

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 103 borehole				USGS 103 borehole			
Port No.	Atmospheric pressure (psia) corresponding to measurement event			Port No.	Fluid temperature (°C) corresponding to measurement event		
	06-20-2011	06-25-2012	06-25-2013		06-20-2011	06-25-2012	06-25-2013
1	12.262	12.255	12.255	1	12.8	12.6	12.6
2	12.262	12.254	12.257	2	12.7	12.6	12.6
3	12.263	12.253	12.259	3	12.7	12.5	12.6
4	12.264	12.254	12.259	4	12.7	12.5	12.6
5	12.264	12.253	12.260	5	12.6	12.5	12.5
6	12.265	12.252	12.260	6	12.6	12.5	12.5
7	12.266	12.252	12.260	7	12.6	12.5	12.5
8	12.265	12.250	12.261	8	12.6	12.5	12.5
9	12.265	12.251	12.263	9	12.6	12.5	12.5
10	12.264	12.251	12.263	10	12.6	12.5	12.5
11	12.265	12.250	12.264	11	12.6	12.5	12.5
12	12.262	12.250	12.263	12	12.8	12.6	12.6
13	12.263	12.250	12.264	13	12.7	12.6	12.6
14	12.264	12.251	12.264	14	12.7	12.6	12.6
15	12.263	12.249	12.263	15	12.8	12.6	12.6
16	12.263	12.249	12.263	16	12.8	12.7	12.7
17	12.262	12.249	12.264	17	12.8	12.7	12.7
18	12.261	12.247	12.263	18	12.9	12.7	12.7
19	12.261	12.247	12.264	19	12.9	12.8	12.8
20	12.261	12.246	12.263	20	13.0	12.8	12.8
21	12.261	12.247	12.263	21	13.2	13.0	13.0
22	12.262	12.246	12.264	22	13.3	13.2	13.0
23	12.263	12.246	12.265	23	13.4	13.2	13.3

**E2 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 103 borehole				USGS 103 borehole			
Port No.	Fluid pressure (psia) corresponding to measurement event			Port No.	Hydraulic head (ft) corresponding to measurement event		
	06-20-2011	06-25-2012	06-25-2013		06-20-2011	06-25-2012	06-25-2013
1	303.38	303.26	302.91	1	4,420.6	4,420.4	4,419.5
2	297.09	297.00	296.63	2	4,420.6	4,420.4	4,419.6
3	282.41	282.34	281.91	3	4,420.6	4,420.4	4,419.4
4	271.71	271.61	271.24	4	4,420.6	4,420.4	4,419.5
5	241.71	241.63	241.25	5	4,420.5	4,420.4	4,419.5
6	235.43	235.32	234.95	6	4,420.6	4,420.3	4,419.5
7	229.15	229.05	228.69	7	4,420.5	4,420.3	4,419.5
8	219.18	219.09	218.72	8	4,420.5	4,420.3	4,419.5
9	211.51	211.44	211.05	9	4,420.5	4,420.4	4,419.5
10	198.95	198.86	198.49	10	4,420.5	4,420.3	4,419.5
11	188.49	188.40	188.02	11	4,420.5	4,420.3	4,419.4
12	173.75	173.65	173.30	12	4,420.8	4,420.6	4,419.8
13	169.47	169.38	168.98	13	4,420.6	4,420.4	4,419.5
14	158.26	158.17	157.81	14	4,420.5	4,420.4	4,419.5
15	152.04	151.91	151.54	15	4,420.7	4,420.4	4,419.5
16	144.86	144.75	144.36	16	4,420.6	4,420.4	4,419.5
17	132.30	132.17	131.80	17	4,420.6	4,420.3	4,419.4
18	120.43	120.30	119.92	18	4,420.7	4,420.4	4,419.5
19	105.74	105.61	105.22	19	4,420.6	4,420.4	4,419.4
20	90.86	90.73	90.35	20	4,420.6	4,420.4	4,419.4
21	59.40	59.47*	58.87	21	4,420.7	4,420.9	4,419.5
22	53.12	53.00	52.59	22	4,420.7	4,420.5	4,419.5
23	48.72	48.46	48.19	23	4,420.7	4,420.4	4,419.5

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; —, no data]

USGS 105 borehole								
Port No.	Atmospheric pressure (psia) corresponding to measurement event							
	03-30-2011	07-11-2011	09-27-2011	11-28-2011	03-15-2012	06-28-2012	09-19-2012	06-26-2013
1	12.249	12.238	12.294	12.358	12.235	12.264	12.323	12.274
2	12.252	12.239	12.293	12.359	12.235	12.264	12.323	12.275
3	12.253	12.239	12.293	12.358	12.237	12.264	12.321	12.274
4	12.254	12.239	12.292	12.359	12.237	12.264	12.320	12.275
5	12.254	12.238	12.291	12.357	12.238	12.264	12.319	12.275
6	12.253	12.238	12.291	12.358	12.237	12.264	12.317	12.277
7	12.255	12.237	12.291	12.357	12.238	12.264	12.317	12.276
8	12.256	12.237	12.290	12.357	12.238	12.264	12.316	12.274
9	12.256	12.237	12.288	12.356	12.239	12.263	12.315	12.274
10	12.255	12.236	12.287	12.355	12.239	12.262	12.314	12.275
11	12.256	12.237	12.285	12.355	12.240	12.261	12.314	12.273
12	12.256	12.236	12.285	12.353	12.238	12.262	12.314	12.275
13	12.258	12.235	12.283	12.352	12.236	12.262	12.314	12.275
14	12.259	12.234	12.282	12.352	12.236	12.261	12.313	12.275
15	12.257	12.233	12.282	12.352	12.234	12.262	12.313	12.274
16	12.255	12.234	12.281	12.352	12.237	12.262	12.312	12.276
17	12.253	12.233	12.281	12.351	12.238	12.260	12.311	12.275
18	12.252	12.233	12.281	12.351	12.237	12.260	12.310	12.274

USGS 105 borehole								
Port No.	Fluid temperature (°C) corresponding to measurement event							
	03-30-2011	07-11-2011	09-27-2011	11-28-2011	03-15-2012	06-28-2012	09-19-2012	06-26-2013
1	12.5	12.7	12.7	12.5	12.4	12.5	12.6	12.7
2	12.5	12.6	12.6	12.5	12.4	12.5	12.4	12.4
3	12.6	12.6	12.6	12.6	12.4	12.4	12.4	12.4
4	12.7	12.7	12.7	12.7	12.5	12.5	12.5	12.5
5	12.9	12.8	12.9	12.9	12.7	12.7	12.7	12.6
6	13.0	13.0	13.0	13.1	12.9	12.9	12.9	12.8
7	13.1	13.1	13.1	13.2	13.0	13.0	13.0	12.9
8	13.2	13.1	13.2	13.2	13.0	13.0	13.0	13.0
9	13.2	13.2	13.2	13.2	13.0	13.0	13.0	13.0
10	13.1	13.1	13.1	13.1	13.0	13.0	13.0	13.0
11	13.1	13.1	13.1	13.1	13.0	13.0	13.0	13.0
12	13.1	13.1	13.1	13.1	13.0	13.0	13.0	13.0
13	12.9	13.0	13.0	13.0	12.9	12.9	12.9	12.9
14	12.8	12.9	12.9	12.9	12.7	12.7	12.7	12.9
15	12.8	12.9	12.8	12.8	12.6	12.6	12.6	12.8
16	12.8	12.8	12.8	12.8	12.6	12.6	12.6	12.7
17	12.8	12.8	12.8	12.8	12.6	12.6	12.6	12.7
18	12.8	12.8	12.8	12.8	12.6	12.6	12.6	12.7

**E4 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 105 borehole								
Port No.	Fluid pressure (psia) corresponding to measurement event							
	03-30-2011	07-11-2011	09-27-2011	11-28-2011	03-15-2012	06-28-2012	09-19-2012	06-26-2013
1	274.46	274.63	274.55	274.85	274.69	274.55	274.38	292.14
2	258.15	258.32	258.23	258.54	258.37	258.29	258.07	277.62
3	250.87	251.04	250.95	251.24	251.10	251.00	250.79	250.65
4	225.33	225.51	225.42	225.71	225.57	225.46	225.26	225.13
5	199.11	199.29	199.20	199.49	199.34	199.24	199.03	198.90
6	184.22	184.40	184.33	184.60	184.46	184.36	184.14	184.00
7	168.42	168.59	168.50	168.78	168.65	168.55	168.32	168.21
8	155.64	155.81	155.73	156.02	155.85	155.76	155.55	155.41
9	147.1	147.27	147.18	147.47	147.32	147.22	147.02	146.89
10	132.19	132.36	132.28	132.57	132.42	132.32	132.11	131.98
11	122.77	122.95	122.84	123.14	122.99	122.91	122.69	122.55
12	114.24	114.43	114.33	114.63	114.47	114.38	114.17	114.05
13	95.07	95.24	95.14	95.45	95.30	95.18	94.98	94.86
14	88.6	88.78	88.68	88.98	88.82	88.73	88.49	88.37
15	79.87	80.04	79.97	80.26	80.09	79.94	79.77	79.65
16	47.14	47.31	47.22	47.52	47.36	47.24	47.03	46.91
17	34.99	35.17	35.08	35.38	35.20	35.10	34.89	34.77
18	26.26	26.44	26.35	26.63	26.46	26.38	26.14	26.01

  

USGS 105 borehole								
Port No.	Hydraulic head (ft) corresponding to measurement event							
	03-30-2011	07-11-2011	09-27-2011	11-28-2011	03-15-2012	06-28-2012	09-19-2012	06-26-2013
1	4,419.8	4,420.3	4,419.9	4,420.5	4,420.4	4,420.0	4,419.5	4,460.6
2	4,419.8	4,420.2	4,419.9	4,420.5	4,420.4	4,420.1	4,419.5	4,464.7
3	4,419.8	4,420.2	4,419.9	4,420.4	4,420.4	4,420.1	4,419.5	4,419.2
4	4,419.8	4,420.2	4,419.9	4,420.4	4,420.3	4,420.0	4,419.4	4,419.2
5	4,419.7	4,420.2	4,419.9	4,420.4	4,420.3	4,420.0	4,419.4	4,419.2
6	4,419.7	4,420.2	4,419.9	4,420.4	4,420.3	4,420.0	4,419.4	4,419.2
7	4,419.7	4,420.2	4,419.8	4,420.3	4,420.3	4,420.0	4,419.3	4,419.2
8	4,419.7	4,420.2	4,419.8	4,420.4	4,420.2	4,420.0	4,419.4	4,419.1
9	4,419.7	4,420.1	4,419.8	4,420.3	4,420.2	4,420.0	4,419.4	4,419.2
10	4,419.7	4,420.1	4,419.8	4,420.3	4,420.2	4,420.0	4,419.4	4,419.1
11	4,419.7	4,420.1	4,419.8	4,420.3	4,420.2	4,420.0	4,419.3	4,419.1
12	4,419.6	4,420.1	4,419.8	4,420.3	4,420.2	4,419.9	4,419.3	4,419.2
13	4,419.7	4,420.1	4,419.8	4,420.3	4,420.3	4,419.9	4,419.3	4,419.2
14	4,419.5	4,420.0	4,419.6	4,420.2	4,420.0	4,419.8	4,419.1	4,418.9
15	4,419.5	4,420.0	4,419.7	4,420.2	4,420.1	4,419.7	4,419.2	4,419.0
16	4,419.5	4,419.9	4,419.6	4,420.1	4,420.0	4,419.7	4,419.1	4,418.9
17	4,419.3	4,419.8	4,419.5	4,420.0	4,419.9	4,419.6	4,419.0	4,418.8
18	4,419.3	4,419.8	4,419.5	4,420.0	4,419.8	4,419.6	4,418.9	4,418.7

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 108 borehole								
Port No.	Atmospheric pressure (psia) corresponding to measurement event							
	03-30-2011	06-21-2011	09-27-2011	11-28-2011	03-15-2012	06-26-2012	09-19-2012	06-26-2013
1	12.275	12.290	12.347	12.395	12.268	12.180	12.367	12.305
2	12.276	12.289	12.348	12.393	12.266	12.185	12.367	12.306
3	12.275	12.288	12.347	12.395	12.267	12.189	12.369	12.307
4	12.275	12.288	12.347	12.394	12.265	12.188	12.368	12.308
5	12.269	12.287	12.347	12.397	12.266	12.191	12.368	12.308
6	12.270	12.287	12.348	12.396	12.264	12.191	12.368	12.309
7	12.269	12.284	12.348	12.396	12.265	12.195	12.368	12.309
8	12.269	12.282	12.348	12.395	12.265	12.196	12.368	12.309
9	12.267	12.281	12.347	12.393	12.266	12.195	12.367	12.308
10	12.267	12.281	12.347	12.395	12.266	12.194	12.367	12.310
11	12.267	12.280	12.346	12.395	12.265	12.194	12.367	12.309
12	12.268	12.280	12.344	12.396	12.265	12.192	12.366	12.310
13	12.268	12.279	12.344	12.396	12.267	12.192	12.366	12.309
14	12.266	12.278	12.342	12.397	12.267	12.191	12.366	12.310
15	12.267	12.277	12.340	12.396	12.267	12.192	12.366	12.310
16	12.264	12.276	12.339	12.395	12.267	12.193	12.366	12.310

USGS 108 borehole								
Port No.	Fluid temperature (°C) corresponding to measurement event							
	03-30-2011	06-21-2011	09-27-2011	11-28-2011	03-15-2012	06-26-2012	09-19-2012	06-26-2013
1	12.8	12.9	12.8	12.7	12.6	12.7	12.7	12.7
2	12.7	12.8	12.8	12.7	12.6	12.6	12.7	12.7
3	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6
4	12.7	12.7	12.7	12.7	12.5	12.5	12.6	12.6
5	12.7	12.7	12.7	12.7	12.5	12.6	12.6	12.6
6	12.7	12.7	12.7	12.7	12.5	12.5	12.5	12.6
7	12.7	12.7	12.7	12.7	12.5	12.5	12.5	12.6
8	12.7	12.7	12.7	12.7	12.5	12.5	12.5	12.6
9	12.7	12.7	12.7	12.7	12.5	12.5	12.5	12.5
10	12.6	12.6	12.7	12.7	12.5	12.5	12.5	12.5
11	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5
12	12.6	12.6	12.6	12.6	12.4	12.4	12.4	12.5
13	12.6	12.6	12.6	12.6	12.4	12.4	12.4	12.5
14	12.5	12.5	12.5	12.5	12.3	12.4	12.4	12.4
15	12.4	12.4	12.5	12.5	12.3	12.3	12.3	12.4
16	12.4	12.4	12.4	12.4	12.3	12.3	12.3	12.3

**E6 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 108 borehole								
Port No.	Fluid pressure (psia) corresponding to measurement event							
	03-30-2011	06-21-2011	09-27-2011	11-28-2011	03-15-2012	06-26-2012	09-19-2012	06-26-2013
1	255.35	255.51	255.42	255.76	255.56	255.40	255.23	255.11
2	250.90	251.10	250.98	251.28	251.12	250.93	250.80	250.66
3	233.89	234.09	233.97	234.28	234.11	233.92	233.79	233.66
4	208.41	208.60	208.49	208.79	208.63	208.44	208.29	208.16
5	193.53	193.73	193.61	193.91	193.76	193.58	193.43	193.29
6	189.08	189.29	189.17	189.48	189.30	189.13	189.00	188.86
7	172.79	172.99	172.86	173.16	172.99	172.82	172.68	172.55
8	140.87	141.08	140.97	141.27	141.10	140.91	140.77	140.65
9	132.29	132.50	132.37	132.67	132.50	132.32	132.18	132.04
10	125.72	125.92	125.80	126.10	125.93	125.75	125.59	125.46
11	108.68	108.87	108.75	109.05	108.86	108.71	108.54	108.41
12	98.02	98.21	98.10	98.40	98.22	98.06	97.90	97.78
13	90.73	90.92	90.80	91.11	90.92	90.75	90.60	90.48
14	43.12	43.33	43.20	43.51	43.31	43.14	42.98	42.88
15	33.87	34.06	33.96	34.26	34.04	33.88	33.74	33.61
16	25.83	26.05	25.92	26.24	26.04	25.97	25.82	26.00

USGS 108 borehole								
Port No.	Hydraulic head (ft) corresponding to measurement event							
	03-30-2011	06-21-2011	09-27-2011	11-28-2011	03-15-2012	06-26-2012	09-19-2012	06-26-2013
1	4,419.9	4,420.3	4,419.9	4,420.6	4,420.4	4,420.3	4,419.5	4,419.3
2	4,420.0	4,420.4	4,420.0	4,420.6	4,420.5	4,420.2	4,419.5	4,419.3
3	4,420.0	4,420.4	4,420.0	4,420.6	4,420.5	4,420.2	4,419.5	4,419.4
4	4,420.2	4,420.6	4,420.2	4,420.8	4,420.7	4,420.4	4,419.7	4,419.5
5	4,420.2	4,420.6	4,420.2	4,420.8	4,420.7	4,420.5	4,419.7	4,419.5
6	4,420.2	4,420.6	4,420.2	4,420.8	4,420.7	4,420.4	4,419.7	4,419.5
7	4,420.2	4,420.6	4,420.2	4,420.7	4,420.6	4,420.4	4,419.7	4,419.5
8	4,420.2	4,420.6	4,420.2	4,420.8	4,420.7	4,420.4	4,419.7	4,419.6
9	4,420.0	4,420.5	4,420.0	4,420.6	4,420.5	4,420.2	4,419.5	4,419.3
10	4,420.0	4,420.4	4,420.0	4,420.6	4,420.5	4,420.2	4,419.4	4,419.3
11	4,419.9	4,420.3	4,419.9	4,420.5	4,420.3	4,420.1	4,419.3	4,419.2
12	4,419.8	4,420.2	4,419.8	4,420.4	4,420.3	4,420.1	4,419.3	4,419.1
13	4,419.8	4,420.2	4,419.8	4,420.4	4,420.2	4,420.0	4,419.3	4,419.1
14	4,419.5	4,420.0	4,419.5	4,420.1	4,419.9	4,419.7	4,419.0	4,418.9
15	4,419.4	4,419.8	4,419.5	4,420.0	4,419.8	4,419.6	4,418.9	4,418.7
16	4,419.3	4,419.8	4,419.4	4,420.0	4,419.8	4,419.8	4,419.1	4,419.6

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. Hydraulic head values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). Abbreviations: °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 131A borehole						
Port No.	Atmospheric pressure (psia) corresponding to measurement event					
	09-17-2012	10-24-2012	03-18-2013	07-15-2013	09-23-2013	11-26-2013
1	12.378	12.270	12.263	12.305	12.274	12.423
2	12.376	12.270	12.263	12.304	12.273	12.422
3	12.377	12.270	12.263	12.306	12.273	12.421
4	12.376	12.271	12.263	12.308	12.272	12.420
5	12.374	12.271	12.262	12.310	12.271	12.419
6	12.373	12.271	12.261	12.310	12.271	12.419
7	12.372	12.270	12.261	12.310	12.271	12.418
8	12.371	12.269	12.259	12.310	12.271	12.417
9	12.370	12.268	12.259	12.310	12.272	12.415
10	12.366	12.267	12.259	12.310	12.271	12.415
11	12.363	12.268	12.258	12.311	12.272	12.416
12	12.363	12.267	12.257	12.310	12.272	12.414
13	12.362	12.266	12.255	12.311	12.270	12.414
14	12.361	12.266	12.254	12.312	12.270	12.414
15	12.360	12.267	12.254	12.313	12.271	12.412
16	12.357	12.266	12.253	12.312	12.270	12.414

USGS 131A borehole						
Port No.	Fluid temperature (°C) corresponding to measurement event					
	09-17-2012	10-24-2012	03-18-2013	07-15-2013	09-23-2013	11-26-2013
1	13.5	13.4	13.4	13.5	13.3	13.2
2	13.4	13.4	13.4	13.5	13.2	13.2
3	13.4	13.4	13.4	13.4	13.2	13.2
4	13.4	13.4	13.4	13.4	13.2	13.2
5	13.4	13.4	13.4	13.4	13.2	13.2
6	13.4	13.4	13.4	13.4	13.2	13.2
7	13.2	13.3	13.3	13.3	13.1	13.1
8	13.0	13.1	13.1	13.1	12.9	12.9
9	12.7	12.8	12.8	12.8	12.5	12.5
10	12.4	12.5	12.5	12.5	12.2	12.3
11	12.2	12.2	12.3	12.3	12.0	12.1
12	12.1	12.1	12.1	12.1	11.8	11.8
13	11.9	11.9	11.9	11.9	11.6	11.7
14	11.6	11.7	11.7	11.6	11.4	11.4
15	11.4	11.5	11.5	11.5	11.3	11.3
16	11.3	11.3	11.3	11.3	11.1	11.1

**E8 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 131A borehole						
Port No.	Fluid pressure (psia) corresponding to measurement event					
	09-17-2012	10-24-2012	03-18-2013	07-15-2013	09-23-2013	11-26-2013
1	285.60	285.65	285.84	285.41	285.21	285.50
2	278.48	278.51	278.69	278.29	278.07	278.36
3	267.84	267.90	268.06	267.67	267.44	267.73
4	261.27	261.33	261.48	261.09	260.87	261.15
5	235.74	235.79	235.97	235.58	235.35	235.64
6	200.30	200.34	200.51	200.13	199.91	200.20
7	190.16	190.23	190.39	190.00	189.77	190.07
8	178.11	178.16	178.34	177.95	177.72	178.01
9	143.12	143.15	143.36	143.01	142.79	143.04
10	127.86	127.89	128.11	127.73	127.48	127.74
11	121.27	121.33	121.53	121.15	120.91	121.15
12	93.65	93.64	93.81	93.57	93.31	93.44
13	76.57	76.56	76.75	76.50	76.24	76.36
14	51.04	51.01	51.20	50.97	50.69	50.81
15	42.26*	42.50	42.68	42.52	42.26	42.24
16	20.35	20.36	20.53	20.40	20.09	20.12

USGS 131A borehole						
Port No.	Hydraulic head (ft) corresponding to measurement event					
	09-17-2012	10-24-2012	03-18-2013	07-15-2013	09-23-2013	11-23-2013
1	4,428.9	4,429.3	4,429.7	4,428.6	4,428.2	4,428.6
2	4,429.0	4,429.3	4,429.7	4,428.7	4,428.3	4,428.6
3	4,429.0	4,429.4	4,429.7	4,428.7	4,428.3	4,428.6
4	4,429.0	4,429.4	4,429.7	4,428.7	4,428.3	4,428.6
5	4,429.0	4,429.3	4,429.8	4,428.8	4,428.3	4,428.6
6	4,429.0	4,429.3	4,429.7	4,428.7	4,428.3	4,428.6
7	4,428.9	4,429.3	4,429.7	4,428.7	4,428.2	4,428.6
8	4,429.0	4,429.3	4,429.8	4,428.8	4,428.3	4,428.6
9	4,431.7	4,432.0	4,432.5	4,431.6	4,431.2	4,431.4
10	4,430.9	4,431.2	4,431.7	4,430.7	4,430.2	4,430.5
11	4,430.9	4,431.2	4,431.7	4,430.7	4,430.2	4,430.4
12	4,429.5	4,429.7	4,430.1	4,429.4	4,428.9	4,428.9
13	4,429.4	4,429.6	4,430.1	4,429.3	4,428.8	4,428.8
14	4,429.5	4,429.7	4,430.1	4,429.5	4,428.9	4,428.8
15	4,428.9	4,429.6	4,430.1	4,429.6	4,429.1	4,428.7
16	4,431.3	4,431.5	4,431.9	4,431.5	4,430.9	4,430.6



**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 132 borehole				USGS 132 borehole			
Port No.	Atmospheric pressure (psia) corresponding to measurement event			Port No.	Fluid temperature (°C) corresponding to measurement event		
	07-06-2011	06-19-2012	06-19-2013		07-06-2011	06-19-2012	06-19-2013
1	12.326	12.230	12.130	1	11.0	11.0	11.0
2	12.328	12.231	12.131	2	10.9	10.8	10.9
3	12.327	12.229	12.131	3	10.9	10.8	10.9
4	12.328	12.232	12.132	4	10.9	10.8	10.9
5	12.329	12.231	12.133	5	11.5	11.2	11.2
6	12.329	12.230	12.133	6	11.9	11.8	11.8
7	12.329	12.229	12.131	7	12.2	12.0	12.1
8	12.330	12.228	12.132	8	12.3	12.2	12.2
9	12.330	12.227	12.133	9	12.4	12.3	12.2
10	12.330	12.226	12.134	10	12.5	12.4	12.3
11	12.331	12.225	12.134	11	12.5	12.4	12.4
12	12.330	12.225	12.135	12	12.6	12.5	12.5
13	12.330	12.224	12.134	13	12.6	12.5	12.6
14	12.330	12.225	12.135	14	12.6	12.6	12.6
15	12.330	12.225	12.135	15	12.7	12.6	12.6
16	12.330	12.223	12.135	16	12.7	12.6	12.6
17	12.329	12.222	12.135	17	12.6	12.5	12.6
18	12.328	12.224	12.136	18	12.6	12.5	12.6
19	12.327	12.221	12.133	19	12.5	12.4	12.5
20	12.328	12.223	12.134	20	12.1	12.0	12.2
21	12.328	12.223	12.134	21	11.9	11.8	12.1
22	12.327	12.225	12.135	22	11.8	11.7	11.9
23	12.327	12.225	12.135	23	11.8	11.6	11.8

**E10 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 132 borehole			
Port No.	Fluid pressure (psia) corresponding to measurement event		
	07-06-2011	06-19-2012	06-19-2013
	1	257.44	257.32
2	248.73	248.64	248.22
3	245.20	245.10	244.68
4	240.92	240.83	240.42
5	202.63	202.54	202.12
6	187.40	187.33	186.89
7	175.85	175.77	175.35
8	162.30	162.28	161.86
9	156.01	155.89	155.48
10	147.13	147.06	146.62
11	144.10	144.01	143.60
12	129.19	129.10	128.68
13	124.93	124.84	124.43
14	107.56	107.45	107.05
15	100.97	100.86	100.45
16	96.70	96.60	96.19
17	91.72	91.62	91.22
18	80.74	80.63	80.23
19	64.19	64.07	63.67
20	40.69	40.58	40.18
21	36.41	36.29	35.90
22	25.40	25.29	24.90
23	19.51	19.40	18.99

USGS 132 borehole			
Port No.	Hydraulic head (ft) corresponding to measurement event		
	07-06-2011	06-19-2012	06-19-2013
	1	4,420.5	4,420.5
2	4,420.5	4,420.5	4,419.8
3	4,420.6	4,420.5	4,419.8
4	4,420.5	4,420.5	4,419.8
5	4,420.4	4,420.4	4,419.7
6	4,420.4	4,420.4	4,419.6
7	4,420.4	4,420.4	4,419.7
8	4,420.3	4,420.5	4,419.7
9	4,420.5	4,420.5	4,419.8
10	4,420.4	4,420.5	4,419.6
11	4,420.4	4,420.4	4,419.7
12	4,420.4	4,420.4	4,419.6
13	4,420.4	4,420.4	4,419.7
14	4,420.4	4,420.4	4,419.7
15	4,420.4	4,420.4	4,419.7
16	4,420.4	4,420.4	4,419.7
17	4,420.4	4,420.4	4,419.7
18	4,420.4	4,420.4	4,419.7
19	4,420.4	4,420.4	4,419.7
20	4,420.3	4,420.3	4,419.6
21	4,420.3	4,420.3	4,419.6
22	4,420.2	4,420.2	4,419.5
23	4,420.4	4,420.3	4,419.6

USGS 133 borehole			
Port No.	Atmospheric pressure (psia) corresponding to measurement event		
	06-27-2009	06-20-2012	06-24-2013
	1	12.311	12.379
2	12.310	12.378	12.211
3	12.310	12.378	12.211
4	12.308	12.378	12.210
5	12.309	12.378	12.209
6	12.307	12.377	12.208
7	12.306	12.375	12.208
8	12.306	12.376	12.207
9	12.306	12.376	12.207
10	12.304	12.375	12.208
11	12.304	12.375	12.207
12	12.303	12.374	12.206
13	12.303	12.374	12.206

USGS 133 borehole			
Port No.	Fluid temperature (°C) corresponding to measurement event		
	06-27-2009	06-20-2012	06-24-2013
	1	12.5	12.3
2	12.3	12.2	12.3
3	12.2	12.0	12.2
4	12.1	12.0	12.0
5	12.0	11.9	12.0
6	11.8	11.6	11.8
7	11.6	11.5	11.6
8	11.5	11.4	11.5
9	11.5	11.4	11.4
10	11.4	11.3	11.4
11	11.3	11.2	11.3
12	11.2	11.1	11.2
13	11.2	11.1	11.1

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. Hydraulic head values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). Abbreviations: °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 133 borehole				USGS 133 borehole			
Port No.	Fluid pressure (psia) corresponding to measurement event			Port No.	Hydraulic head (ft) corresponding to measurement event		
	06-27-2009	06-20-2012	06-24-2013		06-27-2009	06-20-2012	06-24-2013
1	148.02	148.16	147.84	1	4457.2	4457.3	4457.0
2	139.39	139.51	139.13	2	4457.3	4457.5	4457.0
3	135.09	135.25	134.85	3	4457.2	4457.4	4456.9
4	128.02	128.14	127.76	4	4457.3	4457.4	4456.9
5	122.36	122.51	122.10	5	4457.3	4457.5	4457.0
6	95.32	95.52	95.24	6	4462.2	4462.5	4462.2
7	84.85	85.04	84.78	7	4462.6	4462.9	4462.7
8	74.49	74.67	74.70	8	4463.3	4463.6	4464.0
9	68.62	68.80	68.63	9	4463.4	4463.6	4463.6
10	61.50	61.69	61.42	10	4463.3	4463.6	4463.3
11	37.32	37.49	37.23	11	4463.3	4463.6	4463.4
12	30.89	31.07	30.82	12	4463.2	4463.5	4463.3
13	22.17	22.32	22.08	13	4463.2	4463.4	4463.2

  

USGS 134 borehole				USGS 134 borehole			
Port No.	Atmospheric pressure (psia) corresponding to measurement event			Port No.	Fluid temperature (°C) corresponding to measurement event		
	06-09-2011	06-18-2012	07-10-2013		06-09-2011	06-18-2012	07-10-2013
1	12.193	12.172	12.354	1	15.1	15.2	15.2
2	12.192	12.172	12.354	2	15.0	15.0	15.1
3	–	–	–	3	–	–	–
4	12.192	12.172	12.353	4	14.9	14.7	14.9
5	12.194	12.171	12.353	5	14.7	14.6	14.7
6	12.194	12.170	12.353	6	14.6	14.4	14.6
7	12.193	12.171	12.353	7	14.5	14.3	14.5
8	12.193	12.169	12.353	8	14.3	14.2	14.3
9	12.195	12.169	12.353	9	14.1	14.0	14.1
10	12.193	12.168	12.353	10	14.0	13.8	14.0
11	12.192	12.168	12.352	11	13.8	13.7	13.8
12	12.192	12.167	12.352	12	13.7	13.6	13.7
13	12.192	12.167	12.353	13	13.6	13.4	13.6
14	12.194	12.168	12.353	14	13.5	13.3	13.5
15	12.195	12.169	12.353	15	13.4	13.3	13.4
16	12.195	12.169	12.353	16	13.4	13.2	13.3
17	12.196	12.169	12.353	17	13.2	13.1	13.2
18	12.196	12.168	12.353	18	13.2	13.0	13.1
19	12.196	12.166	12.352	19	13.1	12.9	13.0
20	12.195	12.166	12.352	20	13.0	12.8	12.9

**E12 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 134 borehole				USGS 134 borehole			
Port No.	Fluid pressure (psia) corresponding to measurement event			Port No.	Hydraulic head (ft) corresponding to measurement event		
	06-09-2011	06-18-2012	07-10-2013		06-09-2011	06-18-2012	07-10-2013
1	171.16	171.24	171.09	1	4,453.7	4,453.9	4,453.2
2	166.84	166.93	166.77	2	4,453.8	4,454.0	4,453.2
3	–	–	–	3	–	–	–
4	156.00	156.10	155.94	4	4,453.7	4,454.0	4,453.2
5	149.50	149.62	149.45	5	4,453.7	4,454.0	4,453.2
6	145.10	145.29	145.11	6	4,453.7	4,454.0	4,453.2
7	138.60	138.80	138.61	7	4,453.7	4,454.0	4,453.2
8	128.20	128.40	128.23	8	4,453.7	4,454.0	4,453.2
9	113.10	113.23	113.06	9	4,453.7	4,454.0	4,453.2
10	102.70	102.84	102.67	10	4,453.7	4,454.0	4,453.2
11	95.35	95.49	95.31	11	4,453.7	4,454.1	4,453.3
12	88.93	89.05	88.80	12	4,453.9	4,454.2	4,453.2
13	77.95	78.09	77.78	13	4,454.6	4,455.0	4,453.8
14	73.33	73.48	73.26	14	4,453.9	4,454.3	4,453.4
15	68.97	69.14	68.94	15	4,453.9	4,454.3	4,453.4
16	66.38	66.56	66.35	16	4,453.9	4,454.4	4,453.5
17	51.65	51.81	51.63	17	4,453.9	4,454.4	4,453.5
18	46.44	46.61	46.52	18	4,454.0	4,454.4	4,453.8
19	39.92	40.10	39.89	19	4,453.8	4,454.3	4,453.4
20	29.64	29.96	29.72	20	4,454.2	4,455.0	4,454.0

  

USGS 135 borehole								
Port No.	Atmospheric pressure (psia) corresponding to measurement event							
	04-18-2011	07-07-2011	09-29-2011	11-30-2011	03-12-2012	06-21-2012	09-13-2012	06-24-2013
1	12.054	12.253	12.322	12.191	12.149	12.253	12.390	12.1
2	12.054	12.255	12.321	12.193	12.149	12.251	12.390	12.1
3	12.055	12.254	12.320	12.194	12.150	12.251	12.389	12.098
4	12.055	12.253	12.319	12.195	12.150	12.251	12.388	12.101
5	12.056	12.252	12.318	12.194	12.155	12.250	12.386	12.102
6	12.056	12.250	12.319	12.195	12.155	12.249	12.386	12.101
7	12.055	12.250	12.318	12.198	12.156	12.246	12.385	12.101
8	12.055	12.250	12.319	12.199	12.156	12.245	12.384	12.101
9	12.055	12.249	12.319	12.200	12.157	12.242	12.384	12.102
10	12.055	12.249	12.317	12.200	12.156	12.241	12.383	12.101
11	12.055	12.249	12.318	12.201	12.156	12.240	12.381	12.101
12	12.055	12.248	12.317	12.202	12.156	12.240	12.380	12.101
13	12.055	12.247	12.316	12.201	12.156	12.240	12.378	12.101
14	12.056	12.246	12.315	12.199	12.156	12.240	12.377	12.101

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. Hydraulic head values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). Abbreviations: °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 135 borehole								
Port No.	Fluid temperature (°C) corresponding to measurement event							
	04-18-2011	07-07-2011	09-29-2011	11-30-2011	03-12-2012	06-21-2012	09-13-2012	06-24-2013
1	11.8	11.8	11.8	11.7	11.6	11.7	11.8	11.75
2	11.8	11.8	11.7	11.7	11.6	11.6	11.6	11.67
3	11.7	11.7	11.7	11.7	11.5	11.6	11.6	11.6
4	11.7	11.7	11.7	11.7	11.5	11.5	11.5	11.57
5	11.7	11.7	11.7	11.7	11.5	11.5	11.5	11.57
6	11.7	11.7	11.7	11.7	11.5	11.5	11.5	11.54
7	11.7	11.7	11.7	11.7	11.5	11.5	11.5	11.54
8	11.7	11.7	11.7	11.7	11.5	11.5	11.5	11.55
9	11.7	11.7	11.7	11.7	11.5	11.5	11.5	11.53
10	11.7	11.7	11.7	11.7	11.5	11.5	11.5	11.54
11	11.7	11.6	11.6	11.6	11.5	11.5	11.5	11.52
12	11.6	11.7	11.7	11.7	11.5	11.5	11.5	11.52
13	11.7	11.6	11.6	11.6	11.5	11.5	11.5	11.53
14	11.6	11.6	11.6	11.6	11.5	11.5	11.5	11.51

  

USGS 135 borehole								
Port No.	Fluid pressure (psia) corresponding to measurement event							
	04-18-2011	07-07-2011	09-29-2011	11-30-2011	03-12-2012	06-21-2012	09-13-2012	06-24-2013
1	185.42	185.76	185.68	185.82	185.78	185.80	185.58	185.38
2	180.97	181.33	181.25	181.35	181.32	181.38	181.18	180.94
3	158.33	158.69	158.59	158.71	158.66	158.70	158.50	158.23
4	139.17	139.52	139.42	139.55	139.49	139.52	139.33	139.07
5	129.22	129.56	129.49	129.61	129.55	129.58	129.38	129.13
6	120.51	120.84	120.76	120.89	120.83	120.86	120.65	120.41
7	101.32	101.66	101.59	101.70	101.66	101.68	101.47	101.22
8	75.75	76.09	76.00	76.12	76.06	76.08	75.89	75.63
9	63.64	63.99	63.89	64.01	63.96	63.87	63.77	63.54
10	57.75	58.10	58.00	58.12	58.06	58.10	57.88	57.64
11	43.52	43.87	43.77	43.91	43.85	43.86	43.66	43.42
12	32.86	33.20	33.12	33.23	33.19	33.20	33.00	32.77
13	20.78	21.09	21.02	21.15	21.09	21.11	20.91	20.67
14	16.29	16.64	16.53	16.67	16.61	16.64	16.40	16.2

**E14 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 135 borehole								
Port No.	Hydraulic head (ft) corresponding to measurement event							
	04-18-2011	07-07-2011	09-29-2011	11-30-2011	03-12-2012	06-21-2012	09-13-2012	06-24-2013
1	4,419.0	4,419.3	4,419.0	4,419.6	4,419.6	4,419.4	4,418.6	4418.8
2	4,419.0	4,419.4	4,419.0	4,419.6	4,419.6	4,419.5	4,418.7	4418.84
3	4,417.5	4,417.9	4,417.5	4,418.1	4,418.1	4,417.9	4,417.2	4417.2
4	4,417.6	4,417.9	4,417.5	4,418.1	4,418.1	4,417.9	4,417.2	4417.21
5	4,417.6	4,417.9	4,417.6	4,418.1	4,418.1	4,417.9	4,417.2	4417.24
6	4,417.6	4,417.9	4,417.5	4,418.1	4,418.1	4,417.9	4,417.1	4417.22
7	4,417.5	4,417.9	4,417.5	4,418.1	4,418.1	4,417.9	4,417.1	4417.18
8	4,417.6	4,417.9	4,417.5	4,418.1	4,418.1	4,417.9	4,417.1	4417.19
9	4,417.6	4,418.0	4,417.6	4,418.1	4,418.1	4,417.7	4,417.1	4417.25
10	4,417.6	4,418.0	4,417.6	4,418.1	4,418.1	4,418.0	4,417.2	4417.26
11	4,417.5	4,417.8	4,417.4	4,418.0	4,418.0	4,417.8	4,417.0	4417.11
12	4,417.5	4,417.8	4,417.5	4,418.0	4,418.0	4,417.8	4,417.0	4417.15
13	4,417.5	4,417.8	4,417.4	4,418.0	4,418.0	4,417.8	4,417.0	4417.11
14	4,417.5	4,417.9	4,417.5	4,418.1	4,418.0	4,417.9	4,417.0	4417.2

USGS 137A borehole						
Port No.	Atmospheric pressure (psia) corresponding to measurement event					
	09-18-2012	10-22-2012	03-18-2013	07-15-2013	09-23-2013	11-25-2013
1	12.083	12.360	12.233	12.294	12.238	12.395
2	12.082	12.360	12.234	12.294	12.239	12.397
3	12.083	12.360	12.234	12.294	12.240	12.396
4	12.084	12.360	12.232	12.293	12.241	12.396
5	12.084	12.360	12.234	12.293	12.242	12.395
6	12.082	12.361	12.236	12.292	12.243	12.393
7	12.080	12.361	12.237	12.291	12.244	12.394
8	12.082	12.361	12.236	12.291	12.245	12.395

USGS 137A borehole						
Port No.	Fluid temperature (°C) corresponding to measurement event					
	09-18-2012	10-22-2012	03-18-2013	07-15-2013	09-23-2013	11-25-2013
1	12.7	12.7	12.5	12.9	12.3	12.3
2	12.6	12.6	12.5	12.7	12.3	12.3
3	12.6	12.6	12.6	12.7	12.4	12.4
4	12.7	12.7	12.7	12.7	12.4	12.4
5	12.8	12.8	12.8	12.8	12.5	12.5
6	12.8	12.8	12.8	12.8	12.6	12.6
7	12.8	12.8	12.8	12.8	12.6	12.6
8	12.9	12.9	12.9	12.9	12.6	12.6

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. Hydraulic head values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). Abbreviations: °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

USGS 137A borehole						
Port No.	Fluid pressure (psia) corresponding to measurement event					
	09-18-2012	10-22-2012	03-18-2013	07-15-2013	09-23-2013	11-25-2013
1	119.76	119.83	119.93	119.62	119.39	119.70
2	115.52	115.57	115.67	115.37	115.14	115.45
3	104.86	104.92	105.02	104.72	104.49	104.79
4	81.92	82.00	82.09	81.80	81.56	81.86
5	64.15	64.21	64.31	64.02	63.79	64.09
6	53.27	53.35	53.45	53.15	52.91	53.22
7	26.94	27.01	27.12	26.81	26.58	26.89
8	18.20	18.26	18.34	18.05	17.84	18.14

  

Port No.	Hydraulic head (ft) corresponding to measurement event					
	09-18-2012	10-22-2012	03-18-2013	07-15-2013	09-23-2013	11-25-2013
1	4,416.5	4,416.1	4,416.6	4,415.7	4,415.3	4,415.7
2	4,416.6	4,416.0	4,416.6	4,415.7	4,415.3	4,415.7
3	4,416.6	4,416.1	4,416.6	4,415.8	4,415.4	4,415.7
4	4,416.5	4,416.1	4,416.6	4,415.8	4,415.3	4,415.7
5	4,416.6	4,416.1	4,416.6	4,415.8	4,415.4	4,415.7
6	4,416.5	4,416.1	4,416.6	4,415.8	4,415.3	4,415.7
7	4,416.5	4,416.0	4,416.5	4,415.7	4,415.3	4,415.7
8	4,416.5	4,416.0	4,416.5	4,415.7	4,415.3	4,415.7

  

MIDDLE 2050A borehole											
Port No.	Atmospheric pressure (psia) corresponding to measurement event										
	06-27-2011	09-28-2011	11-29-2011	03-14-2012	06-18-2012	09-20-2012	11-28-2012	03-19-2013	07-10-2013	09-24-2013	11-26-2013
1	12.338	12.383	12.434	12.264	12.162	12.413	12.333	12.387	12.353	12.231	12.452
2	12.337	12.382	12.432	12.264	12.162	12.414	12.331	12.387	12.352	12.229	12.450
3	12.336	12.381	12.431	12.263	12.160	12.414	12.331	12.386	12.351	12.229	12.449
4	12.332	12.380	12.431	12.263	12.161	12.413	12.330	12.387	12.350	12.231	12.449
5	12.332	12.380	12.431	12.264	12.159	12.413	12.330	12.385	12.349	12.231	12.448
6	12.330	12.379	12.429	12.264	12.160	12.412	12.330	12.385	12.347	12.232	12.447
7	12.330	12.378	12.426	12.262	12.158	12.412	12.328	12.386	12.344	12.231	12.446
8	12.329	12.377	12.428	12.263	12.161	12.413	12.328	12.386	12.343	12.231	12.444
9	12.327	12.375	12.427	12.263	12.157	12.414	12.327	12.385	12.341	12.230	12.443
10	12.327	12.376	12.426	12.262	12.159	12.415	12.326	12.384	13.340	12.230	12.444
11	12.326	12.376	12.424	12.261	12.157	12.415	12.326	12.383	12.339	12.231	12.442
12	12.326	12.374	12.422	12.260	12.159	12.415	12.326	12.383	12.338	12.231	12.441
13	12.325	12.373	12.421	12.261	12.158	12.417	12.325	12.383	12.337	12.231	12.440
14	12.326	12.372	12.421	12.262	12.158	12.418	12.324	12.382	12.335	12.230	12.439
15	12.325	12.372	12.417	12.261	12.159	12.418	12.322	12.382	12.334	12.229	12.438

**E16 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

<b>MIDDLE 2050A borehole</b>											
<b>Port No.</b>	<b>Fluid temperature (°C) corresponding to measurement event</b>										
	<b>06-27-2011</b>	<b>09-28-2011</b>	<b>11-29-2011</b>	<b>03-14-2012</b>	<b>06-18-2012</b>	<b>09-20-2012</b>	<b>11-28-2012</b>	<b>03-19-2013</b>	<b>07-10-2013</b>	<b>09-24-2013</b>	<b>11-26-2013</b>
1	16.4	16.4	16.3	16.0	16.3	16.3	16.2	16.3	16.6	16.1	16.0
2	16.0	16.0	16.0	15.9	16.0	16.0	16.0	15.9	16.3	15.7	15.8
3	15.6	15.5	15.6	15.5	15.5	15.5	15.5	15.4	15.7	15.3	15.2
4	14.6	14.9	15.0	14.7	14.7	14.6	14.6	14.5	14.8	14.4	14.7
5	14.4	14.5	14.5	14.3	14.3	14.3	14.4	14.2	14.4	14.1	14.1
6	14.2	14.3	14.3	14.2	14.1	14.2	14.2	14.1	14.2	13.9	14.0
7	13.5	13.6	13.6	13.5	13.5	13.6	13.4	13.2	13.4	12.9	13.3
8	13.1	13.2	13.1	13.0	13.0	13.0	12.9	12.9	13.1	12.6	12.8
9	12.8	12.9	12.9	12.7	12.7	12.7	12.8	12.7	12.9	12.4	12.5
10	12.4	12.4	12.4	12.2	12.2	12.2	12.2	12.1	12.4	11.9	12.0
11	12.1	12.1	12.1	11.9	11.9	12.0	12.0	11.9	12.1	11.7	11.7
12	11.8	11.9	11.7	11.6	11.6	11.6	11.6	11.6	11.7	11.3	11.3
13	11.5	11.6	11.5	11.4	11.4	11.4	11.4	11.3	11.5	11.1	11.2
14	11.4	11.4	11.4	11.2	11.1	11.2	11.3	11.2	11.3	11.0	11.0
15	11.3	11.3	11.3	11.1	11.0	11.1	11.1	11.1	11.2	10.9	10.9

  

<b>MIDDLE 2050A borehole</b>											
<b>Port No.</b>	<b>Fluid pressure (psia) corresponding to measurement event</b>										
	<b>06-27-2011</b>	<b>09-28-2011</b>	<b>11-29-2011</b>	<b>03-14-2012</b>	<b>06-18-2012</b>	<b>09-20-2012</b>	<b>11-28-2012</b>	<b>03-19-2013</b>	<b>07-10-2013</b>	<b>09-24-2013</b>	<b>11-26-2013</b>
1	352.90	352.66	352.95	353.02	352.79	352.56	352.80	352.96	352.53	352.17	352.45
2	336.75	336.50	336.79	336.83	336.66	336.40	336.60	336.79	336.37	336.01	336.28
3	315.13	314.88	315.18	315.23	315.03	314.79	315.00	315.18	314.76	314.41	314.67
4	272.54	272.29	272.59	272.64	272.45	272.22	272.42	272.58	272.18	271.81	272.07
5	256.28	256.02	256.32	256.38	256.18	255.94	256.15	256.32	255.92	255.55	255.81
6	236.82	236.57	236.86	236.92	236.73	236.47	236.69	236.86	236.46	236.11	236.35
7	169.43	169.20	169.47	169.54	169.35	169.09	169.31	169.49	169.08	168.71	168.98
8	155.24	155.04	155.29	155.35	155.19	154.92	155.12	155.29	154.92	154.55	154.80
9	146.41	146.20	146.46	146.52	146.34	146.08	146.28	146.46	146.08	145.71	145.95
10	115.88	115.68	115.93	115.98	115.83	115.55	115.73	115.93	115.55	115.17	115.43
11	110.20	109.99	110.24	110.31	110.15	109.87	110.06	110.25	109.88	109.50	109.76
12	83.00	82.86	83.03	83.13	83.07	82.78	82.89	83.05	82.80	82.41	82.57
13	74.48	74.36	74.53	74.60	74.58	74.28	74.37	74.53	74.28	73.91	74.30
14	38.92	38.81	38.96	39.04	39.00	38.73	38.80	38.99	38.73	38.34	38.50
15	27.92	27.81	27.97	28.03	28.00	27.70	27.79	27.98	27.74	27.34	27.49



**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; —, no data]

<b>MIDDLE 2050A borehole</b>											
<b>Port No.</b>	<b>Hydraulic head (ft) corresponding to measurement event</b>										
	<b>06-27-2011</b>	<b>09-28-2011</b>	<b>11-29-2011</b>	<b>03-14-2012</b>	<b>06-18-2012</b>	<b>09-20-2012</b>	<b>11-28-2012</b>	<b>03-19-2013</b>	<b>07-10-2013</b>	<b>09-24-2013</b>	<b>11-26-2013</b>
1	4,445.9	4,445.3	4,445.8	4,446.3	4,446.1	4,444.9	4,445.7	4,445.9	4,445.1	4,444.4	4,444.6
2	4,446.3	4,445.6	4,446.2	4,446.7	4,446.5	4,445.3	4,446.0	4,446.3	4,445.4	4,444.8	4,444.9
3	4,446.3	4,445.7	4,446.2	4,446.7	4,446.5	4,445.4	4,446.0	4,446.3	4,445.5	4,444.9	4,445.0
4	4,446.3	4,445.7	4,446.3	4,446.7	4,446.5	4,445.4	4,446.1	4,446.3	4,445.5	4,444.9	4,445.0
5	4,446.5	4,445.8	4,446.4	4,446.9	4,446.7	4,445.5	4,446.2	4,446.4	4,445.6	4,445.0	4,445.1
6	4,446.5	4,445.8	4,446.3	4,446.8	4,446.6	4,445.5	4,446.2	4,446.4	4,445.6	4,445.0	4,445.1
7	4,446.5	4,445.8	4,446.3	4,446.9	4,446.7	4,445.5	4,446.2	4,446.5	4,445.6	4,445.0	4,445.1
8	4,446.5	4,445.9	4,446.3	4,446.9	4,446.7	4,445.5	4,446.2	4,446.4	4,445.7	4,445.1	4,445.2
9	4,446.4	4,445.8	4,446.3	4,446.8	4,446.7	4,445.5	4,446.1	4,446.4	4,445.6	4,445.0	4,445.1
10	4,446.4	4,445.8	4,446.3	4,446.8	4,446.7	4,445.4	4,446.1	4,446.4	4,443.3	4,445.0	4,445.1
11	4,446.5	4,445.9	4,446.3	4,446.9	4,446.7	4,445.5	4,446.1	4,446.4	4,445.7	4,445.1	4,445.2
12	4,446.7	4,446.3	4,446.6	4,447.2	4,447.3	4,446.0	4,446.5	4,446.7	4,446.3	4,445.6	4,445.5
13	4,446.7	4,446.3	4,446.6	4,447.1	4,447.3	4,446.0	4,446.5	4,446.7	4,446.2	4,445.6	4,446.0
14	4,446.7	4,446.4	4,446.6	4,447.1	4,447.3	4,446.1	4,446.4	4,446.7	4,446.3	4,445.6	4,445.5
15	4,446.7	4,446.3	4,446.6	4,447.1	4,447.3	4,446.0	4,446.4	4,446.7	4,446.3	4,445.6	4,445.5

  

<b>MIDDLE 2051 borehole</b>											
<b>Port No.</b>	<b>Atmospheric pressure (psia) corresponding to measurement event</b>										
	<b>06-27-2011</b>	<b>09-28-2011</b>	<b>11-29-2011</b>	<b>03-14-2012</b>	<b>06-19-2012</b>	<b>09-18-2012</b>	<b>11-28-2012</b>	<b>03-19-2013</b>	<b>06-20-2013</b>	<b>09-24-2013</b>	<b>11-26-2013</b>
1	12.218	12.361	12.427	12.217	12.220	12.376	12.335	12.342	12.280	12.247	12.444
2	12.218	12.361	12.428	12.215	12.218	12.375	12.334	12.342	12.280	12.246	12.444
3	12.218	12.361	12.427	12.214	12.218	12.374	12.333	12.344	12.281	12.246	12.444
4	12.218	12.361	12.426	12.213	12.217	12.372	12.333	12.345	12.280	12.245	12.444
5	12.218	12.361	12.428	12.211	12.217	12.371	12.332	12.349	12.281	12.244	12.444
6	12.219	12.362	12.427	12.210	12.215	12.371	12.330	12.350	12.281	12.243	12.445
7	12.219	12.361	12.429	12.210	12.213	12.371	12.329	12.350	12.282	12.242	12.445
8	12.220	12.361	12.430	12.213	12.213	12.371	12.328	12.350	12.283	12.242	12.444
9	12.220	12.361	12.428	12.214	12.214	12.369	12.328	12.350	12.283	12.241	12.444
10	12.221	12.363	12.429	12.218	12.215	12.368	12.328	12.351	12.284	12.241	12.443
11	12.221	12.362	12.428	12.222	12.212	12.367	12.326	12.352	12.285	12.239	12.443
12	12.221	12.362	12.426	12.225	12.211	12.366	12.324	12.354	12.285	12.238	12.442

**E18 Multilevel Groundwater Monitoring of Hydraulic Head and Temperature, Eastern Snake River Plain Aquifer, Idaho, 2011–13**

**Appendix E.** Barometric pressure, water temperature, fluid pressure, and hydraulic head data from port measurements for boreholes USGS 103, USGS 105, USGS 108, USGS 131A, USGS 132, USGS 133, USGS 134, USGS 135, USGS 137A, MIDDLE 2050A, and MIDDLE 2051, Idaho National Laboratory, Idaho, 2011–13.—Continued

[Port No.: Identifier used to locate port couplings. **Hydraulic head** values in feet above National Geodetic Vertical Datum of 1929 (NGVD29). **Abbreviations:** °C, degrees Celsius; psi, pound per square inch; psia, pound per square inch absolute; ft, foot; –, no data]

<b>MIDDLE 2051 borehole</b>											
<b>Port No.</b>	<b>Fluid temperature (°C) corresponding to measurement event</b>										
	<b>06-27-2011</b>	<b>09-28-2011</b>	<b>11-29-2011</b>	<b>03-14-2012</b>	<b>06-19-2012</b>	<b>09-18-2012</b>	<b>11-28-2012</b>	<b>03-19-2013</b>	<b>06-20-2013</b>	<b>09-24-2013</b>	<b>11-26-2013</b>
1	15.2	15.3	15.2	15.0	15.1	15.1	15.1	15.1	15.0	14.4	14.8
2	15.2	15.2	15.2	15.0	15.1	15.0	15.1	15.1	15.0	14.8	14.8
3	15.2	15.2	15.2	15.0	15.0	15.0	15.0	15.0	15.0	14.8	14.8
4	14.9	14.9	15.0	14.7	14.8	14.8	14.8	14.7	14.9	14.6	14.6
5	14.0	13.9	14.0	13.7	13.7	13.7	13.9	13.7	13.7	13.5	13.7
6	13.7	13.7	13.7	13.4	13.5	13.5	13.6	13.5	13.5	13.3	13.4
7	13.6	13.6	13.6	13.4	13.5	13.5	13.5	13.4	13.5	13.2	13.3
8	13.5	13.5	13.6	13.4	13.4	13.4	13.4	13.4	13.4	13.2	13.2
9	13.3	13.4	13.4	13.2	13.2	13.2	13.2	13.2	13.3	13.0	12.9
10	12.1	11.6	12.1	11.7	12.0	11.9	12.0	11.5	11.5	11.8	11.7
11	11.4	11.1	11.3	11.0	11.1	11.2	11.2	10.7	11.2	10.7	11.0
12	10.8	10.8	10.8	10.6	10.7	10.7	10.7	10.5	10.9	10.4	10.5

  

<b>MIDDLE 2051 borehole</b>											
<b>Port No.</b>	<b>Fluid pressure (psia) corresponding to measurement event</b>										
	<b>06-27-2011</b>	<b>09-28-2011</b>	<b>11-29-2011</b>	<b>03-14-2012</b>	<b>06-19-2012</b>	<b>09-18-2012</b>	<b>11-28-2012</b>	<b>03-19-2013</b>	<b>06-20-2013</b>	<b>09-24-2013</b>	<b>11-26-2013</b>
1	261.09	261.10	261.31	261.25	261.27	261.01	261.10	261.13	260.92	260.59	260.75
2	256.84	256.85	257.04	257.01	257.03	256.75	256.86	256.87	256.67	256.33	256.50
3	239.52	239.52	239.71	239.69	239.73	239.44	239.52	239.56	239.35	239.01	239.17
4	201.23	201.25	201.43	201.41	201.43	201.16	201.25	201.28	201.07	200.74	200.89
5	146.64	146.67	146.88	146.82	146.90	146.60	146.66	146.68	146.50	146.14	146.31
6	123.63	123.67	123.87	123.80	123.89	123.59	123.65	123.66	123.48	123.14	123.29
7	108.73	108.75	108.97	108.88	108.97	108.67	108.73	108.75	108.56	108.22	108.39
8	100.91	100.92	101.15	101.07	101.17	100.85	100.92	100.95	100.75	100.40	100.57
9	89.93	89.95	90.17	90.10	90.19	89.87	89.95	89.97	89.78	89.44	89.60
10	45.87	45.90	46.10	46.04	46.11	45.80	45.87	45.89	45.71	45.36	45.54
11	33.63	33.84	34.07	34.31	34.66	34.67	34.79	34.89	34.59	34.01	33.94
12	29.77	30.01	30.24	30.62	31.11	31.36	31.60	31.59	31.24	30.53	30.34

  

<b>MIDDLE 2051 borehole</b>											
<b>Port No.</b>	<b>Hydraulic head (ft) corresponding to measurement event</b>										
	<b>06-27-2011</b>	<b>09-28-2011</b>	<b>11-29-2011</b>	<b>03-14-2012</b>	<b>06-19-2012</b>	<b>09-18-2012</b>	<b>11-28-2012</b>	<b>03-19-2013</b>	<b>06-20-2013</b>	<b>09-24-2013</b>	<b>11-26-2013</b>
1	4,430.3	4,430.0	4,430.3	4,430.7	4,430.7	4,429.7	4,430.0	4,430.1	4,429.8	4,429.0	4,429.0
2	4,430.3	4,430.0	4,430.3	4,430.7	4,430.7	4,429.7	4,430.1	4,430.1	4,429.7	4,429.0	4,428.9
3	4,430.3	4,430.0	4,430.2	4,430.7	4,430.8	4,429.7	4,430.0	4,430.1	4,429.7	4,429.0	4,428.9
4	4,430.2	4,429.9	4,430.2	4,430.6	4,430.7	4,429.7	4,430.0	4,430.0	4,429.7	4,429.0	4,428.9
5	4,427.0	4,426.7	4,427.1	4,427.4	4,427.6	4,426.5	4,426.8	4,426.8	4,426.5	4,425.8	4,425.7
6	4,427.0	4,426.7	4,427.0	4,427.4	4,427.6	4,426.5	4,426.8	4,426.7	4,426.5	4,425.8	4,425.7
7	4,427.0	4,426.7	4,427.0	4,427.3	4,427.5	4,426.5	4,426.7	4,426.7	4,426.4	4,425.7	4,425.6
8	4,426.9	4,426.6	4,427.0	4,427.3	4,427.6	4,426.5	4,426.7	4,426.7	4,426.4	4,425.7	4,425.6
9	4,427.0	4,426.7	4,427.1	4,427.4	4,427.6	4,426.5	4,426.8	4,426.8	4,426.5	4,425.8	4,425.7
10	4,427.0	4,426.8	4,427.1	4,427.4	4,427.6	4,426.5	4,426.8	4,426.8	4,426.5	4,425.8	4,425.7
11	4,433.3	4,433.4	4,433.8	4,434.8	4,435.7	4,435.3	4,435.7	4,435.9	4,435.3	4,434.1	4,433.5
12	4,434.2	4,434.5	4,434.9	4,436.2	4,437.4	4,437.6	4,438.2	4,438.1	4,437.5	4,436.0	4,435.1