25.00	27.50	96.58	1.23	0.5000	0.65540	0.61070	0C
10	CO2/70	20:41:29	1465.4	1702191	1390220	0.18327	4.56E-5	-0.01772	25.00	27.49	96.58	1.23	0.5000	0.67300	0.61070	0CH
11	CO2/70	20:42:23	2003.6	1740532	1348078	0.22772	4.63E-5	-0.01823	25.00	27.50	96.58	1.23	0.5000	0.69010	0.61070	0C
12	CO2/70	20:43:24	2470.0	1778128	1315088	0.26035	4.91E-5	-0.01798	24.90	27.49	96.58	1.23	0.5000	0.70310	0.61070	0CH
13	CO2/70	20:44:09	2888.0	1805337	1289056	0.28599	4.02E-5	-0.01792	25.00	27.48	96.58	1.23	0.5000	0.71380	0.61050	0C
14	CO2/70	23:34:52	0	1503179	1587589	-0.05612	4.71E-5	-0.01897	35.00	37.33	96.80	1.23	0.5000	0.58240	0.59980	0C
15	CO2/70	23:35:37	100.2	1526672	1564936	-0.02504	5.82E-5	-0.01848	35.00	37.34	96.80	1.23	0.5000	0.59150	0.60020	0C
16	CO2/70	23:36:18	200.5	1546519	1544651	0.00125	5.09E-5	-0.01852	35.00	37.33	96.80	1.23	0.5000	0.59930	0.60000	0CH
17	CO2/70	23:37:07	299.8	1564260	1527108	0.02365	5.52E-5	-0.01843	35.00	37.35	96.81	1.23	0.5000	0.60610	0.59950	0CH
18	CO2/70	23:38:00	401.4	1580919	1511687	0.04375	5.36E-5	-0.01837	35.00	37.35	96.81	1.23	0.5000	0.61250	0.59980	0CH
19	CO2/70	23:38:46	499.7	1594707	1497364	0.06107	4.73E-5	-0.01804	35.00	37.34	96.81	1.23	0.5000	0.61780	0.59980	0C
20	CO2/70	23:39:27	599.5	1608608	1484600	0.07711	4.64E-5	-0.01835	35.00	37.36	96.81	1.23	0.5000	0.62320	0.59980	0C
21	CO2/70	23:40:11	753.0	1627490	1465974	0.09923	5.13E-5	-0.01833	35.00	37.36	96.81	1.23	0.5000	0.63050	0.59930	0C
22	CO2/70	23:41:02	999.7	1654574	1439398	0.13007	5.08E-5	-0.01832	35.00	37.36	96.81	1.23	0.5000	0.64100	0.59980	0C
23	CO2/70	23:42:02	1465.4	1697787	1395361	0.17816	4.57E-5	-0.01789	35.00	37.35	96.82	1.23	0.5000	0.65790	0.60000	0CH
24	CO2/70	23:42:53	2003.6	1740532	1353562	0.22232	4.63E-5	-0.01823	35.00	37.37	96.82	1.23	0.5000	0.67450	0.59980	0C
25	CO2/70	23:43:44	2470.0	1772888	1321213	0.25478	4.58E-5	-0.01823	35.00	37.37	96.82	1.23	0.5000	0.68690	0.59980	0C
26	CO2/70	23:44:33	2888.0	1799333	1294854	0.28036	3.85E-5	-0.01820	35.00	37.38	96.82	1.23	0.5000	0.69720	0.59980	0C
27	CO2/70	2:31:05	0	1503860	1587959	-0.05587	6.25E-5	-0.01926	45.00	47.62	97.04	1.24	0.5000	0.57120	0.58950	0C
28	CO2/70	2:31:54	100.2	1526853	1565930	-0.02563	5.50E-5	-0.01873	45.00	47.64	97.04	1.24	0.5000	0.58000	0.58930	0C
29	CO2/70	2:32:43	200.5	1546375	1547129	-0.00047	5.11E-5	-0.01889	45.00	47.63	97.04	1.24	0.5000	0.58730	0.58900	0C
30	CO2/70	2:33:29	299.8	1563027	1529855	0.02130	5.41E-5	-0.01880	45.00	47.63	97.04	1.24	0.5000	0.59370	0.58880	0H
31	CO2/70	2:34:17	401.4	1578925	1514240	0.04094	5.03E-5	-0.01877	45.00	47.65	97.04	1.24	0.5000	0.59980	0.58880	0C
32	CO2/70	2:35:06	499.7	1593220	1500886	0.05801	5.24E-5	-0.01867	45.00	47.65	97.04	1.24	0.5000	0.60510	0.58880	0C
33	CO2/70	2:35:51	599.5	1605853	1487864	0.07343	5.46E-5	-0.01875	45.00	47.65	97.05	1.24	0.5000	0.61000	0.58900	0C
34	CO2/70	2:36:38	753.0	1624103	1469530	0.09517	5.84E-5	-0.01874	45.00	47.66	97.05	1.24	0.5000	0.61680	0.58900	0C
35	CO2/70	2:37:28	999.7	1650280	1442967	0.12561	4.94E-5	-0.01874	45.00	47.67	97.04	1.24	0.5000	0.62690	0.58900	0C
36	CO2/70	2:38:30	1465.4	1694109	1400847	0.17314	4.59E-5	-0.01833	45.00	47.67	97.05	1.24	0.5000	0.64350	0.58900	0C
37	CO2/70	2:39:23	2003.6	1735882	1359232	0.21698	4.39E-5	-0.01866	45.00	47.69	97.05	1.24	0.5000	0.65930	0.58880	0C
38	CO2/70	2:40:24	2470.0	1768487	1327605	0.24927	4.39E-5	-0.01864	45.00	47.68	97.05	1.24	0.5000	0.67180	0.58900	0C
39	CO2/70	2:41:11	2888.0	1794330	1301281	0.27478	4.55E-5	-0.01863	45.00	47.69	97.05	1.24	0.5000	0.68160	0.58850	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.

CO2 Computations

Num	ppm	abs / kPa	ppm/K	Coeffs	Predicted	Error	%Error	Temp	Drift at 370 ppm	%/C
1	0	0E0	0	9.5337E2	0	0	0.000	27C	1.052	-0.107
2	100.2	3.16171E-4	0.33329	3.04186E5	0.3344	0.00111	0.334	37C	-0.073	
3	200.5	5.82032E-4	0.66689	8.27474E7	0.67375	0.00687	1.029	47C	-1.090	
4	299.8	8.07407E-4	0.99721	-5.20465E9	1.0099	0.01269	1.273			
5	401.4	1.00901E-3	1.33515	1.45109E12	1.35278	0.01763	1.321			
6	499.7	1.18228E-3	1.66207		1.68227	0.0202	1.216			
7	599.5	1.34251E-3	1.99401		2.01779	0.02377	1.192			
8	753	1.56284E-3	2.50466		2.53128	0.02662	1.063			
9	999.7	1.86947E-3	3.32513		3.35561	0.03048	0.917			
10	1465.4	2.34628E-3	4.87427		4.92566	0.05139	1.054			
11	2003.6	2.7821E-3	6.66423		6.71869	0.05446	0.817			
12	2470	3.10203E-3	8.21581		8.28927	0.07346	0.894			
13	2888	3.35342E-3	9.60649		9.6954	0.0889	0.925			
14	0	0E0	0		0	0	0.000			
15	100.2	3.04013E-4	0.32272		0.32024	-0.00248	-0.769			
16	200.5	5.61172E-4	0.64577		0.64498	-0.00079	-0.122			
17	299.8	7.802E-4	0.96554		0.96677	0.00123	0.127			
18	401.4	9.76791E-4	1.29275		1.29514	0.00239	0.185			
19	499.7	1.14619E-3	1.60939		1.61086	0.00147	0.091			
20	599.5	1.30307E-3	1.93069		1.93235	0.00166	0.086			
21	753	1.51942E-3	2.42504		2.42509	0.00005	0.002			
22	999.7	1.82105E-3	3.21954		3.21643	-0.00311	-0.097			
23	1465.4	2.29117E-3	4.71948		4.72457	0.00508	0.108			
24	2003.6	2.72304E-3	6.4524		6.45343	0.00102	0.016			
25	2470	3.04048E-3	7.9544		7.96887	0.01447	0.182			
26	2888	3.29064E-3	9.30023		9.32912	0.02889	0.311			
27	0	0E0	0		0	0	0.000			
28	100.2	2.95135E-4	0.31235		0.30996	-0.00239	-0.767			
29	200.5	5.4069E-4	0.62504		0.61711	-0.00793	-1.269			
30	299.8	7.5316E-4	0.9346		0.92462	-0.00998	-1.068			
31	401.4	9.44842E-4	1.25125		1.23908	-0.01217	-0.972			
32	499.7	1.11144E-3	1.55767		1.5435	-0.01417	-0.909			
33	599.5	1.26181E-3	1.86877		1.84496	-0.0238	-1.274			
34	753	1.47396E-3	2.34718		2.3166	-0.03058	-1.303			
35	999.7	1.7712E-3	3.11608		3.07674	-0.03933	-1.262			
36	1465.4	2.23485E-3	4.56767		4.52461	-0.04306	-0.943			
37	2003.6	2.66267E-3	6.24486		6.18984	-0.05502	-0.881			
38	2470	2.97778E-3	7.69878		7.65164	-0.04714	-0.612			
39	2888	3.22673E-3	9.00137		8.96673	-0.03464	-0.385			

ppm - CO2 concentration (tank value) in cell B

abs/kPa - CO2 absorptance / pressure

ppm/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.

H2O Measurements

	Type	Time	H2O(C)	610kPa	H2O(ppt)	H2OA_W	H2OB_W	H2OAbs	H2OSD	CO2Abs	TOven(C)	T(C)	Pa(kPa)	Press	CAgc	HAgc	Diag
1	H2O/70	20:49:26	-99.00	-1.80	0.00	1541041	1568624	-0.01792	8.18E-5	-0.05610	25.00	27.49	96.59	1.23	0.59410	0.61070	0C
2	H2O/70	20:56:01	2.78	17.84	6.55	1578809	1530776	0.03054	7.32E-5	-0.05603	24.90	27.49	96.59	1.23	0.59410	0.62560	0CH
3	H2O/70	21:01:37	7.77	18.09	9.24	1591131	1518857	0.04527	7.38E-5	-0.05602	25.00	27.47	96.60	1.23	0.59410	0.63050	0CH
4	H2O/70	21:07:12	12.79	18.29	12.90	1605432	1504497	0.06292	6.50E-5	-0.05601	25.00	27.47	96.61	1.23	0.59410	0.63610	0CH
5	H2O/70	21:12:32	17.78	18.45	17.75	1622716	1487468	0.08335	6.72E-5	-0.05581	25.00	27.47	96.62	1.23	0.59410	0.64300	0CH
6	H2O/70	21:22:56	24.02	18.70	26.00	1648365	1463199	0.11236	5.72E-5	-0.05602	25.10	27.47	96.63	1.23	0.59390	0.65300	0CH
7	H2O/70	23:50:00	-99.00	2.73	0.00	1541573	1569956	-0.01830	6.89E-5	-0.05621	35.00	37.40	96.83	1.23	0.58240	0.60000	0CH
8	H2O/70	23:57:07	3.79	18.66	6.97	1579632	1530328	0.03121	6.99E-5	-0.05607	35.00	37.42	96.84	1.23	0.58220	0.61470	0CH
9	H2O/70	0:02:39	10.80	18.99	11.22	1597216	1512981	0.05271	6.73E-5	-0.05602	35.00	37.44	96.85	1.23	0.58220	0.62150	0CH
10	H2O/70	0:08:10	17.78	19.24	17.60	1619369	1490525	0.07957	7.24E-5	-0.05591	35.00	37.45	96.86	1.23	0.58220	0.63000	0CH
11	H2O/70	0:13:32	24.79	19.53	26.97	1648468	1462978	0.11247	7.10E-5	-0.05583	35.00	37.46	96.88	1.23	0.58220	0.64130	0CH
12	H2O/70	0:21:10	33.53	19.99	44.53	1689859	1422534	0.15825	7.23E-5	-0.05582	35.00	37.48	96.88	1.23	0.58220	0.65740	0CH
13	H2O/70	2:46:23	-99.00	4.70	0.00	1541325	1570148	-0.01871	7.03E-5	-0.05607	45.00	47.73	97.06	1.24	0.57090	0.58880	0CH
14	H2O/70	2:58:49	4.81	19.79	7.40	1580366	1530579	0.03153	7.07E-5	-0.05583	45.00	47.76	97.07	1.24	0.57090	0.60370	0CH
15	H2O/70	3:03:57	13.82	20.02	13.54	1604294	1507886	0.06014	6.77E-5	-0.05577	45.00	47.77	97.08	1.24	0.57090	0.61270	0CH
16	H2O/70	3:09:24	22.80	20.41	23.71	1636238	1476194	0.09775	6.23E-5	-0.05557	44.90	47.81	97.09	1.24	0.57090	0.62490	0CH
17	H2O/70	3:14:42	31.74	20.89	39.89	1678610	1434604	0.14549	6.09E-5	-0.05527	45.00	47.81	97.10	1.24	0.57120	0.64100	0CH
18	H2O/70	3:22:35	43.07	21.71	73.39	1744057	1369856	0.21454	7.51E-5	-0.05549	45.00	47.84	97.10	1.24	0.57090	0.66590	0CH

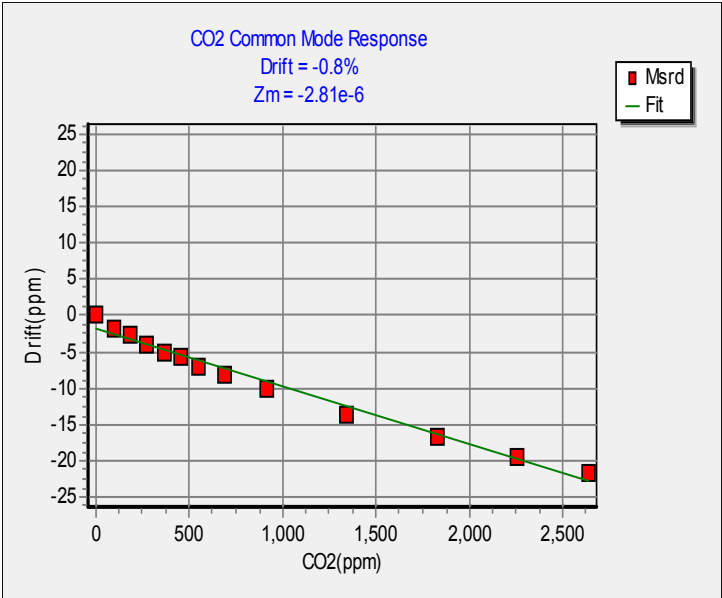
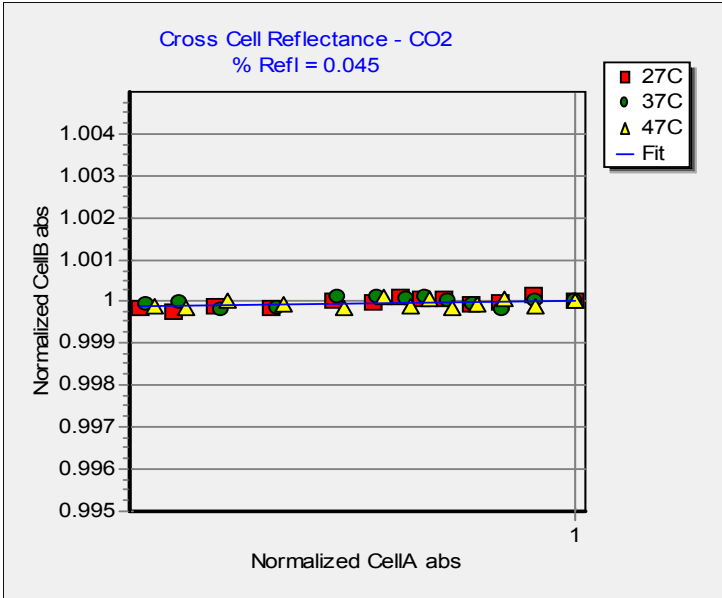
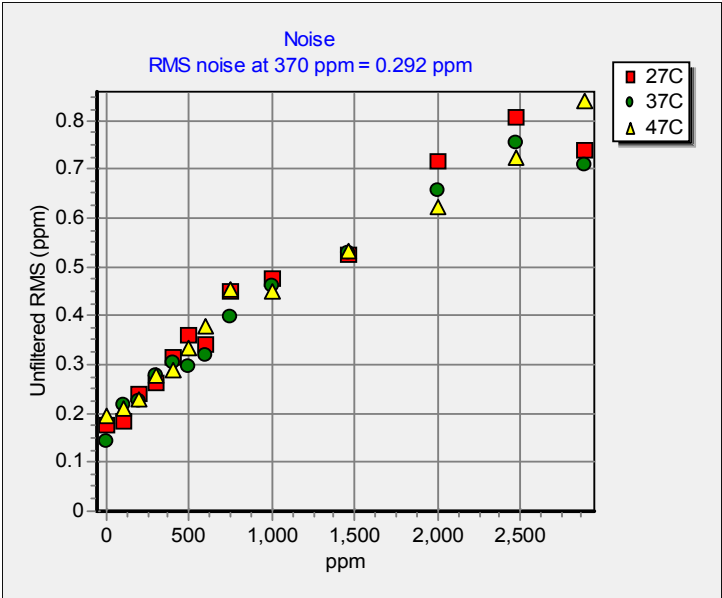
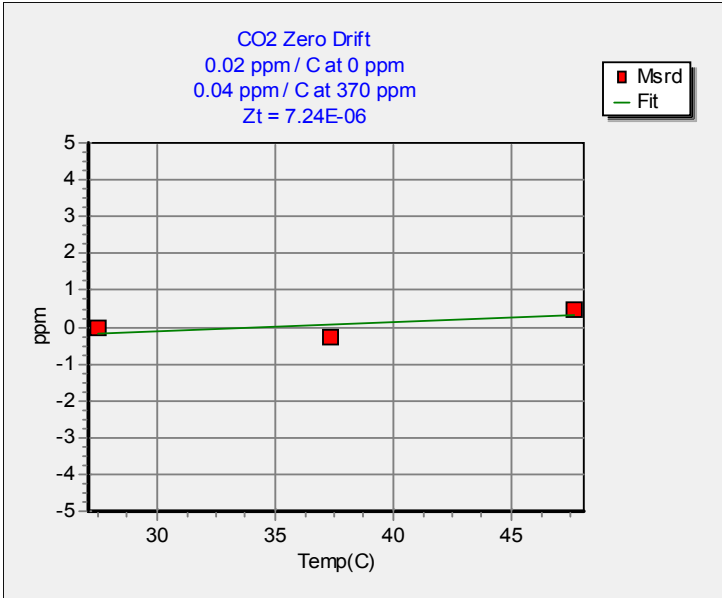
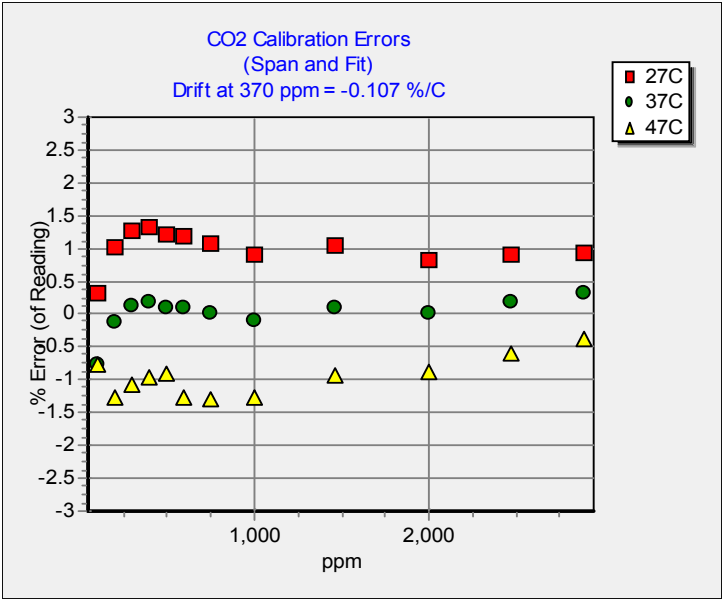
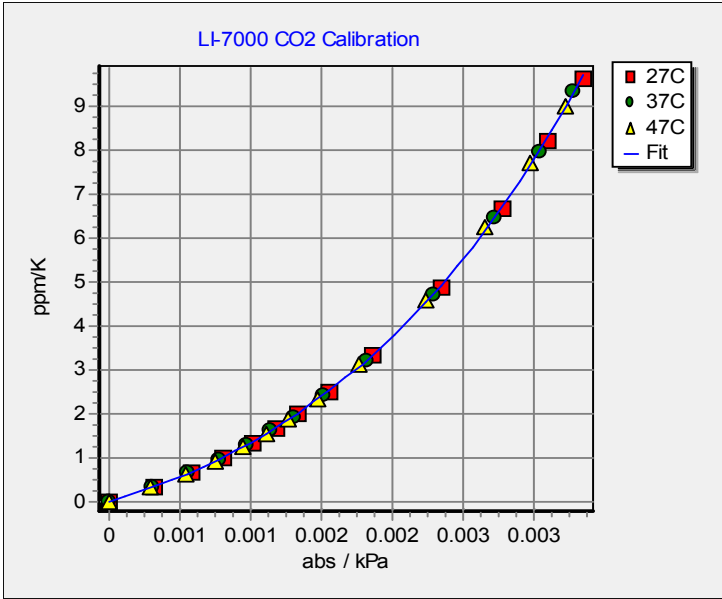
H2O(C) - LI-610 Dewpoint generator set point
610kPa - Overpressure (kPa) in the LI-610
H2OA_W - raw detector output for cell A
H2OB_W - raw detector output for cell B
H2OAbs - H2O absorptance (unfiltered)
H2OSD - Standard deviation of H2OAbs (50 samples over 10 seconds).
CO2Abs - CO2 absorptance (unfiltered)
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

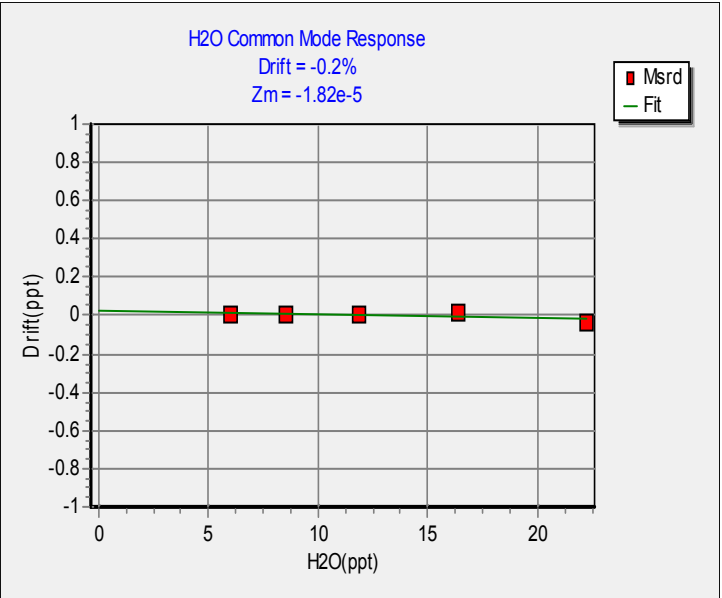
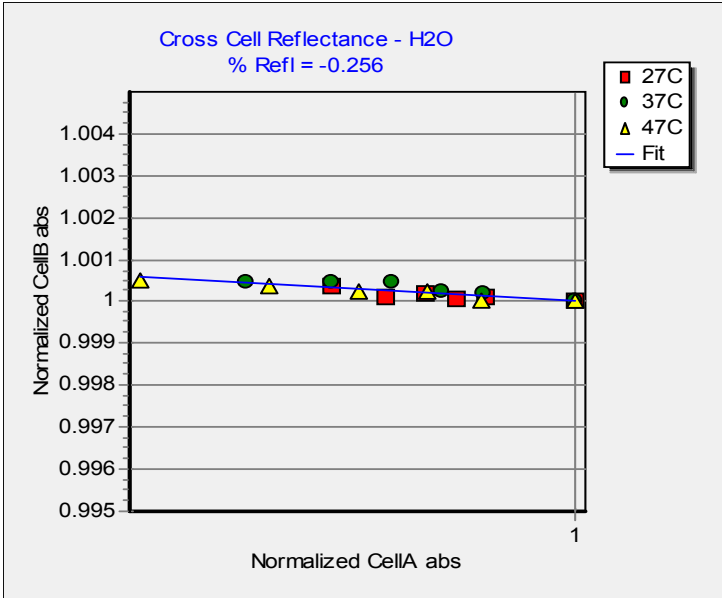
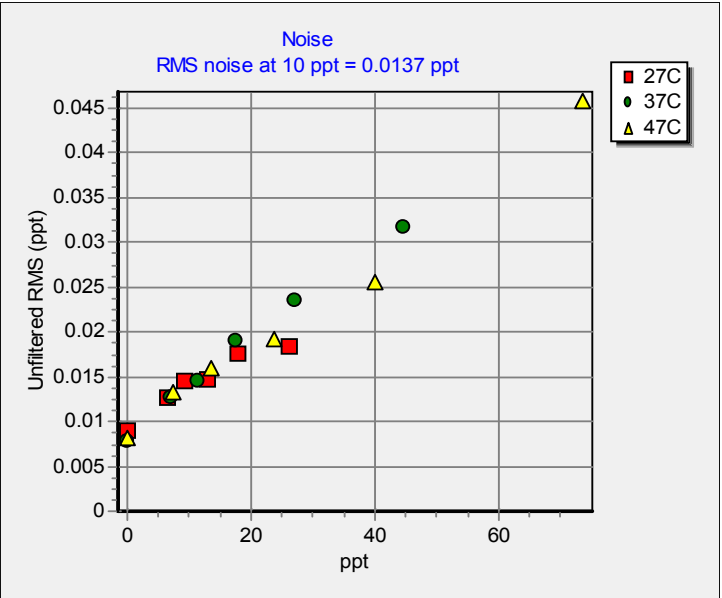
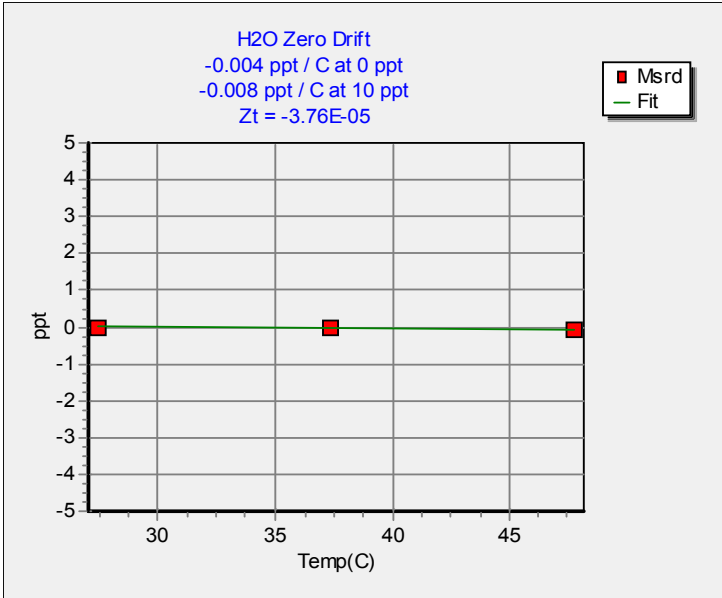
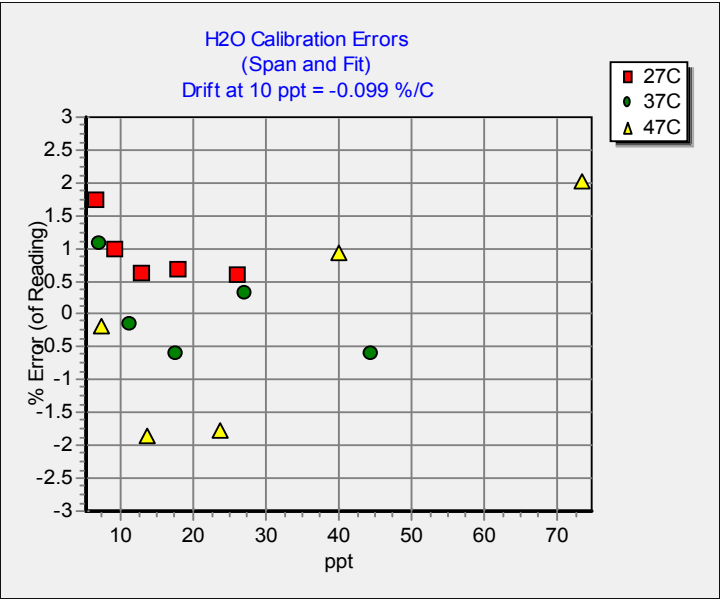
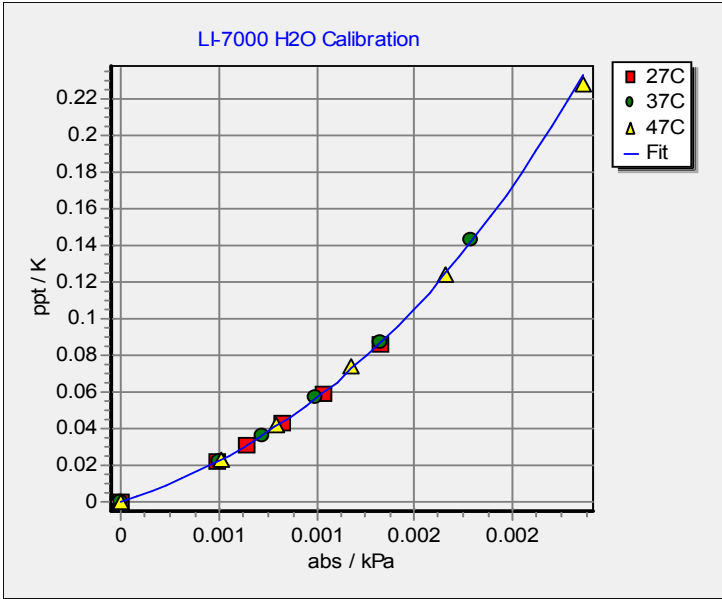
Num	ppt	abs / kPa	ppt / K	Coeffs	Predicted	Error	%Error	Temp	Drift at 10 ppt	%C
1	0	0E0	0	3.52368E1	0	0	0.000	27C	0.884	-0.099
2	6.5	4.92876E-4	0.02179	1.78427E4	0.02217	0.00038	1.746	37C	0.110	
3	9.2	6.42625E-4	0.03074	3.88661E6	0.03104	0.00031	1.000	47C	-1.096	
4	12.9	8.22036E-4	0.04291		0.04318	0.00027	0.630			
5	17.8	1.02967E-3	0.05904		0.05944	0.0004	0.674			
6	26	1.3245E-3	0.08649		0.087	0.00052	0.596			
7	0	0E0	0		0	0	0.000			
8	7	5.02068E-4	0.02244		0.02268	0.00024	1.061			
9	11.2	7.20019E-4	0.03612		0.03607	-0.00005	-0.146			
10	17.6	9.92269E-4	0.05666		0.05633	-0.00034	-0.591			
11	27	1.32556E-3	0.08683		0.08711	0.00028	0.326			
12	44.5	1.78961E-3	0.14335		0.14248	-0.00087	-0.609			
13	0	0E0	0		0	0	0.000			
14	7.4	5.08059E-4	0.02306		0.02302	-0.00004	-0.181			
15	13.5	7.97299E-4	0.04219		0.04141	-0.00078	-1.860			
16	23.7	1.17748E-3	0.07387		0.07257	-0.0013	-1.758			
17	39.9	1.65998E-3	0.12428		0.12544	0.00115	0.928			
18	73.4	2.35804E-3	0.22864		0.23326	0.00462	2.023			

mmolH2O/mol - H2O concentration in cell B
abs/kPa - H2O absorptance / pressure
ppt/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.

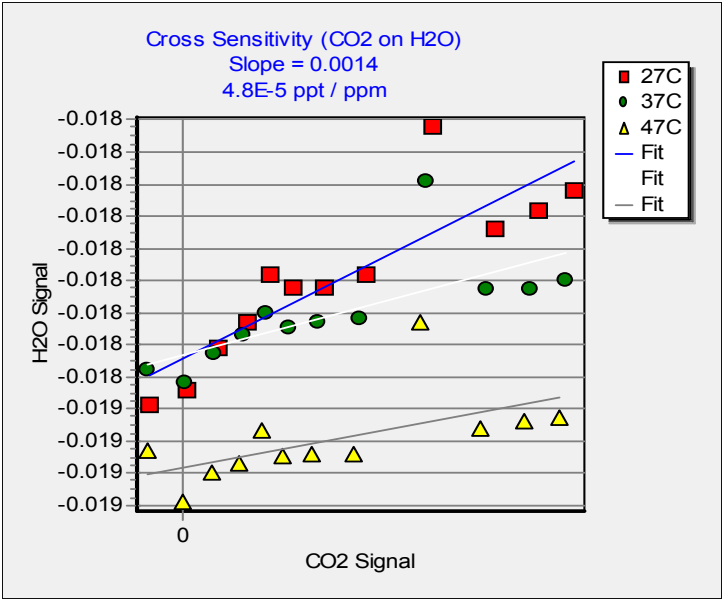
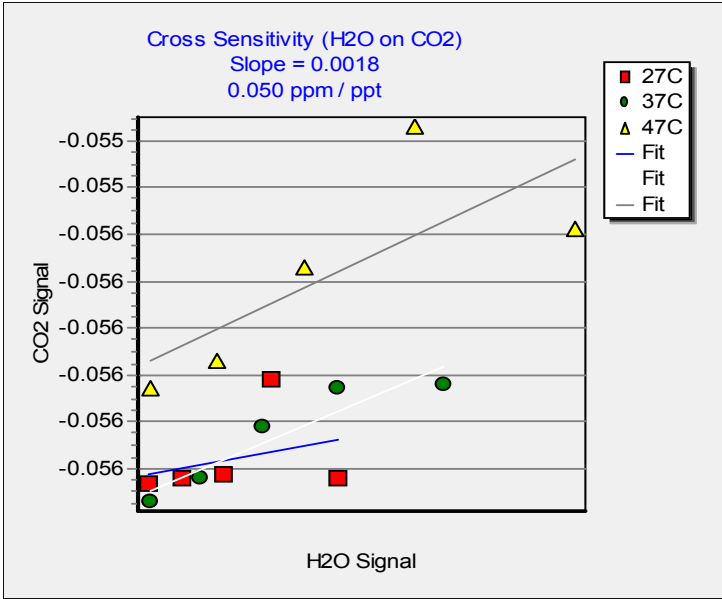
CO2 Calibration Plots



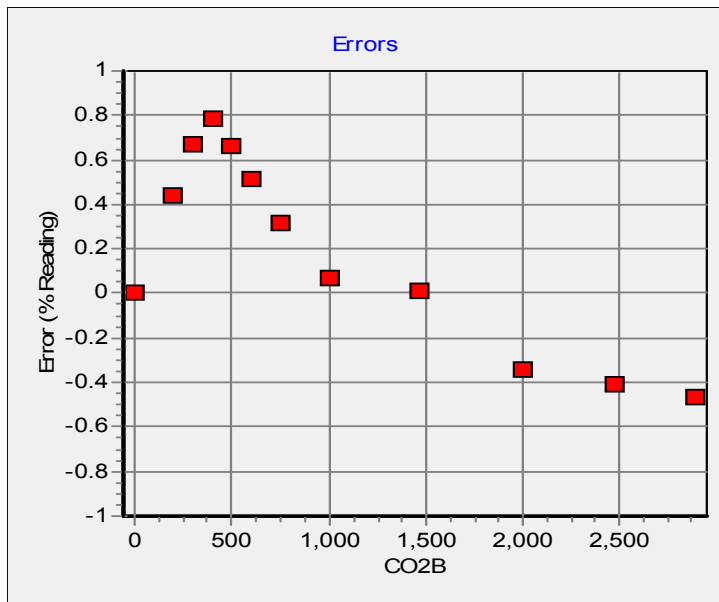
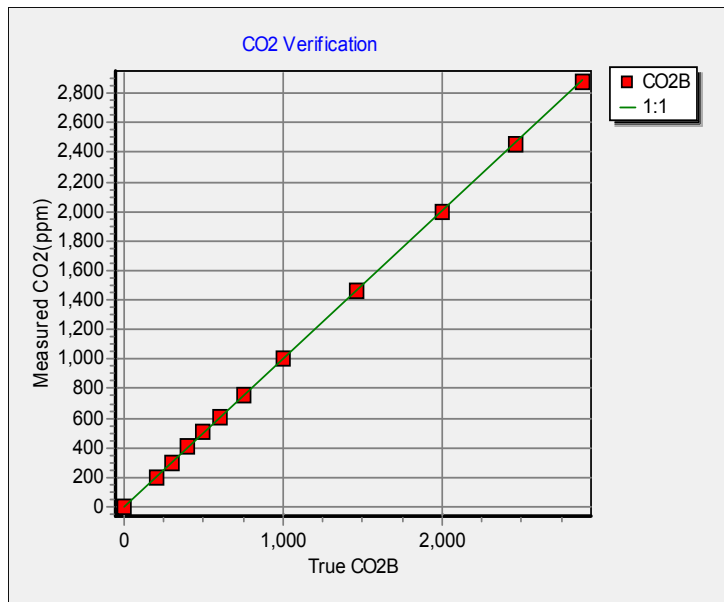
H2O Calibration Plots



Cross Sensitivity Plots



CO2 Final Check



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	Type	Time	CO2(ppm)	CO2Abs	CO2SD	CO2A	CO2B	CO2BSD	TOven(C)	T(C)	Pa(kPa)	Press	F(l/m)	CAgc	HAgc	Diag
1	CO2/70	9:05:30	0	0.00001	5.43E-5	0.00	0.00	0.014	25.00	27.43	97.52	97.51	0.5000	0.59190	0.60900	0C
2	CO2/70	9:06:34	200.5	0.05680	5.22E-5	0.00	201.38	0.024	25.00	27.44	97.52	97.52	0.5000	0.60980	0.60880	0C
3	CO2/70	9:07:31	299.8	0.07881	4.72E-5	0.00	301.82	0.029	25.00	27.44	97.52	97.50	0.5000	0.61710	0.60880	0CH
4	CO2/70	9:08:17	401.4	0.09856	5.80E-5	0.00	404.56	0.016	25.00	27.45	97.52	97.52	0.5000	0.62370	0.60930	0
5	CO2/70	9:08:59	499.7	0.11549	5.94E-5	0.00	503.01	0.041	25.00	27.44	97.52	97.50	0.5000	0.62950	0.60850	0C
6	CO2/70	9:09:35	599.5	0.13105	4.67E-5	0.00	602.56	0.043	25.00	27.44	97.52	97.51	0.5000	0.63490	0.60900	0CH
7	CO2/70	9:10:24	753.0	0.15252	4.78E-5	0.00	755.37	0.039	25.00	27.45	97.52	97.53	0.5000	0.64270	0.60850	0C
8	CO2/70	9:11:17	999.7	0.18238	4.15E-5	0.00	1000.42	0.062	25.00	27.44	97.52	97.53	0.5000	0.65350	0.60880	0CH
9	CO2/70	9:12:09	1465.4	0.22876	4.56E-5	0.00	1465.56	0.130	25.00	27.44	97.52	97.52	0.5000	0.67130	0.60850	0CH
10	CO2/70	9:12:59	2003.6	0.27117	4.04E-5	0.00	1996.78	0.188	25.00	27.44	97.52	97.52	0.5000	0.68840	0.60850	0C
11	CO2/70	9:13:45	2470.0	0.30221	4.57E-5	0.00	2459.94	0.156	25.00	27.44	97.52	97.52	0.5000	0.70160	0.60850	0C
12	CO2/70	9:14:28	2888.0	0.32664	4.17E-5	0.00	2874.57	0.109	25.00	27.44	97.52	97.52	0.5000	0.71230	0.60830	0C

CO2(ppm) - CO2 concentration (tank value)

CO2Abs - CO2 absorbance (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)

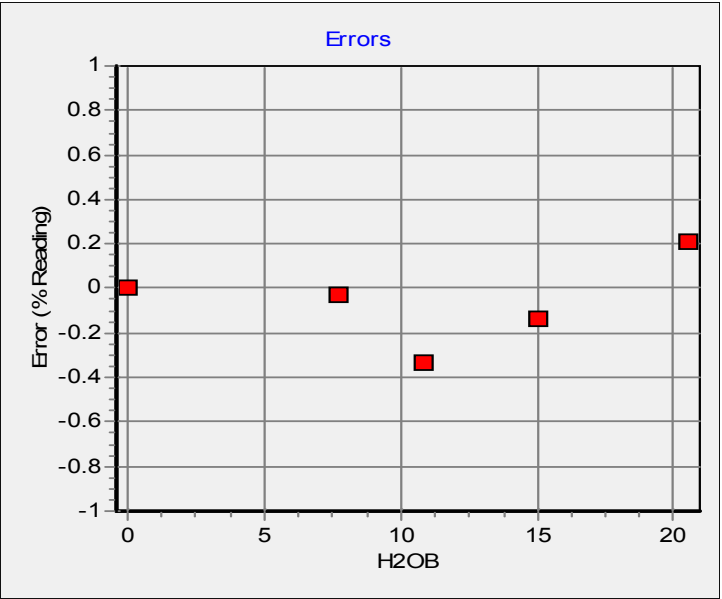
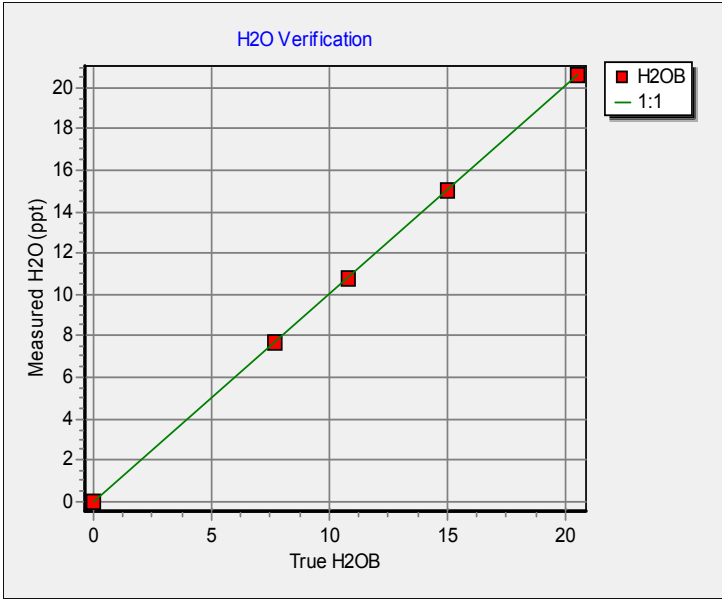
F(l/m) - Flow through cell B, liters/min.

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.

H2O Final Check



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	Type	Time	H2O(C)	610kPa	H2O(ppt)	H2OAbs	H2OA	H2OB	H2OBSD	TOven(C)	T(C)	Pa(kPa)	Press	CAGc	HAGc	Diag
1	H2O/70	10:26:05	-99.00	-0.15	0.00	0.00004	0.000	0.005	0.000	25.00	28.06	97.56	97.56	0.59120	0.60780	0CH
2	H2O/70	10:32:52	5.27	18.09	7.72	0.05447	0.000	7.718	0.001	25.00	28.42	97.56	97.58	0.59070	0.62470	0CH
3	H2O/70	10:38:45	10.28	18.38	10.84	0.07018	0.000	10.804	0.002	25.00	28.77	97.57	97.58	0.59020	0.62950	0CH
4	H2O/70	10:44:24	15.28	18.55	15.01	0.08878	0.000	14.990	0.002	25.00	29.12	97.57	97.56	0.59000	0.63540	0CH
5	H2O/70	10:50:00	20.29	18.75	20.54	0.11023	0.000	20.583	0.002	25.00	29.50	97.58	97.58	0.58950	0.64220	0CH

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 absorbance (unfiltered)

H2OBSD - 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.