

**Appendix C.** Calibration results for fluid pressure sensor, a component of the sampling probe used in boreholes USGS 103, USGS 105, USGS 108, USGS 132, USGS 133, USGS 134, USGS 135, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2008–11.

[**Post-calibration:** Calibration performed after sensor adjustment by the probe manufacturer. **Pre-calibration:** Calibration performed prior to sensor adjustment. **Reference pressure** measured at a specified accuracy of  $\pm 0.1$  psi. **Error:** Difference between the monitored and referenced pressure. **Abbreviations:** °C, degrees Celsius; psia, pound per square inch absolute; psi, pound per square inch]

Post-calibration, October 22, 2008				Pre-calibration, November 7, 2009			
Temperature 10.1°C		Temperature 20.0°C		Temperature 9.9°C		Temperature 19.7°C	
Reference pressure (psia)	Error (psi)	Reference pressure (psia)	Error (psi)	Reference pressure (psia)	Error (psi)	Reference pressure (psia)	Error (psi)
14.749	0.091	14.783	0.105	14.551	0.278	14.546	0.262
51.140	-0.010	51.289	-0.013	49.453	0.190	50.512	0.173
98.814	-0.082	99.267	-0.097	98.852	0.107	98.755	0.125
148.922	-0.108	149.614	-0.092	148.236	0.110	149.257	0.096
198.782	-0.071	197.975	-0.056	198.437	0.136	198.975	0.137
249.159	0.022	248.398	0.023	247.797	0.187	248.829	0.197
297.607	0.059	298.694	0.049	298.215	0.230	297.628	0.237
348.147	0.103	347.625	0.082	347.388	0.269	347.256	0.256
398.171	0.095	397.485	0.073	397.525	0.254	397.967	0.234
447.300	0.035	446.993	0.004	447.703	0.191	447.854	0.158
496.764	-0.152	496.870	-0.156	497.802	0.007	498.088	0.020
449.328	0.028	449.926	0.014	449.314	0.186	449.097	0.160
400.218	0.093	400.569	0.094	399.624	0.245	399.614	0.235
350.535	0.109	350.628	0.089	350.388	0.283	349.389	0.243
300.538	0.074	300.826	0.050	297.850	0.232	300.526	0.222
248.155	0.007	247.778	0.008	250.545	0.208	248.072	0.193
201.072	-0.053	201.244	-0.041	199.742	0.143	198.910	0.146
147.858	-0.087	147.575	-0.080	147.998	0.107	148.573	0.106
99.856	-0.087	100.144	-0.091	99.805	0.119	100.988	0.126
49.686	-0.020	50.011	-0.007	50.836	0.171	51.532	0.174
14.738	0.095	14.766	0.105	14.561	0.258	14.552	0.253

  

Post-calibration, November 7, 2009				Pre-calibration, July 2, 2010			
Temperature 9.9°C		Temperature 19.7°C		Temperature 10.5°C		Temperature 20.3°C	
Reference pressure (psia)	Error (psi)	Reference pressure (psia)	Error (psi)	Reference pressure (psia)	Error (psi)	Reference pressure (psia)	Error (psi)
14.551	0.092	14.546	0.073	14.627	0.063	14.635	0.041
49.453	0	50.512	-0.019	49.739	-0.049	50.342	-0.040
98.852	-0.085	98.755	-0.07	100.045	-0.121	100.352	-0.117
148.236	-0.084	149.257	-0.098	149.859	-0.140	149.735	-0.130
198.437	-0.056	198.975	-0.056	199.519	-0.099	199.111	-0.085
247.797	-0.001	248.829	0.009	249.369	-0.048	248.870	-0.028
298.215	0.047	297.628	0.054	298.480	-0.012	298.907	-0.010
347.388	0.094	347.256	0.08	348.036	0.025	348.784	0.037
397.525	0.089	397.967	0.066	398.316	0.028	398.193	0.021
447.703	0.038	447.854	0.001	448.024	-0.069	448.308	-0.051
497.802	-0.133	498.088	-0.124	498.272	-0.023	498.050	-0.178
449.314	0.033	449.097	0.004	449.823	-0.070	449.792	-0.049
399.624	0.08	399.614	0.068	399.769	0.020	399.851	0.021
350.388	0.108	349.389	0.066	350.333	0.022	350.288	0.029
297.85	0.049	300.526	0.039	300.699	-0.017	300.392	0.006
250.545	0.021	248.072	0.004	247.631	-0.052	251.194	-0.034
199.742	-0.048	198.91	-0.047	200.642	-0.108	200.645	-0.081
147.998	-0.086	148.573	-0.089	148.015	-0.141	146.550	-0.124
99.805	-0.074	100.988	-0.068	97.403	-0.123	98.455	-0.123
50.836	-0.018	51.532	-0.018	50.153	-0.056	49.802	-0.062
14.561	0.072	14.552	0.063	14.624	0.044	14.639	0.031

**C2 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2009–10**

**Appendix C. Calibration Results for Fluid Pressure Sensor, a Component of the Sampling Probe Used in Boreholes USGS 103, USGS 105, USGS 108, USGS 132, USGS 133, USGS 134, USGS 135, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2008–11.—Continued**

[**Post-calibration:** Calibration performed after sensor adjustment by the probe manufacturer. **Pre-calibration:** Calibration performed prior to sensor adjustment. **Reference pressure** measured at a specified accuracy of  $\pm 0.1$  psi. **Error:** Difference between the monitored and referenced pressure. **Abbreviations:** °C, degrees Celsius; psia, pound per square inch absolute; psi, pound per square inch]

Post-calibration, July 2, 2010				Pre-calibration, December 13, 2011			
Temperature 10.5°C		Temperature 20.3°C		Temperature 10.1°C		Temperature 19.9°C	
Ref press (psia)	Error (psi)	Ref press (psia)	Error (psi)	Ref press (psia)	Error (psi)	Ref press (psia)	Error (psi)
14.627	0.072	14.635	0.081	14.672	0.021	14.683	0.034
49.739	-0.009	50.342	0.002	49.945	-0.006	48.958	-0.024
100.045	-0.077	100.352	-0.073	98.858	-0.075	98.689	-0.092
149.859	-0.085	149.735	-0.086	148.886	-0.090	149.398	-0.091
199.519	-0.051	199.111	-0.040	198.739	-0.058	198.647	-0.075
249.369	0.018	248.870	0.018	248.640	-0.003	247.815	-0.015
298.480	0.054	298.907	0.036	298.047	0.032	297.864	-0.009
348.036	0.079	348.784	0.083	347.556	0.062	347.641	0.024
398.316	0.081	398.193	0.067	397.972	0.048	397.584	0.029
448.024	0.019	448.308	-0.005	447.757	0.013	447.558	-0.032
498.272	-0.138	498.050	-0.132	497.235	0.171	497.628	-0.192
449.823	0.004	449.792	-0.003	449.538	-0.015	448.682	-0.045
399.769	0.084	399.851	0.066	399.731	0.056	399.426	0.041
350.333	0.092	350.288	0.075	350.501	0.051	349.426	0.038
300.699	0.050	300.392	0.052	301.296	0.049	300.390	0.012
247.631	0.011	251.194	0.012	249.139	0.015	250.446	0.025
200.642	-0.058	200.645	-0.035	199.959	-0.030	198.504	-0.031
148.015	-0.097	146.550	-0.079	149.363	-0.062	149.966	-0.101
97.403	-0.074	98.455	-0.079	99.855	-0.094	100.536	-0.078
50.153	-0.004	49.802	-0.020	51.396	-0.031	51.186	-0.025
14.624	0.086	14.639	0.071	14.671	0.034	14.681	0.033