

7. WATER SOURCE DEVELOPMENT

7.1 General

Table 7.1.1
Water Source Information

Filename: H2O-RES.XLS

CONTENT: Water Sources - General Information				PAGE: 1 OF 2		
DATA COLLECTION LEVEL: Municipal				PROV. NO.: 0371		DATE :
REGION NUMBER : III				NAME : Zambales		
CATE- GORY	TYPE			Shallow Well	Deep Well	Spring
	TOTAL NUMBER			14,161	1,887	14
G I	10/	GOVERNMENT AGENCY	o	1,508	1,887	9
E M	11/	PRIVATE	o	12,653	0	5
N L	12/	LEVEL I	o	14,036	1,863	3
E V	13/	LEVEL II	o	23	11	3
R L	14/	LEVEL III	o	2	13	3
A O	15/	WATER DISTRICT	o	2	10	3
L W	16/	MEO/CEO	o	434	543	1
N	17/	RWSA	o	4	14	0
I E	18/	BWSA	o	0	8	0
N R	19/	INSTITUTION	o	0	0	0
F S	20/	COMMERCIAL ESTABLISH.	o	0	0	0
O H	21/	INDUST./AGRIC. UNDERT.	o	0	0	0
R I	22/	PUBLIC (DOMESTIC)	o	423	436	0
M P	23/	PRIVATE (DOMESTIC)	o	12,764	98	0
A	24/	SUBMERSIBLE/TURBINE	o	8	15	0
T A	25/	CENTRIFUGAL	o	1	1	0
I B	26/	HANDPUMP	o	11,440	1,802	0
O S	27/	BUCKET & ROPE	o	2,540	0	0
N	28/	FREE FLOWING	o	0	0	4
	29/	DRINKING	o	12,819	1,884	6
U	30/	WASHING/BATHING	o	11,330	1,884	4
S	31/	GARDENING/IRRIGATION	o	11,330	1,884	4
E	32/	BIG-SCALE IRRIGATION	o	0	0	0
	33/	PRODUCTION	o	0	0	0
W	34/	NO QUALITY PROBLEM	o	9,090	1,761	4
A	35/	HIGH IRON/MAG. CONT.	o	0	0	0
T	36/	HIGH CHLORIDE CONTENT	o	0	0	0
Q	37/	TURB./COLORED/SMELL	o	0	0	0
U	38/	POLLUTED/CONTAMINATED	o	0	0	0
A	39/	CHLORINATED	o	2	4	0
L	40/	TREATED	o	13	6	1
P	41/	SEASONAL PRODUCTION	o	0	0	0
R	42/	AVG. CAP. < 100 m ³ /d	o	0	0	0
O	43/	AVG. CAP. >= 100 m ³ /d	o	2	1	0
D	44/	NO. OF HOUSEH. <5	o	0	0	0
	45/	NO. OF HOUSEH. >=5	o	11,396	1,885	5

Water Source Development

M4.2

Filename: H2O-RES.XLS

CONTENT: Water Sources - Source and Watershed Information			PAGE: 2 OF 2		
REGION NUMBER:			PROV. NO.:		DATE:
			NAME : Zambales		
CATEGORY	TYPE		Shallow Well	Deep Well	Spring
W E L L I N F O R M A T I O N	46/ OPEN-HOLE/BOITOM	o	0	0	#REF!
	47/ SCREEN/SLOTE CASING	o	13049	1887	3
	48/ DEPTH < 20 m	o	13049	0	0
	49/ DEPTH >= 20 m	o	0	1887	0
	50/ DIAM. < 100 mm (4")	o	0	0	0
	51/ DIAM. >= 100 mm (4")	o	14159	1887	1
	52/ SWL < 5 m Below Ground	o	12444	2811	0
	53/ SWL >= 5 m Below Ground	o	1722	75	0
	54/ SPEC.CAP. < 3 m ³ /h/m	o	0	0	0
	55/ SPEC.CAP. >= 3 m ³ /h/m	o	0	0	0
	56/ B-VALUE < 1,000 s/m ²	o			
	57/ B-VALUE >= 1,000 s/m ³	o			
	58/ C-VAL. < 60,000 s ² /m ⁵ (Well Loss Const.)	o			
	59/ C-VAL. >= 60,000 s ² /m ⁶	o			
	60/ PRODUCTIVE	o	14149	1884	3
	61/ ABAND., DRY/DECR. YIELD	o	0	0	0
	62/ ABAND., COL./STUC. PUMP	o	0	0	0
	63/ ABAND., DEFECTIVE PUMP	o	0	0	0
	64/ ABAND., POOR WTR. QUAL.	o	0	0	0
	65/ CONTR. YEAR < 1980	o	2701	471	0
66/ CONTR. YEAR >= 1981	o	11458	1416	3	
A Q U I F O R E	67/ T-VALUE < 0.001 m ² /s	o			
	68/ T-VALUE >= 0.001 m ² /s	o			
	69/ S-VALUE < 0.01	o			
	70/ S-VALUE >= 0.01	o			
	71/ ALLUVIAL FORMATION	o			
R E H	72/ VOLCANIC FORMATION	o			
	73/ LIMESTONE FORMATION	o			
	74/ SANDSTONE FORMATION	o			
	75/ OTH. SEDIMENTARY FOR.	o			
S P R I N G	76/ MIN. YEILD < 10 m ³ /h	o	0	0	0
	77/ MIN. YEILD >= 10 m ³ /h	o	0	0	0
	78/ SPRING BOX, PUMPED	o	0	0	0
	79/ TAPPED USING GRAVITY	o	0	0	7
S T R I C T	80/ UNTAPPED SPRINGS	o	0	0	1
	81/ MIN. YIELD < 25 m ³ /h	o	0	0	0
R O F T W H	82/ MIN. YIELD >= 25 m ³ /h	o	0	0	0
	83/ RIVER REGULATION	o	0	0	0
W T R S H E D	84/ QUARRY IN RIVER BED	o	0	0	0
	85/ TRANSPORTATION (BOATS)	o	0	0	0
S I T E	86/ MINING ACTIVITIES	o	0	0	0
	87/ LOGGING ACTIVITIES	o	0	0	0
	88/ LOGGING BAN	o	0	0	0
S O U R C E	89/ REFORESTATION ACTIVITY	o	0	0	0
	90/ AQUACULTURE ACTIVITY	o	0	0	0

LEGEND: o - Specify figure

CONTENT: Water Sources - General Information						PAGE: 1 OF 2		
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE:		
REGION NUMBER: 3				NAME : ZAMBALES				
CATE- GORY				BARANGAY NO.: Not Applicable			NAME : Not Applicable	
	1/ MUNICIPALITY NO. / NAME			SAN MARCELINO			CASTILLEJOS	
G	TYPE		Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
	TOTAL NUMBER		1,154	151	1	1,369	139	
E N M E L R V A L O W N I E N R F S O H R I M P A T I B O S N U S E W A T Q U A L I T Y P R O B L E M S	10/	GOVERNMENT AGENCY	o 43	151	1	159	139	
	11/	PRIVATE	o 1,111			1,210		
	12/	LEVEL I	o 1,154	151	1	1,369	139	
	13/	LEVEL II	o					
	14/	LEVEL III	o					
	15/	WATER DISTRICT	o					
	16/	MEO/CEO	o 43	151	1	159	139	
	17/	RWSA	o					
	18/	BWSA	o					
	19/	INSTITUTION	o					
	20/	COMMERCIAL ESTABLISH.	o					
	21/	INDUST./AGRIC. UNDERT.	o					
	22/	PUBLIC (DOMESTIC)	o					
	23/	PRIVATE (DOMESTIC)	o 1,111			1,210		
	24/	SUBMERSIBLE/TURBINE	o					
	25/	CENTRIFUGAL	o					
	26/	HANDPUMP	o 1,154	151		1,369	139	
	27/	BUCKET & ROPE	o					
	28/	FREE FLOWING	o					
	29/	DRINKING	o 1,154	151	1	1,369	139	
	30/	WASHING/BATHING	o 1,154	151	1	1,369	139	
	31/	GARDENING/IRRIGATION	o 1,154	151	1	1,369	139	
	32/	BIG-SCALE IRRIGATION	o					
	33/	PRODUCTION	o					
	34/	NO QUALITY PROBLEM	o 1,154	151	1	1,369	17	
	35/	HIGH IRON/MAG. CONT.	o					
	36/	HIGH CHLORIDE CONTENT	o					
	37/	TURB./COLORED/SMELL	o					
	38/	POLLUTED/CONTAMINATED	o					
	39/	CHLORINATED	o					
	40/	TREATED	o					1
	41/	SEASONAL PRODUCTION	o					
	42/	AVG. CAP. < 100 m3/d	o					
	43/	AVG. CAP. >= 100 m3/d	o					
	44/	NO. OF HOUSEH. <5	o					
	45/	NO. OF HOUSEH. >=5	o 1,154	151	1	1,369	139	

LEGEND: o - Specify figure

CONTENT: Water Sources - Source and Watershed Information			PAGE: 2 OF 2					
DATA COLLECTION LEVEL: Municipal			PROV. NO.:		DATE:			
REGION NUMBER: 3			NAME : ZAMBALES					
CATE-	MUNICIPALITY NO. / NAME		SAN MARCELINO			CASTILLEJOS		
GORY	TYPE		Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
W E L L N E T W O R K S	46/ OPEN HOLE/BOTTOM	o						
	47/ SCREEN/SLOPED CASING	o	1,154	151	1	1,369	139	
	48/ DEPTH < 20 m	o	1,154			1,369		
	49/ DEPTH >= 20 m	o		151			139	
	50/ DIAM. < 100 mm (4")	o						
	51/ DIAM. >= 100 mm (4")	o	1,154	151	1	1,369	139	
	52/ SWL < 5 m Below Ground	o	1,154	148		1,369	137	
	53/ SWL >= 5 m Below Ground	o	6	3			2	
	54/ SPEC.CAP. < 3 m ³ /h/m	o						
	55/ SPEC.CAP. >= 3 m ³ /h/m	o						
	56/ B-VALUE < 1,000 s/m ²	o						
	57/ B-VALUE >= 1,000 s/m ³	o						
	58/ C-VAL. < 60,000 s ² /m ⁵ (Well Loss Const.)	o						
	59/ C-VAL. >= 60,000 s ² /m ⁶	o						
	60/ PRODUCTIVE	o	1,154	151	1	1,369	139	
	61/ ABAND., DRY/DECR. YIELD	o						
	62/ ABAND., COL/STUC. PUMP	o						
	63/ ABAND., DEFECTIVE PUMP	o						
	64/ ABAND., POOR WTR. QUAL.	o						
65/ CONTR. YEAR < 1980	o							
66/ CONTR. YEAR >= 1981	o	1,154	151	1	1,369	139		
A Q U I F E R R S	67/ T-VALUE < 0.001 m ² /s	o						
	68/ T-VALUE >= 0.001 m ² /s	o						
	69/ S-VALUE < 0.01	o						
	70/ S-VALUE >= 0.01	o						
	71/ ALLUVIAL FORMATION	o						
	72/ VOLCANIC FORMATION	o						
	73/ LIMESTONE FORMATION	o						
	74/ SANDSTONE FORMATION	o						
	75/ OTH. SEDIMENTARY FOR.	o						
	76/ MIN. YEILD < 10 m ³ /h	o						
S C R I B E D	77/ MIN. YEILD >= 10 m ³ /h	o						
	78/ SPRING BOX, PUMPED	o						
	79/ TAPPED USING GRAVITY	o			1			
	80/ UNTAPPED SPRINGS	o						
S U C R O F T W H I G H S I D E	81/ MIN. YIELD < 25 m ³ /h	o						
	82/ MIN. YIELD >= 25 m ³ /h	o						
	83/ RIVER REGULATION	o						
W H I G H S I D E	84/ QUARRY IN RIVER BED	o						
	85/ TRANSPORTATION (BOATS)	o						
W I D E S I D E	86/ MINING ACTIVITIES	o						
	87/ LOGGING ACTIVITIES	o						
	88/ LOGGING BAN	o						
	89/ REFORESTATION ACTIVITY	o						
H	90/ AQUACULTURE ACTIVITY	o						

LEGEND: o - Specify figure

CONTENT: Water Sources - General Information						PAGE: 1 OF 2		
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE:		
REGION NUMBER: 3				NAME : ZAMBALES				
CATE-GORY						BARANGAY NO.: Not Applicable		
						NAME : Not Applicable		
G	1/ MUNICIPALITY NO. / NAME		SAN NARCISO			SAN ANTONIO		
	TYPE		Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
		TOTAL NUMBER	1,493	112	1	1,208	359	1
B E N E F I C I A R Y S O U R C E S	I	10/ 0	o 23	112	1	157	359	
	M	11/ PRIVATE	o 1,470			1,051		1
	L	12/ LEVEL I	o 1,489	112		1,208	358	
	V	13/ LEVEL II	o 4		1		1	
	L	14/ LEVEL III	o					
	O	15/ WATER DISTRICT	o					
	W	16/ MEO/CEO	o 23	16		10	15	
	N	17/ RWSA	o					
	E	18/ BWSA	o					
	R	19/ INSTITUTION	o					
	S	20/ COMMERCIAL ESTABLISH.	o					
	O	21/ INDUST/AGRIC. UNDERT.	o					
	R	22/ PUBLIC (DOMESTIC)	o			147	344	
	I	23/ PRIVATE (DOMESTIC)	o 1,470	98		1,051		
	A	24/ SUBMERSIBLE/TURBINE	o					
	T	25/ CENTRIFUGAL	o					
	B	26/ HANDPUMP	o		112		358	
	S	27/ BUCKET & ROPE	o 1,489			1,051		
	O	28/ FREE FLOWING	o					
	U	29/ DRINKING	o 1,489	112			358	
	S	30/ WASHING/BATHING	o		112		358	
	E	31/ GARDENING/IRRIGATION	o		112		358	
		32/ BIG-SCALE IRRIGATION	o					
		33/ PRODUCTION	o					
	W	34/ NO QUALITY PROBLEM	o		112		358	
	A	35/ HIGH IRON/MAG. CONT.	o					
	T	36/ HIGH CHLORIDE CONTENT	o					
	Q	37/ TURB./COLORED/SMELL	o					
	U	38/ POLLUTED/CONTAMINATED	o					
	A	39/ CHLORINATED	o					
	L	40/ TREATED	o 4					
	P	41/ SEASONAL PRODUCTION	o					
	R	42/ AVG. CAP. < 100 m ³ /d	o					
O	43/ AVG. CAP. >= 100 m ³ /d	o						
D	44/ NO. OF HOUSEH. <5	o						
	45/ NO. OF HOUSEH. >=5	o		112		1,208	358	

LEGEND: o - Specify figure

CONTENT: Water Sources - Source and Watershed Information				PAGE: 2 OF 2			
DATA COLLECTION LEVEL: Municipal			PROV. NO.:			DATE:	
REGION NUMBER: 3			NAME : ZAMBALES				
CATE- GORY	MUNICIPALITY NO. / NAME	TYPE	SAN NARCISO			SAN ANTONIO	
			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well
W E L L N E T W O R K S	46/	OPEN-HOLE/ BOTTOM	o				
	47/	SCREEN/SLOTTED CASING	o	1493	112		1208 359
	48/	DEPTH < 20 m	o	1493			1208
	49/	DEPTH >= 20 m	o		112		359
	50/	DIAM. < 100 mm (4")	o				
	51/	DIAM. >= 100 mm (4")	o	1493	112		1208 359
	52/	SWL < 5 m Below Ground	o	1493	1111		1208 358
	53/	SWL >= 5 m Below Ground	o				1
	54/	SPEC.CAP. < 3 m ³ /h/m	o				
	55/	SPEC.CAP. >= 3 m ³ /h/m	o				
	56/	B-VALUE < 1,000 s/m ²	o				
	57/	B-VALUE >= 1,000 s/m ²	o				
	58/	C-VAL. < 60,000 s ² /m ⁵ (Well Loss Const.)	o				
	59/	C-VAL. >= 60,000 s ² /m ⁵	o				
	60/	PRODUCTIVE	o	1489	112		1208 358
	61/	ABAND. DRY/DECR. YIELD	o				
	62/	ABAND. COL./STUC. PUMP	o				
	63/	ABAND. DEFECTIVE PUMP	o				
	64/	ABAND. POOR WTR. QUAL.	o				
	65/	CONTR. YEAR < 1980	o	1493	112		1208 359
66/	CONTR. YEAR >= 1981	o					
67/	T-VALUE < 0.001 m ² /s	o					
68/	T-VALUE >= 0.001 m ² /s	o					
69/	S-VALUE < 0.01	o					
70/	S-VALUE >= 0.01	o					
71/	ALLUVIAL FORMATION	o					
72/	VOLCANIC FORMATION	o					
73/	LIMESTONE FORMATION	o					
74/	SANDSTONE FORMATION	o					
75/	OTH. SEDIMENTARY FOR.	o					
76/	MIN. YIELD < 10 m ³ /h	o					
77/	MIN. YIELD >= 10 m ³ /h	o					
78/	SPRING BOX, PUMPED	o					
79/	TAPPED USING GRAVITY	o					
80/	UNTAPPED SPRINGS	o					
81/	MIN. YIELD < 25 m ³ /h	o					
82/	MIN. YIELD >= 25 m ³ /h	o					
83/	RIVER REGULATION	o					
84/	QUARRY IN RIVER BED	o					
85/	TRANSPORTATION (BOATS)	o					
86/	MINING ACTIVITIES	o					
87/	LOGGING ACTIVITIES	o					
88/	LOGGING BAN	o					
89/	REFORESTATION ACTIVITY	o					
90/	AQUACULTURE ACTIVITY	o					

LEGEND: o - Specify figure

CONTENT: Water Sources - General Information						PAGE: 1 OF 2				
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE :				
REGION NUMBER: 3				NAME : ZAMBALES						
CATE-GORY				BARANGAY NO.: Not Applicable						
				NAME : Not Applicable						
G	1/ MUNICIPALITY NO. / NAME			CABANGAN			SAN FELIPE			
	TYPE			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring	
TOTAL NUMBER			855	89	2	617	150			
E	I	10/ GOVERNMENT AGENCY			o	147	89		135	150
		11/ PRIVATE			o	708		2	482	
N	L	12/ LEVEL I			o	854	89		615	147
		13/ LEVEL II			o	1			2	1
R	L	14/ LEVEL III			o					2
		15/ WATER DISTRICT			o					2
V	L	16/ MEO/CEO			o	147	89			
		17/ RWSA			o					
A	L	18/ BWSA			o					
		19/ INSTITUTION			o					
L	O	20/ COMMERCIAL ESTABLISH.			o					
		21/ INDUST./AGRIC. UNDERT.			o					
O	R	22/ PUBLIC (DOMESTIC)			o					
		23/ PRIVATE (DOMESTIC)			o	708			482	
M	P	24/ SUBMERSIBLE/TURBINE			o				2	3
		25/ CENTRIFUGAL			o	1				
P	A	26/ HANDPUMP			o	854	89		615	147
		27/ BUCKET & ROPE			o					
I	B	28/ FREE FLOWING			o					
		29/ DRINKING			o	854	89		615	150
B	O	30/ WASHING/BATHING			o	854	89		615	150
		31/ GARDENING/IRRIGATION			o	854	89		615	150
S	E	32/ BIG-SCALE IRRIGATION			o					
		33/ PRODUCTION			o					
W	A	34/ NO QUALITY PROBLEM			o	854	89		615	150
		35/ HIGH IRON/MAG. CONT.			o					
Q	U	36/ HIGH CHLORIDE CONTENT			o					
		37/ TURB./COLORED/SMELL			o					
U	A	38/ POLLUTED/CONTAMINATED			o					
		39/ CHLORINATED			o					
L	O	40/ TREATED			o	1			2	1
		41/ SEASONAL PRODUCTION			o					
P	R	42/ AVG. CAP. < 100 m3/d			o					
		43/ AVG. CAP. >= 100 m3/d			o					
O	D	44/ NO. OF HOUSEH. <5			o					
		45/ NO. OF HOUSEH. >=5			o	854	89		615	150

LEGEND: o - Specify figure

CONTENT: Water Sources - Source and Watershed Information				PAGE: 2 OF 2				
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE:		
REGION NUMBER: 3				NAME : ZAMBALES				
CATEGORY	MUNICIPALITY NO. / NAME	TYPE	CABANGAN			SAN FELIPE		
			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
WATER BEHAVIOR CHARACTERISTICS	46/	OPEN-HOLE/BOTTOM	o					
	47/	SCREEN/SLOTTED CASING	o	855	89		617	150
	48/	DEPTH < 20 m	o	855			617	
	49/	DEPTH >= 20 m	o		89			150
	50/	DIAM. < 100 mm (4")	o					
	51/	DIAM. >= 100 mm (4")	o	855	89		617	150
	52/	SWL < 5 m Below Ground	o	855	89		617	150
	53/	SWL >= 5 m Below Ground	o	1				
	54/	SPEC.CAP. < 3 m ³ /h/m	o					
	55/	SPEC.CAP. >= 3 m ³ /h/m	o					
	56/	B-VALUE < 1,000 s/m ²	o					
	57/	B-VALUE >= 1,000 s/m ²	o					
	58/	C-VAL. < 60,000 s ² /m ⁵ (Well Loss Const.)	o					
	59/	C-VAL. >= 60,000 s ² /m ⁶	o					
	60/	PRODUCTIVE	o	854	89		615	150
	61/	ABAND., DRY/DECR. YIELD	o					
	62/	ABAND., COL./STUC. PUMP	o					
	63/	ABAND., DEFECTIVE PUMP	o					
	64/	ABAND., POOR WTR. QUAL.	o					
	65/	CONTR. YEAR < 1980	o					
66/	CONTR. YEAR >= 1981	o	855	89		617	150	
AQUICLASSIFICATION	67/	T-VALUE < 0.001 m ² /s	o					
	68/	T-VALUE >= 0.001 m ² /s	o					
	69/	S-VALUE < 0.01	o					
	70/	S-VALUE >= 0.01	o					
	71/	ALLUVIAL FORMATION	o					
ROCK TYPES	72/	VOLCANIC FORMATION	o					
	73/	LIMESTONE FORMATION	o					
	74/	SANDSTONE FORMATION	o					
	75/	OTH. SEDIMENTARY FOR.	o					
SPRING TYPES	76/	MIN. YIELD < 10 m ³ /h	o					
	77/	MIN. YIELD >= 10 m ³ /h	o					
	78/	SPRING BOX, PUMPED	o					
	79/	TAPPED USING GRAVITY	o					
80/	UNTAPPED SPRINGS	o						
SURFACE WATER	81/	MIN. YIELD < 25 m ³ /h	o					
	82/	MIN. YIELD >= 25 m ³ /h	o					
WATER USE	83/	RIVER REGULATION	o					
	84/	QUARRY IN RIVER BED	o					
WATER QUALITY	85/	TRANSPORTATION (BOATS)	o					
	86/	MINING ACTIVITIES	o					
WATER QUALITY	87/	LOGGING ACTIVITIES	o					
	88/	LOGGING BAN	o					
WATER QUALITY	89/	REFORESTATION ACTIVITY	o					
	90/	AQUACULTURE ACTIVITY	o					

LEGEND: o - Specify figure

CONTENT: Water Sources - General Information						PAGE: 1 OF 2		
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE :		
REGION NUMBER: 3				NAME : ZAMBALES				
CATE-GORY						BARANGAY NO.: Not Applicable		
						NAME : Not Applicable		
G	1/ MUNICIPALITY NO. / NAME		IBA			BOTOLAN		
	TYPE		Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
		TOTAL NUMBER	365	120		1,714	162	3
E N M E L R V A L O W N I E N R F S O H R I M P A T A I B O S E W A T Q U A L I T Y P R O B L E M S	I	10/ GOVERNMENT AGENCY	o 233	120		114	162	3
	M	11/ PRIVATE	o 132			1,600		
	L	12/ LEVEL I	o 259	118		1,711	161	1
	V	13/ LEVEL II	o 4	1		3	1	1
	A	14/ LEVEL III	o 2	1				
	L	15/ WATER DISTRICT	o 2	1				
	O	16/ MEO/CEO	o 23	26				
	W	17/ RWSA	o 4	1				
	N	18/ BWSA	o					
	I	19/ INSTITUTION	o					
	E	20/ COMMERCIAL ESTABLISH.	o					
	N	21/ INDUST /AGRIC. UNDERT.	o					
	R	22/ PUBLIC (DOMESTIC)	o 204	92				
	I	23/ PRIVATE (DOMESTIC)	o 132			1,711		
	M	24/ SUBMERSIBLE/TURBINE	o 6	2				
	P	25/ CENTRIFUGAL	o				1	
	A	26/ HANDPUMP	o 359	120		1,711	161	
	T	27/ BUCKET & ROPE	o					
	A	28/ FREE FLOWING	o					
	I	29/ DRINKING	o 359	120		1,711	161	2
	B	30/ WASHING/BATHING	o 359	120		1,711	161	
	O	31/ GARDENING/IRRIGATION	o 359	120		1,711	161	
	S	32/ BIG-SCALE IRRIGATION	o					
	E	33/ PRODUCTION	o					
	W	34/ NO QUALITY PROBLEM	o 359	119			161	
	A	35/ HIGH IRON/MAG. CONT.	o					
	T	36/ HIGH CHLORIDE CONTENT	o					
	Q	37/ TURB /COLORED/SMELL	o					
	U	38/ POLLUTED/CONTAMINATED	o					
	A	39/ CHLORINATED	o 2	1				
	L	40/ TREATED	o 2	1				
	P	41/ SEASONAL PRODUCTION	o					
	R	42/ AVG. CAP. < 100 m3/d	o					
	O	43/ AVG. CAP. >= 100 m3/d	o 2	1				
	D	44/ NO. OF HOUSEH. <5	o					
		45/ NO. OF HOUSEH. >=5	o 359	120		1,711	162	

LEGEND: o - Specify figure

CONTENT: Water Sources - Source and Watershed Information				PAGE: 2 OF 2				
DATA COLLECTION LEVEL: Municipal			PROV. NO.:		DATE:			
REGION NUMBER: 3			NAME : ZAMBALES					
CATEGORY	MUNICIPALITY NO. / NAME	TYPE	IBA			BOTOLAN		
			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
WATER QUALITY	46/	OPEN-HOLE/BOTTOM	o					
	47/	SCREEN/SLOTTED CASING	o	365	120		1,714	162
	48/	DEPTH < 20 m	o	365			1,714	
	49/	DEPTH >= 20 m	o		120			162
	50/	DIAM. < 100 mm (4")	o					
	51/	DIAM. >= 100 mm (4")	o	365	120		1,714	162
	52/	SWL < 5 m Below Ground	o	365	118			159
	53/	SWL >= 5 m Below Ground	o		2		1,714	3
	54/	SPEC. CAP. < 3 m ³ /h/m	o					
WATER QUANTITY	55/	SPEC. CAP. >= 3 m ³ /h/m	o					
	56/	B-VALUE < 1,000 s/m ²	o					
	57/	B-VALUE >= 1,000 s/m ²	o					
	58/	C-VAL. < 60,000 s ² /m ⁵ (Well Loss Const.)	o					
	59/	C-VAL. >= 60,000 s ² /m ⁵	o					
	60/	PRODUCTIVE	o	365	120		1,711	162
	61/	ABAND., DRY/DECR. YIELD	o					
	62/	ABAND., COL./STUC. PUMP	o					
	63/	ABAND., DEFECTIVE PUMP	o					
WATER RESOURCES	64/	ABAND., POOR WTR. QUAL.	o					
	65/	CONTR. YEAR < 1980	o					
	66/	CONTR. YEAR >= 1981	o	365	120		1,714	162
	67/	T-VALUE < 0.001 m ² /s	o					
	68/	T-VALUE >= 0.001 m ² /s	o					
	69/	S-VALUE < 0.01	o					
	70/	S-VALUE >= 0.01	o					
	71/	ALLUVIAL FORMATION	o					
	72/	VOLCANIC FORMATION	o					
WATER RESOURCES	73/	LIMESTONE FORMATION	o					
	74/	SANDSTONE FORMATION	o					
	75/	OTH. SEDIMENTARY FOR.	o					
	76/	MIN. YEILD < 10 m ³ /h	o					
	77/	MIN. YEILD >= 10 m ³ /h	o					
	78/	SPRING BOX, PUMPED	o					
	79/	TAPPED USING GRAVITY	o					1
	80/	UNTAPPED SPRINGS	o					
	81/	MIN. YIELD < 25 m ³ /h	o					
WATER RESOURCES	82/	MIN. YIELD >= 25 m ³ /h	o					
	83/	RIVER REGULATION	o					
	84/	QUARRY IN RIVER BED	o					
	85/	TRANSPORTATION (BOATS)	o					
	86/	MINING ACTIVITIES	o					
	87/	LOGGING ACTIVITIES	o					
	88/	LOGGING BAN	o					
	89/	REFORESTATION ACTIVITY	o					
	90/	AQUACULTURE ACTIVITY	o					

LEGEND: o - Specify figure

CONTENT: Water Sources - General Information							PAGE: 1 OF 2		
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE:			
REGION NUMBER: 3				NAME : ZAMBALES					
CATE- GORY							BARANGAY NO.: Not Applicable		
						NAME : Not Applicable			
G	1/ MUNICIPALITY NO. / NAME		MASINLOC			PALAUIG			
	TYPE		Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring	
TOTAL NUMBER			658	94	1	792	108	1	
E N M	I	10/ GOVERNMENT AGENCY	o	118	94	1	72	108	1
		11/ PRIVATE	o	540			720		
E R V	L	12/ LEVEL I	o	656	93		789	106	1
		13/ LEVEL II	o	2	1		3	2	
A L		14/ LEVEL III	o			1			
		15/ WATER DISTRICT	o			1			
W N		16/ MEO/CEO	o	11	76				
		17/ RWSA	o		11				
I E		18/ BWSA	o		7				
		19/ INSTITUTION	o						
N F S		20/ COMMERCIAL ESTABLISH.	o						
		21/ INDUST./AGRIC. UNDERT.	o						
O H		22/ PUBLIC (DOMESTIC)	o				72		
		23/ PRIVATE (DOMESTIC)	o	540			720		
R M P		24/ SUBMERSIBLE/TURBINE	o						
		25/ CENTRIFUGAL	o						
I B		26/ HANDPUMP	o	654	93		792	106	
		27/ BUCKET & ROPE	o						
O N		28/ FREE FLOWING	o						
		29/ DRINKING	o	540	93		792	108	1
U S		30/ WASHING/BATHING	o	540	93		792	108	1
		31/ GARDENING/IRRIGATION	o	540	93		792	108	1
E		32/ BIG-SCALE IRRIGATION	o						
		33/ PRODUCTION	o						
W A		34/ NO QUALITY PROBLEM	o	11	93		792	108	1
		35/ HIGH IRON/MAG. CONT.	o						
T Q		36/ HIGH CHLORIDE CONTENT	o						
		37/ TURB./COLORED/SMELL	o						
U A		38/ POLLUTED/CONTAMINATED	o						
		39/ CHLORINATED	o						
L		40/ TREATED	o			1			
		41/ SEASONAL PRODUCTION	o						
P R		42/ AVG. CAP. < 100 m ³ /d	o						
		43/ AVG. CAP. >= 100 m ³ /d	o						
O D		44/ NO. OF HOUSEH. <5	o						
		45/ NO. OF HOUSEH. >=5	o	118	93	1	72	108	1

LEGEND: o - Specify figure

CONTENT: Water Sources - Source and Watershed Information							PAGE: 2 OF 2	
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE:		
REGION NUMBER: 3				NAME : ZAMBALES				
CATEGORY	MUNICIPALITY NO. / NAME	TYPE	MASINLOC			PALAUIG		
			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
WELL	46/ OPEN HOLE/BOTTOM	o						
	47/ SCREEN/SLOTTED CASING	o	656	94		792	108	1
	48/ DEPTH < 20 m	o	656			792		
	49/ DEPTH >= 20 m	o		94			108	
	50/ DIAM. < 100 mm (4")	o						
	51/ DIAM. >= 100 mm (4")	o	656	94		792	108	
	52/ SWL < 5 m Below Ground	o	656	59		792	108	
	53/ SWL >= 5 m Below Ground	o		35				
	54/ SPEC.CAP. < 3 m ³ /h/m	o						
	55/ SPEC.CAP. >= 3 m ³ /h/m	o						
	56/ B-VALUE < 1,000 s/m ²	o						
	57/ B-VALUE >= 1,000 s/m ³	o						
	58/ C-VAL. < 60,000 s ² /m ⁵ (Well Loss Const.)	o						
	59/ C-VAL. >= 60,000 s ² /m ⁶	o						
	60/ PRODUCTIVE	o	656	94		792	106	1
	61/ ABAND. DRY/DECR. YIELD	o						
	62/ ABAND. COL/STUC. PUMP	o						
	63/ ABAND. DEFECTIVE PUMP	o						
	64/ ABAND. POOR WTR. QUAL.	o						
65/ CONTR. YEAR < 1980	o							
66/ CONTR. YEAR >= 1981	o	656	94		792	108	1	
AQUICLUS	67/ T-VALUE < 0.001 m ² /s	o						
	68/ T-VALUE >= 0.001 m ² /s	o						
FRESHWATER	69/ S-VALUE < 0.01	o						
	70/ S-VALUE >= 0.01	o						
	71/ ALLUVIAL FORMATION	o						
	72/ VOLCANIC FORMATION	o						
	73/ LIMESTONE FORMATION	o						
SCHEMATIC	74/ SANDSTONE FORMATION	o						
	75/ OTH. SEDIMENTARY FOR.	o						
PUMP	76/ MIN. YIELD < 10 m ³ /h	o						
	77/ MIN. YIELD >= 10 m ³ /h	o						
	78/ SPRING BOX, PUMPED	o						
WELL	79/ TAPPED USING GRAVITY	o			1			1
	80/ UNTAPPED SPRINGS	o						
SUCRO	81/ MIN. YIELD < 25 m ³ /h	o						
	82/ MIN. YIELD >= 25 m ³ /h	o						
WELL	83/ RIVER REGULATION	o						
	84/ QUARRY IN RIVER BED	o						
WELL	85/ TRANSPORTATION (BOATS)	o						
	86/ MINING ACTIVITIES	o						
WELL	87/ LOGGING ACTIVITIES	o						
	88/ LOGGING BAN	o						
WELL	89/ REFORESTATION ACTIVITY	o						
	90/ AQUACULTURE ACTIVITY	o						

LEGEND: o - Specify figure

CONTENT: Water Sources - General Information						PAGE: 1 OF 2				
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE:				
REGION NUMBER: 3				NAME : ZAMBALES						
CATE-GORY				BARANGAY NO.: Not Applicable			NAME : Not Applicable			
	1/ MUNICIPALITY NO. / NAME			STA. CRUZ			CANDELARIA			
G	TYPE			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring	
	TOTAL NUMBER			1,890	234	2	918	89		
E	I	10/ GOVERNMENT AGENCY			o	100	234		57	89
		11/ PRIVATE			o	1,790		2	861	
N	M	12/ LEVEL I			o	1,888	232		916	82
		13/ LEVEL II			o	2			2	4
R	V	14/ LEVEL III			o		2			3
		15/ WATER DISTRICT			o		2			
A	L	16/ MEO/CEO			o					
		17/ RWSA			o					2
I	B	18/ BWSA			o					1
		19/ INSTIYUTION			o					
N	R	20/ COMMERCIAL ESTABLISH.			o					
		21/ INDUST/AGRIC. UNDERT.			o					
F	S	22/ PUBLIC (DOMESTIC)			o					
		23/ PRIVATE (DOMESTIC)			o	1,790			861	
O	H	24/ SUBMERSIBLE/TURBINE			o		2			3
		25/ CENTRIFUGAL			o					
R	I	26/ HANDPUMP			o	1,888	232		916	19
		27/ BUCKET & ROPE			o					
M	P	28/ FREE FLOWING			o					2
		29/ DRINKING			o	1,890	234		918	89
A	T	30/ WASHING/BATHING			o	1,890	234		918	89
		31/ GARDENING/IRRIGATION			o	1,890	234		918	89
I	B	32/ BIG-SCALE IRRIGATION			o					
		33/ PRODUCTION			o					
W	A	34/ NO QUALITY PROBLEM			o	1,890	234		918	89
		35/ HIGH IRON/MAG. CONT.			o					
Q	U	36/ HIGH CHLORIDE CONTENT			o					
		37/ TURB/COLORED/SMELL			o					
A	L	38/ POLLUTED/CONTAMINATED			o					
		39/ CHLORINATED			o					3
P	R	40/ TREATED			o	2			2	3
		41/ SEASONAL PRODUCTION			o					
O	D	42/ AVG. CAP. < 100 m3/d			o					
		43/ AVG. CAP. >= 100 m3/d			o					
D	D	44/ NO. OF HOUSEH. <5			o					
		45/ NO. OF HOUSEH. >=5			o	1,890	234		918	89

LEGEND: o - Specify figure

CONTENT: Water Sources - Source and Watershed Information				PAGE: 2 OF 2				
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE:		
REGION NUMBER: 3				NAME : ZAMBALES				
CATEGORY	MUNICIPALITY NO. / NAME	TYPE	STA. CRUZ			CANDELARIA		
			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
WELL INFORMATION	46/	OPEN-HOLE/BOTTOM	o					
	47/	SCREEN/SLOTTED CASING	o	1,890	234		918	89
	48/	DEPTH < 20 m	o	1,890			918	
	49/	DEPTH >= 20 m	o		234			89
	50/	DIAM. < 100 mm (4")	o					
	51/	DIAM. >= 100 mm (4")	o	1,890	234		918	89
	52/	SWL < 5 m Below Ground	o	1,889	215		918	82
	53/	SWL >= 5 m Below Ground	o	1	19			7
	54/	SPEC. CAP. < 3 m ³ /h/m	o					
	55/	SPEC. CAP. >= 3 m ³ /h/m	o					
	56/	B-VALUE < 1,000 s/m ²	o					
	57/	B-VALUE >= 1,000 s/m ²	o					
	58/	C-VAL. < 60,000 s ² /m ⁵ (Well Loss Const.)	o					
	59/	C-VAL. >= 60,000 s ² /m ⁵	o					
	60/	PRODUCTIVE	o	1,890	234		918	89
	61/	ABAND., DRY/DECR. YIELD	o					
	62/	ABAND., COL./STUC. PUMP	o					
	63/	ABAND., DEFECTIVE PUMP	o					
	64/	ABAND., POOR WTR. QUAL.	o					
65/	CONTR. YEAR < 1980	o						
66/	CONTR. YEAR >= 1981	o	1,890	234		918	89	
QUALITY	67/	T-VALUE < 0.001 m ² /s	o					
	68/	T-VALUE >= 0.001 m ² /s	o					
	69/	S-VALUE < 0.01	o					
	70/	S-VALUE >= 0.01	o					
ROCK	71/	ALLUVIAL FORMATION	o					
	72/	VOLCANIC FORMATION	o					
	73/	LIMESTONE FORMATION	o					
	74/	SANDSTONE FORMATION	o					
	75/	OTH. SEDIMENTARY FOR.	o					
SPRING	76/	MIN. YEILD < 10 m ³ /h	o					
	77/	MIN. YEILD >= 10 m ³ /h	o					
	78/	SPRING BOX, PUMPED	o					
	79/	TAPPED USING GRAVITY	o			1		
80/	UNTAPPED SPRINGS	o			1			
SURFACE	81/	MIN. YIELD < 25 m ³ /h	o					
	82/	MIN. YIELD >= 25 m ³ /h	o					
WATER	83/	RIVER REGULATION	o					
	84/	QUARRY IN RIVER BED	o					
	85/	TRANSPORTATION (BOATS)	o					
WATER USE	86/	MINING ACTIVITIES	o					
	87/	LOGGING ACTIVITIES	o					
	88/	LOGGING BAN	o					
	89/	REFORESTATION ACTIVITY	o					
90/	AQUACULTURE ACTIVITY	o						

LEGEND: o - Specify figure

CONTENT: Water Sources - General Information							PAGE: 1 OF 2		
DATA COLLECTION LEVEL: Municipal					PROV. NO.:		DATE:		
REGION NUMBER: 3					NAME : ZAMBALES				
CATE-GORY					BARANGAY NO.: Not Applicable				
					NAME : Not Applicable				
G	1/ MUNICIPALITY NO./ NAME			PEO DATA			SUBIC		
	TYPE			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
TOTAL NUMBER						1,128	80	2	
E	I	10/ GOVERNMENT AGENCY		o			150	80	2
		11/ PRIVATE		o			978		
N	M	12/ LEVEL I		o			1,128	75	
		13/ LEVEL II		o					
R	V	14/ LEVEL III		o				5	2
		15/ WATER DISTRICT		o				5	2
L	O	16/ MEO/CEO		o			18	31	
		17/ RWSA		o					
I	E	18/ BWSA		o					
		19/ INSTITUTION		o					
N	R	20/ COMMERCIAL ESTABLISH.		o					
		21/ INDUST./AGRIC. UNDERT.		o					
F	S	22/ PUBLIC (DOMESTIC)		o					
		23/ PRIVATE (DOMESTIC)		o			978		
O	H	24/ SUBMERSIBLE/TURBINE		o				5	
		25/ CENTRIFUGAL		o					
M	P	26/ HANDPUMP		o			1,128	75	
		27/ BUCKET & ROPE		o					
A	T	28/ FREE FLOWING		o					2
		29/ DRINKING		o			1,128	80	2
I	B	30/ WASHING/BATHING		o			1,128	80	2
		31/ GARDENING/IRRIGATION		o			1,128	80	2
O	S	32/ BIG-SCALE IRRIGATION		o					
		33/ PRODUCTION		o					
W	A	34/ NO QUALITY PROBLEM		o			1,128	80	2
		35/ HIGH IRON/MAG. CONT.		o					
Q	U	36/ HIGH CHLORIDE CONTENT		o					
		37/ TURB./COLORED/SMELL		o					
A	L	38/ POLLUTED/CONTAMINATED		o					
		39/ CHLORINATED		o					
P	R	40/ TREATED		o					
		41/ SEASONAL PRODUCTION		o					
O	D	42/ AVG. CAP. < 100 m3/d		o					
		43/ AVG. CAP. >= 100 m3/d		o					
D		44/ NO. OF HOUSEH. <5		o					
		45/ NO. OF HOUSEH. >=5		o			1,128	80	2

LEGEND: o - Specify figure

CONTENT: Water Sources - Source and Watershed Information				PAGE: 2 OF 2				
DATA COLLECTION LEVEL: Municipal				PROV. NO.:		DATE:		
REGION NUMBER: 3				NAME : ZAMBALES				
CATEGORY	MUNICIPALITY NO. / NAME	TYPE	PEO DATA			SUBIC		
			Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
WATER BOREHOLE		46/ OPEN-HOLE/BOTTOM	o					
		47/ SCREEN/SLOTTED CASING	o			18	80	
		48/ DEPTH < 20 m	o			18		
		49/ DEPTH >= 20 m	o				80	
		50/ DIAM. < 100 mm (4")	o					
		51/ DIAM. >= 100 mm (4")	o			1128	80	
		52/ SWL < 5 m Below Ground	o			1128	77	
		53/ SWL >= 5 m Below Ground	o				3	
		54/ SPEC.CAP. < 3 m ³ /m	o					
		55/ SPEC.CAP. >= 3 m ³ /m	o					
		56/ B-VALUE < 1,000 s/m ²	o					
		57/ B-VALUE >= 1,000 s/m ³	o					
		58/ C-VAL. < 60,000 s ² /m ⁵ (Well Loss Const.)	o					
		59/ C-VAL. >= 60,000 s ² /m ⁶	o					
		60/ PRODUCTIVE	o			1128	80	
		61/ ABAND., DRY/DECR. YIELD	o					
		62/ ABAND., COL/STUC. PUMP	o					
		63/ ABAND., DEFECTIVE PUMP	o					
		64/ ABAND., POOR WTR QUAL.	o					
		65/ CONTR. YEAR < 1980	o					
		65/ CONTR. YEAR >= 1981	o			1128	80	
		67/ T-VALUE < 0.001 m ² /s	o					
		68/ T-VALUE >= 0.001 m ² /s	o					
		69/ S-VALUE < 0.01	o					
		70/ S-VALUE >= 0.01	o					
		71/ ALLUVIAL FORMATION	o					
		72/ VOLCANIC FORMATION	o					
		73/ LIMESTONE FORMATION	o					
		74/ SANDSTONE FORMATION	o					
		75/ OTH. SEDIMENTARY FOR.	o					
	76/ MIN. YEILD < 10 m ³ /h	o						
	77/ MIN. YEILD >= 10 m ³ /h	o						
	78/ SPRING BOX, PUMPED	o						
	79/ TAPPED USING GRAVITY	o					2	
	80/ UNTAPPED SPRINGS	o						
	81/ MIN. YIELD < 25 m ³ /h	o						
	82/ MIN. YIELD >= 25 m ³ /h	o						
	83/ RIVER REGULATION	o						
	84/ QUARRY IN RIVER BED	o						
	85/ TRANSPORTATION (BOATS)	o						
	86/ MINING ACTIVITIES	o						
	87/ LOGGING ACTIVITIES	o						
	88/ LOGGING BAN	o						
	89/ REFORESTATION ACTIVITY	o						
	90/ AQUACULTURE ACTIVITY	o						

LEGEND: o - Specify figure

7.3 Groundwater Sources
7.3.2 Groundwater Availability in the Province

Table 7.3.1 Well Inventory by Municipality

ZAMBALES

MUNICIPAL	LOCATION	WELL_NO	DATE	DEPTH	SWL	DISCHGE	DRAWDWN	SPPCF	USAGE	REMARKS
Botolan	Bangan	BPW-6803		11.59	3.60					
Botolan	Batonlapoc	BPW19441		8.54	1.83	0.62	1.94	0.320		
Botolan	Batonlapoc	BPW54697	04/26/69	10.98	2.44	0.32		0.30	1.070	
Botolan	Benej	BPW56917	09/15/69	13.72	3.35	0.63	0.61		1.030	Kedalline
Botolan	Benej	BPW19444	06/28/67	9.42	4.27			0.630		
Botolan	Benej Elementary School	BPW19447		10.37	4.57	0.52	1.65	0.315		
Botolan	Capayawan	BPW56025	09/01/60	7.62	3.35	0.44	0.61	0.720		
Botolan	Capayawan	BPW	07/05/67	9.15	1.52	0.50				
Botolan	Capayawan	BPW-7111		14.62	1.52	0.29	0.66	0.440		
Botolan	Carcel	BPW19442		7.62	1.52	0.62	1.63	0.380		
Botolan	Carcel	BPW65171	08/10/71	14.02	1.52	0.44	1.52	0.290		
Botolan	Danaabanga	BPW7170	06/30/67	14.63	4.57	0.63				
Botolan	Danaabanga	BPW52591	11/19/59	7.62	3.05	0.95	0.30	3.170		
Botolan	Maguisig	BPW-7171		11.89	2.44	0.52	0.83	0.630		
Botolan	Mambog	BPW54698		13.11	3.05	2.07	3.29	0.630		
Botolan	Pabel	BPW56022	06/07/60	9.76	3.99	0.44	0.61	0.720		
Botolan	Panan	BPW-7169		12.20	2.74					
Botolan	Panan	BPW19444		9.15	2.44	0.41	1.08	0.380		
Botolan	Paudpog School	BPW54704	06/04/70	21.34	3.05	18.93	3.05	6.210		
Botolan	Pobiscan	BPW21815		21.65	12.20	0.63				
Botolan	Poom Isde	BP707711		24.39	6.10			0.694		
Botolan	Poom Bato Elementary School	BPW19443		24.00	21.44	0.34	1.08	0.315		
Botolan	Porac	BPW26024	07/30/60	17.07	3.08	0.44	0.61	0.720		
Botolan	San Isidro	BPW-6804		14.63	4.27					
Botolan	San Juan	BPW19446		13.11	2.44	0.41	1.08	0.380		
Botolan	Santiago	BPW-7218	04/06/55	46.34	24.40	0.76	1.52	0.500		
Botolan	Villar	BPW10353		7.62						
Cabangan	Antoang	BPW70354	10/01/56	15.85						
Cabangan	App-App			8.23						
Cabangan	Arew			18.29						
Cabangan	Camung			24.39	2.44	0.28	0.56	0.504		
Cabangan	Canning			16.77						
Cabangan	Casabaan	BP707702		24.91	1.83	0.52	0.83	0.630		
Cabangan	Casabaan	BPW-7786		18.29						
Cabangan	Lombay	BPW70774		21.34	1.83	0.78	0.82	0.950		
Cabangan	Lontos	BPW-7787		13.41						
Cabangan	Mabangit	BPW10355		19.21	3.66	1.14	1.65	0.690		
Cabangan	Poblacion	BPW46911		8.84	3.96	0.50	0.91	0.550		
Cabangan	San Isidro	BPW26023	07/05/60	18.29	5.18	0.64	1.02	0.630		
Cabangan	San Isidro	BPW-7788		18.29						
Cabangan	San Juan	BPW70356		25.00	4.88	1.24	1.64	0.757		
Cabangan	San Rafael	BPW-7785		28.90	2.44	1.24	1.64	0.757		
Cabangan	Sta. Rita	BP707710		15.24	2.44			0.440		
Candelaria	Babancal	BPW-6802		12.20	2.44			0.630		
Candelaria	Babancal	BPW10411	11/28/57	16.46	2.44	0.44				
Candelaria	Babancal	BPW 7818	02/28/55	22.60						
Candelaria	Bonabalan	BPW10350	06/28/56	30.48						
Candelaria	Carol	BPW10408	08/02/57	34.75	1.52	0.57	14.23	0.040		

ZAMBALES

MUNICIPAL	LOCATION	WELL_NO	DATE	DEPTH	SWL	DISCHG	DRYDWN	SFCCP	USAGE	REMARKS
Candelaria	Cualajaco	BPW 21086	05/29/53	22.86	5.49	0.63				
Candelaria	East Liberator	BPW 20442	12/31/57	21.95	2.44	0.44				
Candelaria	Lewis	BPW 40918		21.34	5.49	0.52	0.83	0.610		
Candelaria	Lewis	BPW 21085	05/29/58	29.30	5.49	0.63	4.50	0.140		
Candelaria	Lewis	BPW 26088	06/02/67	22.86	3.66	0.50				
Candelaria	Lewis Elementary School	BPW 1839	06/08/67	7.93	3.66	0.50				
Candelaria	Libertador	BPW 46316	09/22/63	7.32	0.91	0.38	0.61	0.620		
Candelaria	Libertador	BPW 8320		22.87	2.13	0.50	0.66	0.757		
Candelaria	Malabon	BPW 10351	07/20/56	10.97						
Candelaria	Northern Poblacion	BPW 20484	02/07/58	17.68	2.74	0.44	0.61	0.720		
Candelaria	Pambian	BPW 10352	07/08/56	14.63						
Candelaria	Pambian	BPW 20483	02/28/58	13.11	2.74	0.44	1.00	0.440		
Candelaria	Pamocosan	BPW 16410	09/17/57	9.45	2.13	0.63	0.61	1.030		
Candelaria	Panayoman	BPW 16409	08/21/57	11.28	1.83	0.63				
Candelaria	Poblacion			30.00						
Candelaria	Poblacion	BPW 6987	10/07/54	25.91	1.22	1.93	2.71	0.700		
Candelaria	Sunbocao	BPW 46114	08/30/63	8.53	0.91	0.44	0.61	0.720		
Candelaria	Sinabacan	BPW 8319		21.95	1.83	3.62	1.64	2.210		
Candelaria	Southern Poblacion	BPW 20483	01/20/58	10.63	1.83	0.44	3.14	0.140		
Candelaria	Taposo	BPW 46912	05/23/69	14.02	3.66	0.32	0.50	1.070		
Candelaria	Uacon	BPW 46315	08/31/63	4.57	0.91	0.44	0.61	0.720		
Candelaria	Uacon	BPW 8801		13.11	1.83					
Candelaria	Uacon North	BPW 21088	08/06/58	7.01	2.13	0.38				
Candelaria	Uacon South	BPW 21089	09/03/58	10.36	2.44	0.44				
Candelaria	West Liberator	BPW 20481	10/31/57	7.92	1.22	0.52				
Candelaria	Western Lewis	BPW 21085		7.14				4.270		
Candelaria	Western Lewis	BPW 21086	06/24/58	7.01	2.13	0.32				
Candelaria	Yamor	BPW 21087	07/23/58	7.01	2.13	0.38				
Castillejos	Angeles	LWUAW 45		13.70	2.60					
Castillejos	Balaybay Elementary School	BPW 04707		21.30	4.60	0.44	0.91	0.483		
Castillejos	Balaybay West	BPW 10345	04/23/56	13.11				1.030		
Castillejos	Banang	BPW 6523	09/03/54	11.36	4.27	0.63	0.61			
Castillejos	Boza	BPW 54688		21.34	2.13					
Castillejos	Del Pilar	BPW 41810		27.44	5.79					
Castillejos	Del Pilar	BPW 7328	12/17/54	36.58	2.44			2.630		
Castillejos	Looc	BPW 4018		13.72	1.83	0.52	0.83	0.630		
Castillejos	Looc	BPW 21812	07/31/67	33.53	3.05	0.63	0.78	0.810		
Castillejos	Looc	LWUA 442		32.00	4.23					
Castillejos	Magbunga	BPW 4933		23.47	1.83			0.630		
Castillejos	Magaysay	BPW	07/19/67	24.40	1.52	0.50	2.17	0.230		
Castillejos	Magaysay	BPW 7331		21.34	1.83					
Castillejos	Magaysay	BPW 54692		21.34	2.44					
Castillejos	Magaysay	LWUA 435		19.80	2.40					
Castillejos	Nacabayan	BPW 62703	06/08/70	13.72	2.44	0.76	1.23	0.620		
Castillejos	Piara	BPW	07/09/67	30.48	1.52	0.50	3.12	0.160		
Castillejos	Poblacion	BPW 7213	11/17/54	48.17	3.05	0.93	4.52	0.210		
Castillejos	Poblacion	BPW 4631		25.91	3.66					
Castillejos	San Agustina	BPW 6986	09/22/54	14.63	0.31	0.63	2.73	0.230		

ZAMBALES

MUNICIPAL	LOCATION	WELL_NO	DATE	DEPTH	SWL	DISCHGE	DRAWDWN	SPCCP	USAGE	REMARKS
Castillejos	San Nicolas	BPW 6524	09/20/54	18.90	1.32	0.61	1.58	0.410		
Castillejos	San Pablo	LWUA #38		12.20	2.31					
Castillejos	Sa. Maria	BPW 6522	08/14/54	45.13	6.10	0.63	4.50	0.140		
Castillejos	Sa. Maria District	BPW 10345	04/10/56	8.23						
Castillejos	Villaflo School	BPW	06/10/67	10.06	0.91	0.63	0.61	1.030		
Iba		BPS26212		18.29	2.44					
Iba		BPS26233		15.85	3.66					
Iba	APC Compound	BPW54682		15.24		3.05				
Iba	Amungan	BPS26017	09/01/60	10.36	1.52					
Iba	Amungan	BPS26123		19.15	2.44					
Iba	Amungan	BPW 6130	04/25/54	7.62	2.44	0.32	0.30	1.070		
Iba	Bali	BPW54694	04/12/69	13.72	2.44	0.61	0.90	0.760		
Iba	Bangamalinga	BPS26013	04/25/60	12.50	3.66	0.30	1.22	0.410		
Iba	Bangamalinga	BPS26016	08/05/60	17.68	3.66	0.44	1.52	0.290		
Iba	Bangamalinga	BPS26124		9.15						
Iba	Bangamalinga	BPW7167		10.67	3.05					
Iba	Bangamalinga	BPW52621	02/16/62	9.15	3.05	0.38	1.84	0.207		
Iba	Bangamalinga	BPW54721	09/23/72	13.41	1.83	0.50	0.91	0.550		
Iba	Bangamalinga East	BPS26014	05/25/60	19.51	4.57	0.50	2.50	0.200		
Iba	Dampay	BPW54691	03/14/69	15.55	3.66	0.38	1.23	0.310		
Iba	Dungun	BPW21082		7.01	2.74	0.32	0.92	0.345		
Iba	Durita	BPW7176		10.67	2.74					
Iba	Hacienda Mayor	BPW54683		30.49	4.57					
Iba	Iba Elementary School	BPW 7841	03/15/55	27.44						
Iba	Lawak	BPW54631		8.23	0.91					
Iba	Municipal Bonding	BPS26233	09/30/62	15.24	1.52	0.31	3.06	2.060		
Iba	Nursery Bc. Plant Industry	BPW 7762	03/19/55	18.29	2.44	0.51	1.23	0.414		
Iba	Palanganan	BPW 6796	05/10/54	10.67	3.05	0.63	0.18	3.500		
Iba	Palanganan	BPW54681		15.24	3.05	2.52				
Iba	Palanganan Bayong Karsada	BPW19445		7.32	1.22	0.32	0.52	0.621		
Iba	Poblacion	BPS25921	12/23/59	18.40	3.05	2.25	4.90	1.480		
Iba	Proloquin	BP10716		9.15	2.13	0.75	1.51	0.497		
Iba	Provincial Hospital	BPW		13.41						
Iba	Provincial Hospital	BPW10341	03/14/56	14.02	3.05					
Iba	Provincial Hospital	BPW26026	09/15/60	7.32	2.13	0.44	1.22	0.360		
Iba	San Agustin	BPW7168		9.15	3.05					
Iba	Sa. Barbara	BPS26221	03/30/62	24.40	12.20	0.32	0.62	0.520		
Iba	Sa. Barbara	BPW 6036	04/09/54	16.16	7.83	0.32	2.91	0.110		
Iba	Sa. Barbara	BPW30490	08/16/67	22.86	3.05	0.50				
Iba	Sa. Barbara School Site	BPW	06/21/67	15.55	3.05	0.50				
Iba	Sa. Rita	BPW64721		13.41						
Iba	Sa. Rosario	BPW 7840	03/10/55	27.44	2.74					
Iba	Sa. Rosario	BPW54637		8.84	0.91					
Iba	Tambac	BPW20489	02/04/59	36.90	5.48	0.57				
Maxinloc	Balaganon	BPS26132	07/11/61	118.90	2.13					
Maxinloc	Balaganon	BPW-6800		9.15	4.57			0.517		
Maxinloc	Balaganon	BPW52623	05/22/62	9.75	0.51	0.50				
Maxinloc	Bamban	BPS2524	06/16/62	13.41	2.13	0.50	1.22	0.410		

MUNICIPAL	LOCATION	WELL_NO	DATE	DEPTH	SWL	DISCHGE	DRAWDOWN	SPCCP	USAGE	REMARKS
Masnlloc	Bamban	BPW-8016		15.72	2.49	0.63	0.61	1.035		
Masnlloc	Baan	BP526114	09/29/61	9.15	3.051			0.380		
Masnlloc	Baan	BPW52612	04/06/61	11.28	4.57	0.50				
Masnlloc	Baan Elementary School	BPW-8326		36.59	2.44	0.95	0.61	1.550		
Masnlloc	Cabangon	BPW52616		37.26	3.66	0.44	8.46	0.052		
Masnlloc	Cabugao	BP526072		27.13	3.66	0.63	2.43	0.259		
Masnlloc	Coliar	BPW-8325		16.77	2.44	0.63	1.22			
Masnlloc	Habang	BP526212		32.01				10.670		
Masnlloc	Inhobol	BPW52615	12/14/61	54.87	7.32	0.50	25.00	0.020		
Masnlloc	Kahawangan	BP526116		102.13						
Masnlloc	Kapayawan	BP526211		18.29						
Masnlloc	Lmie Baguio	BP526113		21.44	7.32					
Masnlloc	Masnlloc Elementary School	BP526234		59.45	3.05					
Masnlloc	Poblacion	BP526131		52.74	5.49	3.79	8.81	0.430		
Masnlloc	Poblacion	BPW-8799		12.20	1.83					
Masnlloc	San Lorenzo	BPW-8329		13.72	2.44	0.63	1.22	0.517		
Masnlloc	San Salvador	BPW-8884		20.73	0.61	0.13	0.19	0.090		
Masnlloc	San Salvador	BPW10144		14.02	4.57					
Masnlloc	San Salvador	BPW52616	01/18/62	37.19	3.66	0.44	8.40	0.050		
Masnlloc	San Salvador	BPW52621	02/22/62	40.55	9.15	0.50	1.52	0.330		
Masnlloc	San Salvador	BPW52622		44.21	7.62	0.51	1.54	0.330		
Masnlloc	San Salvador Island	BPW52614	05/17/61	46.58	6.10	0.50	3.12	0.160		
Masnlloc	Sta. Rita	BPW 7436	01/14/55	24.40						
Masnlloc	Sta. Rosano	BPW-7429		46.34	1.22			0.210		
Masnlloc	Talal	BPW 7430	01/07/55	19.82						
Masnlloc	Talal	BPW52613	104/11/61	33.23	6.40	0.50	1.22	0.410		
Masnlloc	Tapuac	BP526112		7.62	4.27					
Masnlloc	Upac	BP526111	104/15/61	56.71	3.96			0.320		
Olongapo City	Burrito Elementary School	BPW62701	02/15/70	21.95	2.13	0.76	1.52	0.300		
Olongapo City	Boys Town	BPW54687	10/15/68	76.22	19.83	2.52	7.64	0.330		
Olongapo City	Public Cemetery	BPW54689		91.46	18.29	0.13				
Olongapo City	Site No. 1, Gordon Heights	BP546913		9.15	1.83	1.57				
Olongapo City	Site No. 2, Gordon Heights	BPW15120		9.15	2.13	1.26				
Palauig	Alwa	BPW15120		13.72	2.74	0.31	1.79	0.173		
Palauig	Banga	BP526011	02/18/60	9.50	2.13	0.63	0.90	0.700		
Palauig	Bato	BPW	08/21/67	9.15	0.91	0.50	0.61	0.820		
Palauig	Bato	BPW 7730	03/09/55	24.40						
Palauig	Bato	BPW19440		7.62	0.91	0.31	0.91	0.340		
Palauig	Bulawen	BP526222		36.59		1.90				
Palauig	Bulawen	BP70715		18.29						
Palauig	Bulawen	BPW-6797		43.01						
Palauig	Bulawen	BPW15119		43.90	0.88	0.38	2.15	0.177		
Palauig	Bulawen	BPW21815	12/29/59	13.41	6.71	0.95	0.30	3.170		
Palauig	Bulawen	BPW52592		13.41	6.71	0.95	0.31	3.100		
Palauig	Bulawen	BPW14139		14.33	0.31					
Palauig	Cabutan	BPW 5825	09/28/53	118.29	12.20	1.26				
Palauig	Camp Alvaran	BPW15113		10.06	2.44	0.44	0.92	0.480		
Palauig	Cayon	BPW14144		3.96	0.30	0.44	1.22	0.360		
Palauig	Garreta									

ZAMBALES

MUNICIPAL	LOCATION	WELL_NO	DATE	DEPTH	SWL	DISCHGE	DRKWDWN	SPUP	USAGE	REMARKS
Palauag	Juan Luna St	BP26028	10/07/60	4.57	0.91	0.50	0.61	0.820		
Palauag	Lesaca St.	BP26029	10/14/60	3.60	1.22	0.50	0.91	0.550		
Palauag	Libbba	BPW14143		3.96	0.91	0.25	1.47	0.170		
Palauag	Lupay	BPW18142		7.93	0.38	0.38	1.22	0.310		
Palauag	Luzon	BPW	05/31/67	12.20	3.05					
Palauag	Luzon Bagisit	BPW15717		7.32	0.63	0.63	0.61	1.035		
Palauag	Luzon Elementary School	BPW	05/03/67	5.48	1.52					
Palauag	Luzon Purok #6	BPW14138		8.23						
Palauag	Loctoc	BPW15116		4.27	0.51	0.50	0.60	0.830		
Palauag	Macatang	BPW15113		7.62						
Palauag	Magalawa Island	BPW19439		3.66	0.91	0.31	0.60	0.520		
Palauag	New Municipal Building Site	BP26027	09/29/60	5.79	0.91	0.63	0.61	1.030		
Palauag	Palauag Waterworks	BPW-7707		28.35	0.31	0.32	6.15	0.052		
Palauag	Pangolinguan	BPW	05/28/67	45.73	9.14	0.50	8.31	0.060		
Palauag	Pangolinguan School	BPW15118	05/22/67	42.07	10.67	0.32	8.00	0.040		
Palauag	Poblacion	BPW-6798		14.63	2.74					
Palauag	Poblacion Market Site	BPW15121		3.35	1.22	0.31	0.90	0.345		
Palauag	Saliba	BPW14157		8.23	0.75	0.76	0.92	0.850		
Palauag	San Juan	BPW14141		7.93	1.83	0.75	0.90	0.830		
Palauag	San Nino	BPW15114		7.62	1.22	0.90	0.93	0.970		
Palauag	Sto. Tomas	BPW15122		7.62	1.83	0.31	1.19	0.260		
Palauag	Subic	BPW14140		7.01	0.61	0.31	3.60	0.060		
Palauag	Triton	BPW14145		8.54	0.63	0.63	0.91	0.690		
San Antonio	Antipolo	BPW-8017		25.95	2.44	0.63	1.22	0.517		Test Well
San Antonio	Antipolo	LWUA # 1		110.00	0.63					
San Antonio	Carmen St.	BPW-54611		26.83	3.35	0.63	0.30	2.070		
San Antonio	Carmen St	BPW-54671	02/09/68	30.48	3.09					
San Antonio	Durta	LWUA #57		16.30	2.13					
San Antonio	Lana	LWUA #65		53.04	7.30					
San Antonio	NCSK San Miguel	LWUA #66		32.90	3.30					
San Antonio	NCSK San Miguel	LWUA #67		33.50	1.80					
San Antonio	NCSK San Miguel	LWUA #68		36.60	1.80					
San Antonio	NCSK San Miguel	LWUA #69		36.60	3.00					
San Antonio	Pundakit	BPW-7834		21.34	1.52	0.75		0.830		
San Antonio	San Antonio Water Works	BPW 6519	07/09/54	55.48	7.62	0.95	5.94	0.160		
San Antonio	San Antonio Water Works	BPW 7220	07/27/55	56.09	1.32	2.21	0.61	3.620		
San Antonio	San Esteban	BPW 6132	04/29/54	15.65	3.05	0.95	1.53	0.620		
San Antonio	San Gregorio	LWUA #47	12/04/81	36.60	2.80	5.55	18.60	0.400		
San Antonio	San Miguel	BPW-6517		23.17	7.62	0.44		0.180		
San Antonio	San Miguel	LWUA #61		15.20	2.40					
San Felipe	Bucaco Water Works	BP26031	02/10/61	18.30	4.27	2.20	0.61	3.610		
San Felipe	Maligaya	BPW-9016		15.55	4.27	0.63				
San Felipe	Matona	BPW-9017		15.55	3.05	0.61				
San Felipe	Mangachot	BPW-9011		10.98	2.74	0.63				
San Felipe	Mindoro	BPW-9012		17.38	3.05	0.88				
San Felipe	Poblacion	BP26231	05/08/62	18.30	4.27	8.52	0.61	1.970		
San Felipe	Poblacion	BPW-7164		14.02	2.74					
San Felipe	San Rafael	BPW-9013		19.82	3.35	0.63				

ZAMBALES

MUNICIPAL	LOCATION	WELL_NO	DATE	DEPTH	SWL	DISCHG	DRAWDN	SPCCP	USAGE	REMARKS
San Felipe	San Rafael Elementary School	BP707713		15.24	2.74	0.75				
San Felipe	Sindol	BPW-9018		15.24	2.44	0.63				
San Felipe	Nto. Nino	BPW-7164		11.59	3.44					
San Marcelino	Agdao	BPW-6518		35.54	10.67					
San Marcelino	Agdao	BPW10347		17.48						
San Marcelino	Baliwit	BPW 7217	02/08/55	86.58	36.58	0.95	9.00	0.100		
San Marcelino	Consuelo	LWUA #49		12.50	2.74					
San Marcelino	Consuelo Norte	BPW54639	07/31/63	12.50	1.52	0.95	0.61	1.550		
San Marcelino	Ibad	BPW26051	01/12/60	19.82	9.15	0.50				
San Marcelino	La Paz	BPW 9015	04/30/56	18.11						
San Marcelino	La Paz	BPW 6080	08/31/67	18.90	0.91	0.63	1.50	0.420		
San Marcelino	Laog	LWUA #24		18.29	1.50					
San Marcelino	Laog	BPW21083	04/09/58	13.72	6.10	0.44	0.92	0.480		
San Marcelino	Linasin	BPW46914	06/30/69	26.22	0.61	0.76	3.62	0.210		
San Marcelino	Linasin Barro School	BPW 7304	08/13/67	24.40	0.91	0.63	2.10	0.300		
San Marcelino	Linosungan	BPW 7303	11/12/54	18.29						
San Marcelino	Linosungan	LWUA #48		179.90	1.02	50.70	3.95	12.840		
San Marcelino	Nagbuntia	BPW 7305	11/18/54	17.07						
San Marcelino	Pili	BPW54634	06/11/63	12.20	9.15	0.44	0.61	0.720		
San Marcelino	Plaza	BPW26030	12/02/60	24.40	2.74	0.63	0.90	0.700		
San Marcelino	Poblacion	BPW 5271	07/20/51	44.21	5.05	1.26	6.63	0.190		
San Marcelino	R.H.S.	BPW 5601	02/09/54	35.06	6.10	1.26	1.52	0.830		
San Marcelino	R.H.S.	BPW 7216	12/21/54	11.28	1.83	0.63	1.21	0.520		
San Marcelino	San Rafael	BPW 5993	03/21/54	32.32	10.67	0.95	4.52	0.210		
San Marcelino	San Rafael	LWUA #21		21.50	7.50					
San Marcelino	San Rafael			32.30	5.70					
San Marcelino	Sta. Fe		03/11/84	59.45	8.23	3.78	48.78	0.070		
San Marcelino	Sta. Fe	BPW26021		19.51	12.50	0.44				
San Marcelino	Sta. Fe	BPW 9014	05/19/56	21.34						
San Marcelino	Zambales Breeding School	BPW-7781		21.34	2.44	0.63				
San Narciso	Alluris	BPW-8014		25.20	3.05	0.63	0.61	1.030		
San Narciso	Bedding	BPW-8015		26.22	1.83	0.95	1.83	0.520		
San Narciso	Bedding	BPW21084	04/24/58	10.67	2.44	0.44	0.61	0.720		
San Narciso	East Elementary School	BPW 6521	08/71/54	29.88	4.57	0.63	3.00	0.210		
San Narciso	Grolio	BPW-8321		22.87	3.66	0.63	1.23	0.510		
San Narciso	La Paz	BPW 6985	08/23/54	14.02						
San Narciso	Mabalosuen	BP707712		15.24	3.05	0.69	1.50	0.460		
San Narciso	Namanican	BPW-7836		24.39	2.44	0.52	0.63	0.510		
San Narciso	Nanwedad	BPW-8012		25.30	4.27					
San Narciso	Poblacion	BP647104		73.17	0.61	1.26				
San Narciso	Poblacion	BPW 6520	07/25/54	30.49	7.96	0.95	5.94	0.160		
San Narciso	Public Market	LWUA #16		73.20	0.60					
San Narciso	San Jose	BPW-8011		25.30	3.05	0.63	0.61	1.030		
San Narciso	San Jose	LWUA #12		9.10	1.70					
San Narciso	San Pascual	BPW-8013		36.59	4.88	0.63	0.61	1.030		
San Narciso	San Pascual	BPW20488	12/24/58	16.16	1.52	0.64				
San Narciso	Simunablan	BPW-7837		24.39	2.13	0.63	1.54	0.410		
San Narciso	Sta. Cruzan	BP707719		16.77	3.05	0.63	1.23	0.510		

ZAMBALES

MUNICIPAL	LOCATION	WELL_NO	DATE	DEPTH	SWL	DISCHGE	DRAWDN	SPCCP	USAGE	REMARKS
Santa Cruz	Banan Bahale	BPW14018		7.32	0.91					
Santa Cruz	Baika	BPS26241	08/15/62	6.71	1.52	0.32	2.40	0.130		
Santa Cruz	Baika	BPW14036		14.03	0.91					
Santa Cruz	Banscol	BPW52611	07/30/61	22.86	4.57	0.50	3.57	0.140		
Santa Cruz	Bavro	BPW54633	07/20/67	9.43						
Santa Cruz	Biay	BPW 7435	12/22/54	19.82						
Santa Cruz	Biay	BPW54633	05/14/63	13.72	3.03	0.63	1.21	0.520		
Santa Cruz	Biay North	BPW10343	07/11/56	14.65						
Santa Cruz	Bolitoc	BPW26018	09/20/60	17.38	1.52	0.50				
Santa Cruz	Bolitoc	BPS26019	10/15/60	26.52	3.66					
Santa Cruz	Bolitoc	BPW 7434	01/07/55	16.77		0.63	1.85	0.240		
Santa Cruz	Bolitoc	BPW16406	06/07/57	10.36	3.05	0.38	1.52	0.250		
Santa Cruz	Bunga	BPS26015	06/15/60	10.36	2.44	0.50	1.22	0.410		
Santa Cruz	Calitongan	BPW21090	09/15/58	4.27	0.32					
Santa Cruz	Canayacayan	BPW14643		21.34	1.83	0.44				
Santa Cruz	Carina	BPW16402	05/23/67	18.29	4.57	0.32				
Santa Cruz	Cama	BPW54693	07/14/69	10.06	2.74	0.38	2.11	0.180		
Santa Cruz	Cama School	BPW-7439		44.51	4.57					
Santa Cruz	Canlungs	BPW	07/26/67	6.40		0.50				
Santa Cruz	Canlungs	BPW 6984	09/26/54	16.77	1.83	0.32	1.88	0.170		
Santa Cruz	Canlungs	BPW 6988	08/23/52	26.96						
Santa Cruz	Lupay	BPW14640		9.15	0.91					
Santa Cruz	Lumbay	BPS26041	07/10/61	25.30	7.62	0.50				
Santa Cruz	Lucepon	BPW 6983	09/12/54	26.83	0.61	6.31	2.45	2.580		
Santa Cruz	Lucepon South	BPW14642		16.46	1.83					
Santa Cruz	Lupa	BPS46310		59.79	4.57	0.44				
Santa Cruz	Malabago	BPW	07/12/67	15.55	1.52	0.50				
Santa Cruz	Malabago	BPW 6970	08/27/54	14.02	2.44	0.32	1.23	0.260		
Santa Cruz	Malabago	BPW16407	06/10/57	22.86	2.13	0.44	0.40	1.470		
Santa Cruz	Naulo	BPW14641		9.15	1.52					
Santa Cruz	Northern Poblacion	BPW 6989	10/22/54	10.97	1.52	2.20	2.02	1.240		
Santa Cruz	Payapa	BPW16403	04/03/57	15.55	3.35	0.57				
Santa Cruz	Panoman	BPW14645		21.34	1.83	0.44				
Santa Cruz	Poblacion	BPW 7431	12/22/54	7.62	2.13	0.63	2.10	0.300		
Santa Cruz	Poblacion	BPW-7306		28.96	1.22					
Santa Cruz	Poblacion	BPW-7432		26.22	3.05	0.63	2.10	0.300		
Santa Cruz	Poblacion Center	BPW14639		6.71	0.76					
Santa Cruz	Sabaig	BPS26020	11/20/60	12.19	9.15	0.50				
Santa Cruz	San Fernando	BPW 7430	01/07/55	19.82						
Santa Cruz	San Fernando	BPW-7433		21.34	3.66	0.63	0.83	0.760		
Santa Cruz	San Fernando	BPW16405	05/23/57	18.29	0.30					
Santa Cruz	Tabaang	BPW14644		23.78	3.66					
Santa Cruz	Tuborubo	BPS46310	08/28/63	49.08	4.57	0.63	3.00	0.210		
Santa Cruz	Tuborubo	BPW-8324		33.54	11.28	0.63				
Santa Cruz	Tuborubo	BPW16404		50.30	6.10	0.57				
Subic	Balaybay	BPW62704		21.34	4.57	0.44				
Subic	Calapacuan	BPW 6528	09/27/54	11.58	1.52	0.63	1.54	0.410		
Subic	Calapacuan	BPW 7212	10/25/54	45.43	1.52					

ZAMBALES

MUNICIPAL	LOCATION	WELL_NO	DATE	DEPTH	SWL	DISCHGE	DRAWDWN	SPCCP	USAGE	REMARKS
Subic	Calapandayan	BPW10348	04/09/56	6.40	2.44	0.63	1.62	0.960		
Subic	Mangap-Yaca	BPW26030	02/15/63	40.24	1.52	7.57				
Subic	Manggahan	BPW54638		42.68						
Subic	Matian	BPW 7214	11/30/54	13.72	1.52	0.63	3.00	0.210		
Subic	Matian East	BPW 7215	12/00/54	12.20	3.05	0.76	1.52	0.500		
Subic	Matian Jolons	BPW-8328		14.63	1.83	0.63	0.61	1.030		
Subic	Natun North	BPW-8327		25.91	3.05	0.63	1.54	0.410		
Subic	Pamalawan	BPW-8019		30.49	2.74	0.69	1.50	0.460		
Subic	Pamalawan	BPW20487	11/27/58	13.41	3.69	0.44				
Subic	Pamalawan Elementary School	BPW62702	04/15/70	10.67	3.05	0.57	1.54	0.370		
Subic	Subic Water Works	BPW 7219	05/19/55	39.63	1.52	6.31	12.37	0.510		

Source:
Notes:

NWRS Well Inventory
DEPTH = Meters Below Ground Level (m)
DRAWDWN = Drawdown (m)

SWL = Static Water Level (m)
SPCCP = Specific Capacity (l/sec/m)

DISCHGE = Discharge Rate (l/sec)

CABLE ADDRESS:
"MWSS PH"

7.5 Surface Water Sources

In reply, please refer to
Tel. Nos. (2) 95-32-11 to 29
FAX No. (2) 921-2887
Telex No. (722) 27947 MWSS PH

Table 7.5.1
Water Quality Examination Results



Republika ng Pilipinas
PANGASIWAAN NG TUBIG AT ALKANTARILYA SA METROMANILA
Metropolitan Waterworks and Sewerage System
Katipunan Road, Balara, Quezon City 1105, Philippines
CENTRAL LABORATORY DIVISION
Sewage Research and Analysis Section

04 October 1994

Sample Submitted by : Jorge C. Mateo
Date/Time Collected : 29 September 1994/11:50 am
Date/Time Submitted : 30 September 1994/ 8:45 am
Source of Sample : JD-3
Nayon River, Sta. Cruz, Zambales
Sample Analyzed by : B. Astudillo, R. Xavier, N. Alma Jose
and H. Labaro

ANALYSIS OF RIVERWATER SAMPLE*

Color	units :	5.00
Turbidity	units :	5.50
Conductivity	µs/cm :	246.00
pH	:	8.20
Alkalinity	mg/L :	117.00
Total Hardness as CaCO ₃	mg/L :	108.00
Ca Hardness as CaCO ₃	mg/L :	58.00
Mg Hardness as CaCO ₃	mg/L :	50.00
Chemical Oxygen Demand (COD)	mg/L :	71.40
Chloride	mg/L :	2.50
Sulfate	mg/L :	5.00
Total Iron	mg/L :	0.10
Manganese	mg/L :	0.00
Ammonia-Nitrogen	mg/L :	0.30

* Sample received as submitted by client.

Submitted by:

B. Astudillo
BUHAY S. ASTUDILLO
Chief Chemist, SRAS
3112-76

Certified Correct:

Concepcion M. Masanga
CONCEPCION M. MASANGA
Manager A, Central Laboratory Division

CABLE ADDRESS:
"MWSS PH"

In reply, please refer to
Tel. Nos. (2) 95-32-11 to 29
FAX No. (2) 921-2897
Telex No. (722) 27947 MWSS PH



Republika ng Pilipinas
PANGASIWAAN NG TUBIG AT ALKANTARILYA SA METROMANILA
Metropolitan Waterworks and Sewerage System
Katipunan Road, Balara, Quezon City 1105, Philippines
CENTRAL LABORATORY DIVISION
Sewage Research and Analysis Section

04 October 1994

Sample Submitted by : Jorge C. Mateo
Date/Time Collected : 29 September 1994/9:55 am
Date/Time Submitted : 30 September 1994/8:45 am
Source of Sample : JD-4
 Bagsit River, Palawig, Zambales
Sample Analyzed by : B. Astudillo, R. Xavier, N. Alma Jose
 and H. Labaro

ANALYSIS OF RIVERWATER SAMPLE*

Color	units :	45.00
Turbidity	units :	42.00
Conductivity	µs/cm :	620.00
pH	:	7.30
Alkalinity	mg/L :	49.00
Total Hardness as CaCO ₃	mg/L :	80.00
Ca Hardness as CaCO ₃	mg/L :	30.00
Mg Hardness as CaCO ₃	mg/L :	50.00
Chemical Oxygen Demand (COD)	mg/L :	142.90
Chloride	mg/L :	139.00
Sulfate	mg/L :	20.00
Total Iron	mg/L :	2.90
Manganese	mg/L :	0.22
Ammonia-Nitrogen	mg/L :	0.50

* Sample received as submitted by client.

Submitted by:

B. Astudillo
BUHAY S. ASTUDILLO
Chief Chemist, SRAS
3111-96

Certified Correct:

Concepcion M. Masanga
CONCEPCION M. MASANGA
Manager A, Central Laboratory Division

7.6 Future Development Potential of Water Sources

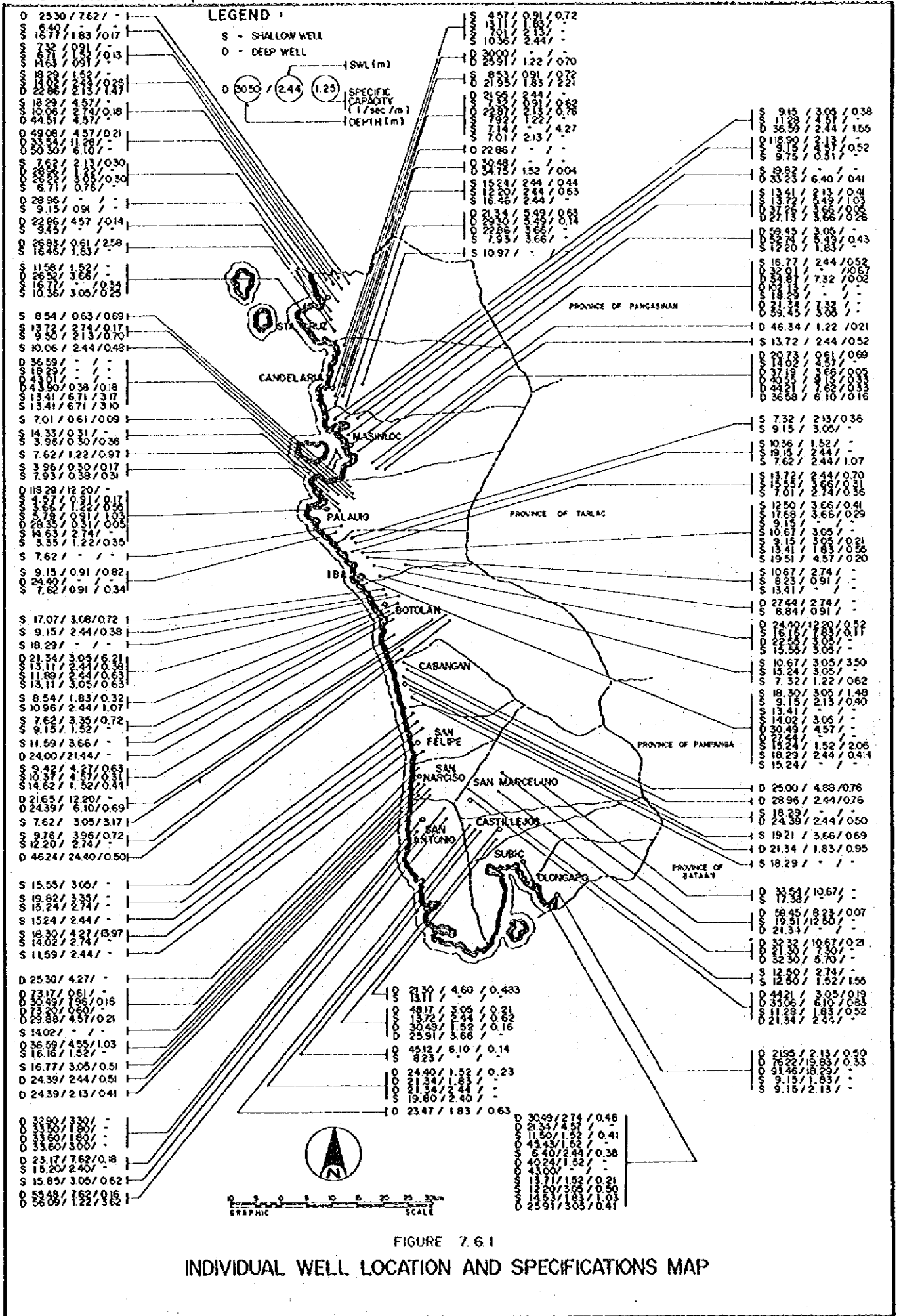


FIGURE 7.61

INDIVIDUAL WELL LOCATION AND SPECIFICATIONS MAP



JICA