Water Quality Status Report No. 118

Ground Water Study of the Lower Boise River Valley Ada and Canyon Counties, Idaho

Idaho Department of
Health and Welfare
Division of Environmental Quality
May 1996

APPENDIX B

Table 8

Nutrient, Bacteria and Radon Results

Headnotes for Tables 8, 9, 10, and 11

Well Location: well location in latitude and longitude or township, range and section

Primary Use of Water:

H	domestic
I	irrigation
P	public supply
C	commercial
D	dewater
S	stock
F	fire

Units of Measure:

°C	degrees celsius
US/CM	microsiemens per centimeter at 25 °C
<	less than
>	greater than
MG/L	milligrams per liter
STAND UNITS	standard units
MG/L as N	milligrams per liter as nitrogen
DISS	dissolved
MG/L as PO4	milligrams per liter as phosphate
MG/L as P	milligrams per liter as phosphorus
COL/100 ML	colonies per 100 milliliters
PCI/L	picocuries per liter
UG/L	micrograms per liter
H2O	water
REC	recoverable
GF	glass fiber filter
FLT	filtered
U	micron (filter pore size)
ND	non-detect
*	results from Dept. of Ag study
MG/L as CACO3	milligrams per liter as calcium carbonate
MG/L as CA	milligrams per liter as calcium
MG/L as MG	milligrams per liter as magnesium
MG/L as NA	milligrams per liter as sodium
MG/L as K	milligrams per liter as potassium
MG/L as CL	milligrams per liter as chloride
MG/L as SO4	milligrams per liter as sulfate
MG/L as F	milligrams per liter as fluoride
MG/L as SIO2	milligrams per liter as silica
UG/L as AS	micrograms per liter as arsenic
UG/L as CD	micrograms per liter as cadmium
UG/L as CR	micrograms per liter as chromium
UG/L as FE	micrograms per liter as iron

	A	B	C	D	E	F	G	H	I	J	K	L
1 2 3 4 5	LATITUDE	LONGITUDE	TOWNSHIP RANGE & SECTION	DATE SAMPLED	DEPTH OF WELL (FEET)	PRIMARY USE OF WATER	WATER TEMP (°C)	SPECIFIC COND. (US/CM)	OXYGEN DISS (MG/L)	pH FIELD (STAND UNITS)	ALKALINITY (MG/L)	BICARBONATE (MG/L)
258	43°41'42"	116°26'18"	04N 01W 10DCA1	08-02-95	259	H	14.5	159	2.7	7.5	76	93
259	43°41'42"	116°26'32"	04N 01W 10DCBB1	08-02-95	70	H	16	159		7.2	73	89
260	43°41'36"	116°26'07"	04N 01W 10DDCA1	08-02-95	230	H	15	134	3	7.3	65	79
261	43°41'32"	116°25'35"	04N 01W 11CDCD1	08-29-95	150	H	15.5	125	1.5	7.3	58	70
262	43°41'55"	116°24'53"	04N 01W 11DAAB1	08-03-95	84	H	14	176	5.6	7	75	92
263	43°42'07"	116°24'12"	04N 01W 12BDAD1	07-25-95	230	H	15.5	192	3.4	7.1	83	100
264	43°41'45"	116°23'45"	04N 01W 12DACD1	07-24-95	98	H	15	214	7	5.6	88	110
265	43°41'50"	116°23'41"	04N 01W 12DADB1	07-24-95	191	H	14.5	185	6.2	7.1	79	96
266	43°41'47"	116°23'38"	04N 01W 12DADD1	07-24-95	209	H	15	238	4.3	7.2	100	120
267	43°41'39"	116°23'50"	04N 01W 12DDB1	07-21-95	81	H	14	245	6.3	7.1	96	120
268	43°41'15"	116°24'38"	04N 01W 13BCBA1	07-25-95	160	H	17.5	189	2.7	7.1	73	89
269	43°40'54"	116°24'28"	04N 01W 13CBD1	07-25-95	32	H	11.5	302	0.6	6.5	134	160
270	43°40'40"	116°24'18"	04N 01W 13DCC5	08-30-95	128	N	13	468	5.1	6.9	194	240
271	43°41'22"	116°25'39"	04N 01W 14BAC1	09-05-95		H	14	148	>7	7.3	59	72
272	43°41'30"	116°25'44"	04N 01W 14BBAB2	08-30-95	108	H	14	136	4	7.3	61	74
273	43°41'05"	116°25'37"	04N 01W 14CAB1	09-05-95		I	14	180	6	7.1	72	88
274	43°40'59"	116°25'42"	04N 01W 14CBA1	09-05-95		I	14.5	179	6.4	7.2	74	90
275	43°40'58"	116°25'55"	04N 01W 14CBBC1	07-26-95	160	H	15	219		7	69	84
276	43°41'20"	116°26'20"	04N 01W 15ABDC1	08-03-95	78	H	14	140	3.7	7.3	88	110
277	43°41'08"	116°26'30"	04N 01W 15ACCB1	08-31-95	116	H	14.5	136		7.5	60	73
278	43°41'23"	116°27'11"	04N 01W 16AADA1	08-07-95	261	H	15.5	140	5.3	7.4	124	150
279	43°41'04"	116°27'47"	04N 01W 16CAAA1	08-08-95	160	H	13.5	115	5.6	7.4	59	71
280	43°41'22"	116°29'31"	04N 01W 17BBCB1	09-12-95	125	H	13.5	104	1.4	7.1	55	67
281	43°41'24"	116°29'21"	04N 01W 17BBDB1	08-09-95	149	H	14	110	4.8	7.1	51	62
282	43°41'20"	116°29'21"	04N 01W 17BBDC1	08-09-95	424	H	15.5	124	4.6	7.6	60	73
283	43°41'21"	116°29'43"	04N 01W 18AACD1	08-31-95	374	C	14.5	130		8.1	66	81
284	43°40'09"	116°28'02"	04N 01W 21CABC1	08-10-95	105	H	13.5	764	5.7	7.1	262	320
285	43°40'02"	116°27'45"	04N 01W 21DBCC1	08-10-95	168	H	14	541		7.2	169	210
286	43°39'48"	116°27'31"	04N 01W 21DCDD1	08-31-95	243	H	14.5	550		7.2	162	200
287	43°40'13"	116°25'22"	04N 01W 23ACCC2	08-10-95	155	H	14.5	674		7.1	290	350
288	43°40'01"	116°24'48"	04N 01W 23DADD1	09-07-95	70.8	H	12.5	622	>7	7.3	244	300
289	43°40'04"	116°25'16"	04N 01W 23DBCA1	08-10-95	133	H	13	701		7.2	291	360
290	43°39'57"	116°24'54"	04N 01W 23DDAB3	09-19-95	80	I	13.5	680	5.5	7.3	288	350
291	43°39'54"	116°24'54"	04N 01W 23DDAC2	09-07-95	182	H	13	697	>7	7.2	303	370
292	43°39'55"	116°24'47"	04N 01W 23DDAD1	08-14-95	220	H	13.5	582		7.1	257	310
293	43°40'26"	116°23'56"	04N 01W 24ACAB1	09-11-95	120	H	13.5	596	6.7	7.2	259	320
294	43°40'27"	116°23'56"	04N 01W 24ACAB2	09-11-95	85	I	12.5	591	>7	7.1	278	330
295	43°40'18"	116°23'51"	04N 01W 24ACDA1	09-19-95	98	H	14	369	5.1	7.1	152	190
296	43°40'24"	116°23'35"	04N 01W 24ADAA2	08-14-95	133	H	15	541		7	260	320
297	43°40'39"	116°24'34"	04N 01W 24BBAB1	09-28-95	209	I	13	381	>7	7.8	151	180
298	43°40'20"	116°24'34"	04N 01W 24BCAC1	08-14-95	235	H	13.5	609		7	246	300
299	43°40'21"	116°24'10"	04N 01W 24BDAD2	08-15-95	121	H	13	514		7.1	224	270

Nutrients, bacteria and radon results

Table 8

	M	N	O	P	Q	R	S	T	U	V	W
1	NITROGEN	NITROGEN	NITROGEN	NITROGEN	NITROGEN	NITROGEN	PHOS	PHOS	TOTAL	FECAL	RADON
2	NH4, DISS	NO2, DISS	NO3, DISS	NO3	NO2+NO3	NO2+NO3	PHATE,	PHORUS,	COLI-	COLI-	222
3	(MG/L as N)	(MG/L as N)	(MG/L as N)	TOTAL	TOTAL	DISS	ORTHO	ORTHO	FORM	FORM	TOTAL
4				(MG/L as N)	(MG/L as N)	(MG/L as N)	DISS(MG/L	DISS	(COL/	(COL/	(PCI/L)
5							as PO4)	(MG/L as P)	100ML)	100ML)	
258	ND	ND				ND	0.12	0.04	0	0	
259	ND	ND				ND	0.12	0.04	0	0	
260	ND	ND				ND	0.09	0.03	0	0	
261	ND	ND		0.06	0.06	0.06	0.09	0.03	0	0	
262	ND	ND		0.35	0.35	0.35	0.09	0.03	0	0	410
263	0.03	ND		0.18	0.18	0.18	0.18	0.06	0	0	
264	0.03	ND		0.45	0.45	0.45	0.09	0.03	0	0	
265	0.03	ND		0.30	0.30	0.30	0.21	0.07	0	0	
266	0.03	ND		0.43	0.43	0.43	0.09	0.03	0	0	530
267	0.02	ND		0.69	0.69	0.69	0.09	0.03	2	0	480
268	0.03	ND		0.58	0.58	0.58	0.18	0.06	0	0	
269	0.16	ND	0.03	0.03	0.06	0.06		ND	2	0	
270	ND	ND		2.00	2.00	2.00	0.03	0.01	0	0	
271	ND	ND		0.12	0.12	0.12	0.03	0.01	0	0	
272	ND	ND		0.16	0.16	0.16	0.09	0.03	0	0	290
273	ND	ND		0.44	0.44	0.44	0.06	0.02	0	0	
274	ND	ND		0.15	0.15	0.15	0.12	0.04	0	0	
275	0.03	ND		0.72	0.72	0.72	0.06	0.02	0	0	
276	0.02	ND		0.06	0.06	0.06	0.09	0.03	0	0	420
277	ND	ND		0.20	0.20	0.20	0.09	0.03	0	0	
278	0.02	ND		0.06	0.06	0.06	0.12	0.04	0	0	
279	ND	ND		0.13	0.13	0.13	0.03	0.01	0	0	
280	ND	ND				ND	0.06	0.02	0	0	350
281	0.02	ND		0.07	0.07	0.07		ND	0	0	
282	ND	ND		0.07	0.07	0.07	0.06	0.02	0	0	
283	0.02	ND				ND	0.09	0.03	0	0	
284	ND	ND		2.70	2.70	2.70	0.09	0.03	2	0	
285	ND	ND		2.20	2.20	2.20	0.03	0.01	0	0	
286	ND	ND		1.80	1.80	1.80		ND	0	0	
287	ND	ND		4.20	4.20	4.20	0.03	0.01	1	0	
288	ND	ND		11.00	11.00	11.00	0.77	0.25	0	0	
289	ND	ND		8.10	8.10	8.10	0.03	0.01	0	0	
290	ND	ND		8.70	8.70	8.70	0.4	0.13	0	0	
291	ND	ND		6.00	6.00	6.00	0.06	0.02	0	0	
292	0.03	ND		3.20	3.20	3.20		ND	0	0	
293	ND	ND		5.10	5.10	5.10	0.09	0.03	0	0	
294	ND	ND		3.10	3.10	3.10	0.03	0.01	0	0	
295	ND	ND		1.60	1.60	1.60		ND	0	0	
296	0.02	ND		2.30	2.30	2.30	0.06	0.02	0	0	
297	ND	0.01	1.49	1.49	1.50	1.50	0.03	0.01	0	0	
298	0.03	ND		3.00	3.00	3.00	0.03	0.01	0	0	
299	0.02	ND		5.00	5.00	5.00	0.09	0.03	0	0	

	A	B	C	D	E	F	G	H	I	J	K	L
1	LATITUDE	LONGITUDE	TOWNSHIP RANGE & SECTION	DATE SAMPLED	DEPTH OF WELL (FEET)	PRIMARY USE OF WATER	WATER TEMP (°C)	SPECIFIC COND. (US/CM)	OXYGEN DISS (MG/L)	pH FIELD (STAND UNITS)	ALKALINITY (MG/L)	BICARBONATE (MG/L)
2												
3												
4												
5												
300	43°40'24"	116°24'26"	04N 01W 24BDBB1	08-14-95	147	H	13	607		7.1	253	310
301	43°39'48"	116°24'29"	04N 01W 24CCDD1	08-15-95	143	H	13.5	637		7.3	277	340
302	43°39'26"	116°23'34"	04N 01W 25ADDA1	09-14-95	125	H	12.5	442	3.4	7.4	209	260
303	43°39'25"	116°25'59"	04N 01W 27ADDA1	08-31-95	30	H	12.5	856	6.2	7.4	343	420
304	43°39'35"	116°27'20"	04N 01W 28AADC1	10-12-95	120	H	13.5	736	5.7	7.2	265	320
305	43°39'14"	116°28'20"	04N 01W 28CBCB2	09-20-95	200	H	14.5	123	1.9	7.3	50	61
306	43°39'23"	116°28'24"	04N 01W 29ADDD1	10-19-95	100	H	12.5	791	1.9	7.3	317	390
307	43°39'42"	116°30'09"	04N 01W 30ABBC1	10-23-95	237	H	13.5	625		7.3	219	270
308	43°39'34"	116°29'36"	04N 01W 30ADAA2	09-20-95	99	H	13.5	775	6.3	7.5	335	410
309	43°38'30"	116°30'43"	04N 01W 31BCCC1	08-15-95	67	H	13.5	587		7.4	169	210
310	43°38'35"	116°30'28"	04N 01W 31BCDA1	08-15-95	312	F	15	359		6.3	91	110
311	43°38'30"	116°30'34"	04N 01W 31BCDC1	08-15-95	126	F	14.5	495	5.7	6.6	194	240
312	43°38'31"	116°30'24"	04N 01W 31BDCC1	08-15-95	120	C	14.5	588		6.9	223	270
313	43°38'34"	116°30'10"	04N 01W 31BDDA1	08-15-95	78	D	13	787		6.9	268	330
314	43°38'49"	116°29'32"	04N 01W 32BBBC1	09-26-95	65	H	12.5	560	4.4	8	234	290
315	43°38'49"	116°29'32"	04N 01W 32BBBC1	10-03-95	65	H						
316	43°38'17"	116°28'12"	04N 01W 33CBDC2	09-20-95	119	H	13.5	543	5.3	7.3	199	240
317	43°38'30"	116°26'03"	04N 01W 34ADDC1	09-21-95	355	H	12.5	733	>7	7.7	230	280
318	43°38'51"	116°24'45"	04N 01W 36BBBB2	09-07-95		H	13	738	>7	7.3	350	430
319	43°41'59"	116°34'19"	04N 02W 09ADD1	10-18-95	197	H	13	171	3.3	6.9	58	71
320	43°41'59"	116°34'20"	04N 02W 09ADD2	10-18-95	200	H	13	242	4.1	6.8	70	86
321	43°41'51"	116°31'55"	04N 02W 12CBC1	07-12-95	155	H	13.5	175	0.4	7	84	100
322	43°39'08"	116°36'42"	04N 02W 29CCB1	07-20-95	130	H	14.5	144		8.8	56	68
323	43°39'35"	116°36'47"	04N 02W 30ADA1	08-22-95	80	H	15	224		7.6	68	82
324	43°42'10"	116°42'27"	04N 03W 09BBD1	07-25-95	200	P	15	686		7.8	226	280
325	43°41'28"	116°38'36"	04N 03W 13BAA1	08-13-95	185	S	15.5	120		8	54	66
326	43°40'04"	116°40'21"	04N 03W 22DADA1	09-18-95	140	H	16.5	1010	5.2	7.7	270	330
327	43°39'35"	116°41'00"	04N 03W 27BADD1	09-19-95	47	I	16	1050	5.7	7.8	427	520
328	43°39'20"	116°42'16"	04N 03W 28BDDC1	09-18-95	120	I	21.5	285	2	8.8	125	150
329	43°38'55"	116°41'43"	04N 03W 28DDCD1	09-19-95	30	I	18	592	>7	7.9	224	270
330	43°44'01"	116°22'35"	05N 01E 31AACB1	08-15-95	185	H	14	480		7.2	220	270
331	43°43'49"	116°22'37"	05N 01E 31ADCB2	08-23-95	229	H	13.5	633		7.1	279	340
332	43°43'31"	116°21'36"	05N 01E 32DBD1	08-07-95	128	H	14	275		7	126	150
333	43°43'29"	116°21'10"	05N 01E 33CBCC1	10-12-95	174	H	14	385	4.4	7	160	200
334	43°43'16"	116°21'05"	05N 01E 33CCCD1	10-05-95	190	H	14	330	4.9	7	141	170
335	43°43'16"	116°21'00"	05N 01E 33CCDC1	10-05-95	154	H	14	338	5.7	7	150	180
336	43°43'54"	116°18'52"	05N 01E 34ADAA1	10-17-95	103	H	13.5	514	1.4	6.9	165	200
337	43°43'21"	116°19'08"	05N 01E 34DCD1	08-06-95	54	H	13.5	926		7	241	290
338	43°43'26"	116°18'46"	05N 01E 35CCBB1	10-12-95	363	K	18	302	2.1	7.6	138	170
339	43°43'45"	116°26'15"	05N 01W 34ACDA1	09-06-95	90	H	13.5	613	>7	7.2	238	290
340	43°43'35"	116°26'15"	05N 01W 34DBAD1	09-06-95	74	H	13.5	794	>7	7.1	203	250
341	43°43'35"	116°26'15"	05N 01W 34DBAD2	09-13-95	72.6	I	13.5	825	5.2	6.9	205	250

Nutrients, bacteria and radon results

Table 8

	M	N	O	P	Q	R	S	T	U	V	W
1	NITROGEN	NITROGEN	NITROGEN	NITROGEN	NITROGEN	NITROGEN	PHOS	PHOS	TOTAL	FECAL	RADON
2	NH4, DISS	NO2, DISS	NO3, DISS	NO3	NO2+NO3	NO2+NO3	PHATE,	PHORUS,	COLI-	COLI-	222
3	(MG/L as N)	(MG/L as N)	(MG/L as N)	TOTAL	TOTAL	DISS	ORTHO	ORTHO	FORM	FORM	TOTAL
4				(MG/L as N)	(MG/L as N)	(MG/L as N)	DISS(MG/L	DISS	(COL/	(COL/	(PCI/L)
5							as PO4)	(MG/L as P)	100ML)	100ML)	
300	0.03	ND		5.20	5.20	5.20	0.09	0.03	0	0	
301	0.02	ND		5.50	5.50	5.50	0.09	0.03	0	0	
302	ND	ND		3.70	3.70	3.70	0.43	0.14	0	0	
303	ND	ND		14.00	14.00	14.00	0.89	0.29	0	0	
304	ND	ND		3.10	3.10	3.10	0.06	0.02	0	0	430
305	ND	ND		0.22	0.22	0.22	0.06	0.02	0	0	
306	ND	ND		5.50	5.50	5.50	0.12	0.04	0	0	
307	ND	ND		2.00	2.00	2.00	0.09	0.03	0	0	
308	ND	ND		8.20	8.20	8.20	0.83	0.27	0	0	
309	0.02	ND		2.50	2.50	2.50	0.09	0.03	0	0	
310	0.02	ND		0.68	0.68	0.68	0.03	0.01	0	0	
311	0.02	ND		4.60	4.60	4.60	0.37	0.12	1	0	
312	0.03	ND		6.70	6.70	6.70	0.58	0.19	0	0	
313	0.04	ND		12	12	12	0.49	0.16	0	0	
314	ND	ND		6.80	6.80	6.80	0.55	0.18	38	0	
315		ND							130	0	
316	ND	ND		3.00	3.00	3.00	0.12	0.04	0	0	
317	ND	ND		3.40	3.40	3.40	0.67	0.22	0	0	
318	ND	ND		4.50	4.50	4.50	0.18	0.06	0	0	
319	ND	ND		0.41	0.41	0.41	0.06	0.02	0	0	
320	ND	ND		0.63	0.63	0.63	0.06	0.02	0	0	
321	ND	0.01	0.5	0.5	0.51	0.51		ND	0	0	400
322	0.02	ND		0.47	0.47	0.47	0.21	0.07		0	
323	0.02	ND		0.67	0.67	0.67	0.15	0.05		0	380
324	0.4	ND		3.4	3.40	3.40	0.12	0.04		0	320
325	ND	ND		0.16	0.16	0.16	0.06	0.02		0	
326	ND	ND		3.3	3.30	3.30	0.6	0.02	1	0	
327	0.02	ND		5	5.00	5.00	0.4	0.13	3	0	
328	ND	ND		0.28	0.28	0.28	0.6	0.02	0	0	
329	ND	0.02		5.18	5.20	5.20	0.4	0.13	5	12	
330	ND	ND		2.6	2.60	2.6	0.49	0.16	0	0	
331	ND	ND		2.4	2.40	2.4	0.46	0.15	0	0	
332	ND	ND		1.9	1.90	1.9	0.46	0.15		0	360
333	ND	ND		3.2	3.20	3.2	0.52	0.17	0	0	
334	ND	ND			2.90	2.9	0.4	0.13	0	0	
335	ND	ND			2.50	2.5	0.43	0.14	0	0	
336	ND	ND			1.7	1.7	0.8	0.26	1	0	
337	ND	ND			11.00	11	0.55	0.18		0	
338	1.1	ND			0.11	0.11	0.28	0.09	0	0	
339	ND	ND			15	15	0.89	0.29	0	0	
340	ND	0.02	37	37	37.00	37	0.61	0.2	0		
341	ND	ND			36.00	36	0.64	0.21	0	0	

Nutrients, bacteria and radon results

Table 8

	A	B	C	D	E	F	G	H	I	J	K	L
1	LATITUDE	LONGITUDE	TOWNSHIP RANGE & SECTION	DATE SAMPLED	DEPTH OF WELL (FEET)	PRIMARY USE OF WATER	WATER TEMP (°C)	SPECIFIC COND. (US/CM)	OXYGEN DISS (MG/L)	pH FIELD (STAND UNITS)	ALKALINITY (MG/L)	BICARBONATE (MG/L)
2												
3												
4												
5												
342	43°43'02"	116°25'54"	05N 01W 35CCC1	08-19-95	84	I	13.5	514		7.4	214	

	M	N	O	P	Q	R	S	T	U	V	W
1	NITROGEN	NITROGEN	NITROGEN	NITROGEN	NITROGEN	NITROGEN	PHOS	PHOS	TOTAL	FECAL	RADON
2	NH4, DISS	NO2, DISS	NO3, DISS	NO3	NO2+NO3	NO2+NO3	PHATE,	PHORUS,	COLI-	COLI-	222
3	(MG/L as N)	(MG/L as N)	(MG/L as N)	TOTAL	TOTAL	DISS	ORTHO	ORTHO	FORM	FORM	TOTAL
4				(MG/L as N)	(MG/L as N)	(MG/L as N)	DISS(MG/L	DISS	(COL/	(COL/	(PCI/L)
5							as PO4)	(MG/L as P)	100ML)	100ML)	
342	0.01	ND			8.5			0.26	0	0	