

Appendix 10. Water-Quality Data—Continued

Appendix 10-1B. Water-quality data for the period July 2004 through July 2007, for the Kabul Basin, Afghanistan

[°C, degrees Celsius; mg/L, milligrams per liter; samples analyzed at USGS laboratory; --, not applicable; pg/kg, picogram per kilogram water]

Table 10-1B Water-quality data for the period July 2004 through July 2007, for the Kabul Basin, Afghanistan.—Continued

ID	Local name	Date (month/ day/year)	Time (hhmm)	Subbasin or source water area	Water temper- ature (°C)	Delta 2H x1000	Delta 18O x1000	Tritium TU	Tritium Plus Minus	CFC11 (pg/kg)	CFC12 (pg/kg)
2.1	Well 2.1	06-07-06	0945	Eastern Front	20.5	-58.9	-9.7				
6	Karez N6	05-10-06	1140	Eastern Front	16.3	-54	-9.04				
7	Well 7	06-04-06	0945	Eastern Front	12.6	-48.8	-8.78				
8	Well 8	06-07-06	1025	Deh Sabz	17.4	-55	-8.29				
10	Karez 10	05-10-06	1205	Eastern Front		-54.6	-9.23				
13	Well 13	05-16-06	1200	Deh Sabz	20.1	-56.6	-8.98	16.7	0.5	246	185
15	Well 15	05-30-06	1510	Deh Sabz	15.8	-52.4	-8.02				
20	Well 20	06-10-06	0925	Western Front	13.2	-45.8	-8.16				
21	Well 21	06-12-06	0920	Western Front	14	-53.1	-9.01				
22.1	Well 22.1	06-12-06	0945	Shomali	14.1	-47.9	-8.11				
24	Well 24	06-14-06	0950	Shomali	15.5	-50.1	-8.47				
25	Well 25	06-14-06	1015	Shomali	15.8	-52.8	-8.55				
28	Well 28	05-23-06	1300	Shomali	13.7	-52.4	-8.49	15.8	0.5	424	219
33	Well 33	05-23-06	1030	Western Front	16.3	-49.5	-8.43	20.1	0.6	203	142
37	Well 37	05-14-06	1000	Deh Sabz	18.8	-63	-9.69	0.87	0.13	195	134
41	Well 41	05-28-06	0950	Western Front	18.1	-50.2	-8.7				
42	Well 42	05-28-06	0810	Shomali	15.8	-55.8	-9.08	8.29	0.28	309	172
43	Well 43	05-28-06	0925	Western Front	15.2	-52.3	-8.9				
45	Well 45	05-30-06	1220	Western Front	18.2	-56.2	-9.29				
47	Well 47	05-30-06	1345	Shomali	16.1	-53.7	-8.62	8.41	0.28	447	234
52	Well 52	06-10-06	1030	Western Front	13.8	-45.7	-8.15				
54	Well 54	05-21-06	1145	Deh Sabz	18.2	-59.1	-9.03	5.08	0.21	128	77
59.1	Well 59.1	05-10-06	1005	Eastern Front	17.7	-55.2	-9.3	5.25	0.22	245	204
64	Well 64	06-24-06	0830	Central Kabul	16.9	-55.9	-8.87				
65	Well 65	05-25-06	0930	Central Kabul	21.6	-60.7	-9.28	9.0	0.3	195	108
66.1	Spring 66.1	05-10-06	1110	Eastern Front	15.3	-50.5	-8.85	12.7	0.4	322	232
67	Well 67	12-09-06	1300	Western Front	14.5	-56.9	-9.34	11.8	0.4		
67.1	Kheelre Spring	05-23-06	1145	Shomali	16.7	-49.9	-8.24	18.0	0.5	383	248
67.2	Spring 67A	06-17-06	1120	Shomali	18.6	-51.7	-8.53				
68.1	Spring 68	05-21-06	1000	Shomali	14.9	-50.1	-8.38	16.3	0.5	473	225
69.1	Karez 69.1	05-10-06	1030	Eastern Front	18.3	-50	-8.72				
71	Azizi Hotak Tank	06-05-07	0940	Eastern Front	20	-56.5	-9.46	0.41	0.17	220	157
72	Well 72	06-12-07	0900	Shomali	15.2	-50	-8.39	17.4	0.5	600	233
73	9 Pola Qare Bagh	06-17-07	1015	Western Front	16.3	-55	-9.18	8.64	0.27	232	122
74	Well 74	06-19-07	1140	Shomali	15.2	-57.5	-9.17	10.4	0.4	471	279
100	Swedish well 224	06-03-06	1100	Western Front	13.2	-46.8	-8.19				
101	Spring 101	05-13-06	1130	Western Front	11	-45.9	-8.16	11.0	0.3	752	360
104	Well 104	05-13-06	1100	Western Front	14.4	-50.3	-8.46	7.56	0.25	491	251
104	Well 104	12-03-06	1220	Western Front	12.1	-48.3	-8.34	13.1	0.4		
105	Karez 105	05-13-06	1000	Paghman/Upper Kabul	14.7	-41.9	-6.94	11.4	0.3	364	221
107	Well 107	05-15-06	1040	Paghman/Upper Kabul	15.5	-59.8	-9.29	6.78	0.22	191	99.5
112	Well 112	06-03-06	1200	Paghman/Upper Kabul	16.2	-55.3	-8.47				
113	Well 113	05-29-06	0930	Paghman/Upper Kabul	15.4	-56.2	-8.84				
115	Well 115	05-29-06	1015	Paghman/Upper Kabul	19.5	-47.5	-8.43				
116	Well 116	05-29-06	1105	Logar	15.9	-54.7	-8.58				
117	Well 117	05-15-06	1220	Paghman/Upper Kabul	16.6	-53.1	-8.48	15.2	0.5	440	252
124	Well 124	05-27-06	0900	Central Kabul	14.5	-56.1	-8.87				
129	Well 129	05-24-06	1255	Central Kabul	17.6	-55.6	-8.79	15.0	0.5	437	539
133	Well 133	05-27-06	0930	Central Kabul	16.2	-55	-8.52				
135	Well 135	05-17-06	1050	Logar	15.3	-53.9	-8.28	15.90	0.50	396	221
140	Well 140	05-29-06	1220	Logar	15.8	-54.7	-8.18				
143	Well 143	05-29-06	1200	Logar	14.5	-55.3	-8.27				

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Table 10-1B Water-quality data for the period July 2004 through July 2007, for the Kabul Basin, Afghanistan.—Continued

ID	Local name	Date		Subbasin or source water area	Water temperature (°C)	Delta 2H x1000	Delta 18O x1000	Tritium TU	Tritium Plus Minus	CFC11 (pg/kg)	CFC12 (pg/kg)
		(month/day/year)	Time (hhmm)								
148	Well 148	06-05-06	1015	Central Kabul	18.1	-55.3	-7.97				
152	Well 152	06-05-06	1000	Central Kabul	16.6	-52.5	-8.24				
153	Well 153	05-20-06	1305	Central Kabul	20	-45.4	-7.34	7.95	0.27	96.3	193
156	Well 156	05-27-06	1000	Central Kabul	15.3	-46.1	-7.18				
157	Well 157	05-27-06	1010	Central Kabul	18	-57.6	-8.56				
162.2	Well 162.2	05-31-06	1020	Central Kabul	16.6	-55.2	-8.58				
163	Well 163	05-31-06	1040	Central Kabul	16.1	-53.3	-8.38				
165	Well 165	05-22-06	1000	Central Kabul	16.2	-59	-9.14	2.81	0.15	160	1630
167	Well 167	06-20-06	0945	Central Kabul	20.4	-62.4	-9.37				
168	Well 168	05-22-06	1040	Central Kabul	18.4	-58	-9.06	7.78	0.28	1560	890
170	Well 170	06-18-06	1150	Central Kabul	17.6	-50.3	-7.75				
172	Well 172	05-22-06	1145	Central Kabul	22.5	-54.6	-8.5	12.3	0.4	222	455
173	Well 173	06-18-06	1050	Central Kabul	16.1	-60.3	-9.17				
180	Spring 180	05-17-06	0945	Central Kabul	18.6	-53.5	-8.6	18.0	0.6	4.91	67.2
181	Chari Sib Spring	05-17-06	1135	Logar	14.8	-55.1	-8.79	12.5	0.4	407	253
182	Well 182	06-02-07	1155	Paghman/Upper Kabul	16	-50.5	-8.48	11.5	0.4	506	246
183	Hootkhel-Nowbahar Pump Station	06-04-07	0905	Central Kabul	18.1	-54.2	-8.62	12.4	0.4	167	8,880
184	Well 184	06-06-07	0920	Paghman/Upper Kabul	15.6	-56.6	-8.96	10.9	0.4	520	1,080
185	Well 185	06-16-07	1050	Central Kabul	20.3	-58.6	-8.97	2.01	0.19	270	161
186	Well 186	06-18-07	0940	Central Kabul	18.5	-62.4	-9.36	0.56	0.10	209	109
187	Hotuk Pump Station	06-20-07	1030	Logar	15.4	-54.6	-8.25	8.5	0.4	265	219
201	Well 201	06-13-06	1045	Logar	14.6	-56.2	-8.41				
202	Well 202	06-13-06	1000	Logar	15.1	-56.8	-8.45				
203	Well 203	05-20-06	1110	Logar	16.2	-56.8	-8.6	12.0	0.4	379	210
204	Well 204	06-13-06	1020	Logar	14.4	-56.4	-8.33				
208	Well 208	05-20-06	0930	Central Kabul	18.3	-56.2	-8.89	12.3	0.4	380	241
210	Well 210	05-31-06	0940	Central Kabul	16.7	-55.1	-8.76				
211	Well 211	06-08-06	0915	Paghman/Upper Kabul	16.1	-56.2	-8.76				
212	Well 212	06-08-06	0950	Paghman/Upper Kabul	15	-55	-8.78				
213	Well 213	05-15-06	1305	Paghman/Upper Kabul	15.1	-54.3	-8.74	14.1	0.4	545	412
214	Well 214	06-11-06	1245	Paghman/Upper Kabul	16.3	-50.6	-8.04				
216	Well 216	06-11-06	1125	Paghman/Upper Kabul	15.4	-53.5	-8.6				
217	Well 217	06-11-06	1100	Paghman/Upper Kabul	17.1	-52.4	-8.43				
218	Well 218	06-20-06	1030	Central Kabul	20.1	-64.5	-9.56				
219	Well 219	06-20-06	1000	Central Kabul	19.1	-63.3	-9.38	2.57	0.17	159	106
220	Well 220	06-20-06	1100	Central Kabul	20.8	-61.9	-9.29				
221	Well 221	12-05-06	1120	Logar	13	-56.1	-8.44	6.77	0.22		
221	Well 221	02-19-07	1120	Logar	13.8			6.80	0.22	224	150
222	Afshar 6B	12-10-06	1220	Paghman/Upper Kabul	12.7	-56.2	-9.04	14.5	0.4		
223	US Embassy CAFE well	02-22-07	1400	Central Kabul	16.3	-59.1	-9.16	6.95	0.25	130	158
301	Istalef River at Istalef	12-04-06	1310	Shomali	5.3	-54.8	-9.44				
301	Istalef River at Istalef	12-18-06	0945	Shomali	4.4	-47.7	-8.38				
301	Istalef River at Istalef	01-02-07	1220	Shomali	4.6	-48.4	-8.42				
301	Istalef River at Istalef	01-16-07	1050	Shomali	4.2	-47.6	-8.49				
301	Istalef River at Istalef	01-30-07	1040	Shomali	7.5	-47.7	-8.39				
301	Istalef River at Istalef	02-13-07	1145	Shomali	7.6	-50.7	-8.75	7.77	0.26	638	326
301	Istalef River at Istalef	02-27-07	1100	Shomali	6.9	-52.3	-8.75				
301	Istalef River at Istalef	03-13-07	1045	Shomali	6	-52	-8.9	10.2	0.4		
301	Istalef River at Istalef	03-27-07	1000	Shomali	11	-52.9	-9.12				
301	Istalef River at Istalef	04-10-07	0845	Shomali	9.4	-51.6	-9.09	10.1	0.4		
301	Istalef River at Istalef	04-24-07	1055	Shomali	12.5	-52.9	-9.16				

Table 10-1B Water-quality data for the period July 2004 through July 2007, for the Kabul Basin, Afghanistan.—Continued

ID	Local name	Date (month/ day/year)	Time (hhmm)	Subbasin or source water area	Water temper- ature (°C)	Delta 2H x1000	Delta 18O x1000	Tritium TU	Tritium Plus Minus	CFC11 (pg/kg)	CFC12 (pg/kg)
301	Istalef River at Istalef	06-14-07	0920	Shomali	14.7	-52.4	-9.06			1,090	256
301	Istalef River at Istalef	07-15-07	1105	Shomali	17.8	-48.8	-8.52			398	202
302	Panjshir River at Sayad	12-09-06	1155	Shomali	9.5	-61.9	-10.02				
302	Panjshir River at Sayad	12-26-06	1210	Shomali	11.4	-60.1	-9.79				
302	Panjshir River at Sayad	01-09-07	1115	Shomali	9.1	-61.6	-9.92				
302	Panjshir River at Sayad	01-23-07	1125	Shomali	9.4	-62.4	-9.9				
302	Panjshir River at Sayad	02-06-07	1130	Shomali	12.5	-60.9	-9.81	11.2	0.4	505	250
302	Panjshir River at Sayad	02-20-07	1140	Shomali	10.5	-60.7	-9.84				
302	Panjshir River at Sayad	03-06-07	1100	Shomali	12.7	-59.1	-9.74	10.8	0.4		
302	Panjshir River at Sayad	03-20-07	0945	Shomali	8.9	-63.4	-10.25				
302	Panjshir River at Sayad	04-03-07	1210	Shomali	11.2	-62.1	-9.95	9.9	0.4		
302	Panjshir River at Sayad	04-17-07	0855	Shomali	12.3	-59.7	-9.83				
302	Panjshir River at Sayad	06-19-07	1030	Shomali	14.8	-66.5	-10.68			532	270
303	Barik Ab River	12-26-06	1030	Shomali	2.3	-63.1	-9.91				
303	Barik Ab River	01-09-07	1015	Shomali	0.6	-62.9	-9.73				
303	Barik Ab River	01-23-07	1240	Shomali	0.7	-62.4	-9.7				
303	Barik Ab River	02-20-07	1020	Shomali	11.1	-53.3	-8.51	8.61	0.29	494	270
303	Barik Ab River	03-06-07	1000	Shomali	7.5	-60.2	-9.47				
303	Barik Ab River	03-20-07	0830	Shomali	9.4	-50.5	-8.52	8.67	0.29		
303	Barik Ab River	04-03-07	1055	Shomali	9.2	-51.3	-8.84				
303	Barik Ab River	04-17-07	1000	Shomali	14.8	-55.4	-9.48	6.65	0.24		
321	Logar River	12-05-06	1010	Logar	4.9	-61	-9.44				
321	Logar River	12-19-06	1040	Logar	4.1	-61.6	-9.28				
321	Logar River	01-06-07	0950	Logar	0.5	-61.1	-9.28				
321	Logar River	01-21-07	1050	Logar	0.7	-61.5	-9.24				
321	Logar River	02-07-07	1100	Logar	7.8	-61.2	-9.41	6.52	0.23	623	333
321	Logar River	02-21-07	1055	Logar	6.2	-60.4	-9.25				
321	Logar River	03-07-07	1000	Logar	9.1	-60.2	-9.02	6.7	0.4		
321	Logar River	03-19-07	0955	Logar	9.6	-58.6	-9.14				
321	Logar River	04-04-07	0955	Logar	11.2	-60.2	-9.22	8.0	0.4		
321	Logar River	04-18-07	1010	Logar	16.4	-59.5	-9.27				
321	Logar River	06-20-07	1110	Logar	22.2	-51.7	-7.65			238	162
322	Kabul River at Tang-i-gharu	12-05-06	1320	Central Kabul	6.2	-58	-8.95				
322	Kabul River at Tang-i-gharu	12-25-06	1335	Central Kabul		-60	-9.23				
322	Kabul River at Tang-i-gharu	01-06-07	1225	Central Kabul	0.8	-59.9	-9.12				
322	Kabul River at Tang-i-gharu	01-21-07	1340	Central Kabul	4.2	-58.4	-9.04				
322	Kabul River at Tang-i-gharu	02-07-07	1300	Central Kabul	10	-59.6	-9.11	7.15	0.25	701	319
322	Kabul River at Tang-i-gharu	02-21-07	1340	Central Kabul	7.8	-60.7	-9.24				
322	Kabul River at Tang-i-gharu	03-07-07	1000	Central Kabul	10.9	-57.7	-8.93	8.1	0.4		
322	Kabul River at Tang-i-gharu	03-19-07	1105	Central Kabul	8.8	-55	-8.8				
322	Kabul River at Tang-i-gharu	04-04-07	1200	Central Kabul	11.8			9.2	0.4		
322	Kabul River at Tang-i-gharu	04-18-07	1235	Central Kabul	16.9	-59.3	-9.48				
322	Kabul River at Tang-i-gharu	06-04-07	1115	Central Kabul	22.6	-47.7	-7.71			78.9	178
322	Kabul River at Tang-i-gharu	07-04-07	0955	Central Kabul	22.9	-54.1	-8.27			363	166
323	Paghman River at Paghman	12-10-06	1300	Paghman/Upper Kabul	8.5	-47.2	-8.62				
323	Paghman River at Paghman	12-25-06	1205	Paghman/Upper Kabul	3.7	-49.8	-8.7				
323	Paghman River at Paghman	01-10-07	1220	Paghman/Upper Kabul	4.6	-49.2	-8.58				
323	Paghman River at Paghman	01-25-07	1130	Paghman/Upper Kabul	7.5	-48	-8.6				
323	Paghman River at Paghman	02-10-07	1350	Paghman/Upper Kabul	5.7	-52.9	-9.22	7.15	0.25	689	331
323	Paghman River at Paghman	02-24-07	1245	Paghman/Upper Kabul	6.3	-52.9	-9.04				
323	Paghman River at Paghman	03-10-07	1225	Paghman/Upper Kabul	7.7	-55.1	-9.31	10.2	0.4		
323	Paghman River at Paghman	03-24-07	1215	Paghman/Upper Kabul	12.3	-56.4	-9.4				

Table 10-1B Water-quality data for the period July 2004 through July 2007, for the Kabul Basin, Afghanistan.—Continued

ID	Local name	Date (month/ day/year)	Time (hhmm)	Sub basin or source water area	Water temper- ature (°C)	Delta 2H x1000	Delta 18O x1000	Tritium TU	Tritium Plus Minus	CFC11 (pg/kg)	CFC12 (pg/kg)
323	Paghman River at Paghman	04-07-07	1230	Paghman/Upper Kabul	11.8	-55.6	-9.44	9.6	0.4		
323	Paghman River at Paghman	06-02-07	1030	Paghman/Upper Kabul	18	-57.2	-9.58			399	208
323	Paghman River at Paghman	07-02-07	1005	Paghman/Upper Kabul	18	-55.6	-9.38			4.46	51.9
324	Kabul River at Tangi Saedan	12-10-06	1020	Paghman/Upper Kabul	5.5	-54.8	-8.92				
324	Kabul River at Tangi Saedan	12-25-06	1045	Paghman/Upper Kabul	14.7	-56.9	-9.2				
324	Kabul River at Tangi Saedan	01-10-07	0955	Paghman/Upper Kabul	2.7	-55.2	-8.96				
324	Kabul River at Tangi Saedan	01-25-07	1010	Paghman/Upper Kabul	6.3	-54.3	-8.98				
324	Kabul River at Tangi Saedan	02-10-07	1100	Paghman/Upper Kabul	6.9	-58.8	-9.3	10.8	0.3	656	327
324	Kabul River at Tangi Saedan	02-24-07	1130	Paghman/Upper Kabul	6.3	-54.5	-9.01				
324	Kabul River at Tangi Saedan	03-10-07	0900	Paghman/Upper Kabul	6.4	-57.4	-9.21	10.6	0.3		
324	Kabul River at Tangi Saedan	03-24-07	1040	Paghman/Upper Kabul	8.1	-59.3	-9.47				
324	Kabul River at Tangi Saedan	04-07-07	1010	Paghman/Upper Kabul	11.2	-58.8	-9.55	10.8	0.5		
324	Kabul River at Tangi Saedan	04-21-07	1015	Paghman/Upper Kabul	11.4	-59.3	-9.64				
987	Panjshir River at Shukhi	05-11-06	0000	Panjsher		-61.8	-10.13	12.1	0.6		

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