ANNEX 1

A. GENERAL INFORMATION

-Name.	Finca_"San Agustin La Minas"		
-Unicipality of the farm	Villa Canales, Guatemala		
-Localization map	Km. 13.5 a Villa Canales, co-ordenades 66-08 to 69-04		
-Area farm	28 Caballerías		
B. PROĐUCT			
-Name of products And product are	a Coffee= 420 manzanas		
	Sábila= 20 manzanas		
А.	Leard life= 10 manzanas		
	Blackberry= 15 manzanas		
	· · ·		
-Annual estimated production.	Kg (Ton) Coffee= 10,000 gg gold		
C. UTILIZATION OF THE RECO	URSE WATER FOR IRRIGATION.		
Source supply.			

6

œ

-Well.	yes2	no
-Appropriate headwater.	yes3	110
-River,	yes	R0
-Rain.	yes	no <u></u>

D, USE FERTILIZERS.		
-Does fertilizer use?	yes <u>X</u> no	
-Fertilizer class.	Urea	
	Basf	
	Nitrofosca	
-Method application.	Manual and Equipment	
-Utilized quantity.	<u>Urea= 2,520 qq</u>	
and period of application	Basf= 2,520 gg	
	Nitrofosca= 2,520 qq	
	One every year (July-August)	
-Knowledge of organic fertilizers.	yes X no	
-Would you deal with applying them? yes x no		
E. USES [BIOCIDAS]		
-Do you use {biocida}?	yes <u>X</u> no	
-Specify class and name?	Fungicide	
	Insecticide	
	Neraticide	
	Herbicide	

-Method application.

Manual and pumping

-Period application.

According to sampling

-Utilized quantity.

No data

NOTE 1: Only coffee seeding data was proporcionated.

NOTE 2: Coffee for import and has estricted quality control.

Information was supplied by: Ing. Edgar Ramírez, General Manager.

A. GENERAL INFORMATION

-Name.	MAYA CROP
-Unicipality of the farm	Aldea el Zapote, Villa Canales, Guatemala.
-Localization map	Km. 25, Road to Relleno, Co-ordinate 63-00
-Area farm	50 Manzanas.

B. PRODUCT

鏫

-..

-Name of products And product area

Flowers seeds, (Geranios y chinas)

÷

(Winter quarters).

-Annual estimated production.

Kg (Ton) Kg/winter quarters (60 modules).

C. UTILIZATION OF THE RECOURSE WATER FOR IRRIGATION.

-Well.	yes X (2)	no
-Appropriate headwater.	yes	no
-River.	yes	no
-Rain.	yes	no

D. USE FERTILIZERS.

-Does fertilizer use?	yesX no
-Fertilizer class.	Urea
	Nitrato de calcio
	Nutrex 20200
-Method application.	Manual and watering trickle.
-Utilized quantity. AND PERIOD OF APPLICATION:	Every two days, Watering trickle.
	<u>Urea = 160 gq. Nitrato de calcio = 160 g</u> q.
	Nutrex 20200 = 160 qq.
-Knowledge of organic fertilizers.	yes X no
-Would you deal with applying the	em? yes X 110
E. USES [BIOCIDAS]	
-Do you use [biocida]?	yes X no
-Specify class and name?	Desistol granulado, counter, Mocap,
	Thiodsan (1.1/2 lt./Manzana), Alto 100 (250 cc/
	Manzana), Vondosed (3 pound/Manzana), Progo-
	500, (1 lts./Manzana).

0

0

......

-Method application.

Manual and pumping.

-Period application.

Two times a year, According to Sampling.

-Utilized quantity.

63

Desistol granulado	=	72 gg.
Caunter	=	<u></u>
Мосар	=	72 qq.

NOTES:

Utilization of the recourse water for irrigation, to pumping 350 gal./ minute, 8 hours daily.

Information was supplied by Lic. Danilo Vasquez, General Manager.

.

A. GENERAL INFORMATION			
-Name.	FINCA E INGENIO "SANTA TERESA"		
-Unicipality of the farm	Villa Canales, Guatemala.		
-Localization map	Km. 22-23 Road to Relleno, Co-ordinate 63-02 to	66-01	
-Area faim	700 Manzanas.		
B. PRODUCT			0
-Name of products And product are	a Sugar Cane (Barbado 4919 and 3439)		
	600 manzanas.		
-Annual estimated production.	Kg(Ton) 60,000 Ton. (100 Ton per Manzana).		
C. UTILIZATION OF THE RECO	OURSE WATER FOR IRRIGATION.		0
Source supply. - Well.	yes no		
-Appropriate headwater.	yesno		
-River.	yes <u>X</u> no		
-Rain.	yesno		

D. USE FERTILIZERS.

-Does fertilizer use?	yesX no		
-Fertilizer class.	Sulfato de Amonio		
	Urea		
-Method application.	Manual_and_Mechanizade		
-Utilized quantity. AND PERIOD OF APPLICATION.	First. 30 days after harvest Second. 60 days before harvest.		
	<u>Sulfato de Amonio = 1,800 qq. (3 per Manzana).</u> Urea = 1,200 qq. (2 per Manzana).		
-Knowledge of organic fertilizers.	yes <u>X</u> no		
-Would you deal with applying them? yes X no			
E. USES [BIOCIDAS]			
-Do you use [biocida]?	yes <u> </u>		
-Specify class and name?	Terbofos, Aerofos, Lorban , Belpar, Cannex,		
	2 HD, Randon.		

-Method application.

Manual and Rumping.

-Period application.

One time at Year.

-Utilized quantity.

.

<u>Terbofoz = 60 qq.</u>

6

63

Belpar, Carmiz, Randon (Aprox. 300 gals.).

NOTE:

.

Utilization of the recourse water for irrigation, the Villa Lobos River is used in january to april, damming used 10 hours daily = 2,500 gals/mir

Information was supplied by Ing. Alfredo Ortíz Garzo, Investigation Chief

A. GENERAL INFORMATION

-Name.	FINCA "MORAN"
-Unicipality of the farm	Villa Canales, Guatemala
-Localization map	Km. 21 y Km. 22 entrada Villa Canales
-Area farm	200 manzanas Co-ordenades= 66-03 to 67-04

B. PRODUCT

68

No.

-Name of products And product area

Coffee 9Variety: Borbon, Caturra y Mundo
Novo)
Cultived area= 150 manzana

-Annual estimated production.

Kg (Ton) 14,000 qq= 700 ton. ripe

C. UTILIZATION OF THE RECOURSE WATER FOR IRRIGATION.

Source supply. -Weil.	yes	no
-Appropriate headwater.	yes X	no
-River.	yes	no
-Rain.	yes	110

D. USE FERTILIZERS.		
-Does fertilizer use?	yes <u>X</u> no	
-Fertilizer class.	Urea	
	Complejo para almácigo= 1050-0	
•		
		•
-Method application.	Manual	.÷
		0
-Utilized quantity.	Urea= 1,000 gg= 6.6 gg *manzanas	
and Period of Application	Completo= 700 qg= 4.6 qg * manzanas	
	One time a year (in month July)	
-Knowledge of organic fertilizers.	yes X no	
-Would you deal with applying then	1? yes <u>x</u> no	
E. USES [BIOCIDAS]		
-Do you use (biocida)?	yes no	0
-Specify class and name?	Thiodan	
	Aceite triona (adherente)	

.

-Method application. Manual and pumping -Period application. Twice a year according to sampling (in August and December)

-Utilized quantity.

Ś٩

Thiudan≕ 72 gals

Aceite triona= 27 galones

This information was supply by: Mr. Victor Diaz Sánchez.

A. GENERAL INFORMATION

-Name.	GRANJA "LAS BRISAS" Arrendada por "TRANSCAFE",
-Unicipality of the farm	Mixco, Guatemala.
-Localization map	Km. 18, Road to San Juan Sac. Co-ordinate 58-22
-Area faim	10 Manzanas.
B. PRODUCT	
-Name of products And produ	ct area Chinese green bean, (Arbeja China)
	4 Manzanas.
-Annual estimated production.	Kg (Ton) Tree harvest a Year.
C. UTILIZATION OF THE R	ECOURSE WATER FOR IRRIGATION.
Source supply. -Well.	yes NoX
-Appropriate headwater.	yes no
-River.	yes NoX
-Rain.	yes 110X
NOTE:	
None water su	uply, it is buying Cistern, (Aproximate 2,000 gals),

Every to months.

D. USE FERTILIZERS.

8

0

-Does fertilizer use?	yes no
-Fertilizer class.	Fuente Orgánico.
	Cal
•*	10-28-0
-Method application.	Manual and Watering Trickle.
-Utilized quantity. AND PERIOD OF APPLICATION:	Seedding initial.
NU TATO VI ALLIONIXON.	<u>Fuerte Orgánico = 288 qq.</u>
	Cal = 288 qq. 10-28-0 = 144 qq.
-Knowledge of organic fertilizers.	yesX no
-Would you deal with applying the	n? yes X no
E. USES [BIOCIDAS]	
-Do you use [biocida]?	yes X no
-Specify class and name?	THIODAN, MALATHION, CHAMPION,
	FERBAN, DIAZINON.

.

.

-Method application.

Pumping and Watering Trickle.

-Period application.

-Utilized quantity.

Wet Season wvery four days.	
Dry Season every week.	
······································	
THIODAN = 96 lts., MALATHION = 15 lts.	مورد مر مو
CHAMPION = 96 lts., FERBAN = 15 lts.,	
DIAZINON = 28 lts.	

0

()

NOTE:

Information was supplied by Ing. Agr. Carlos Barillas, General Manager.

A. GENERAL INFORMATION

6

-Name,	FINCA "LOS GUAJES"	
-Unicipality of the farm	Fraijanes, Guatemala.	
-Localization map	Km. 23, Road to El Salvador, Co-ordinate 71-04 to	73-(
-Area faim	4 Caballerias.	
B. PRODUCT		
-Name of products And product ar	reaSeeds (Jaragua and Quiquiyu)	
	Pasture (potreros).	
	96 Manzanas.	
-Annual estimated production.	Kg (Ton) Pasture.	
C. UTILIZATION OF THE RECO	OURSE WATER FOR IRRIGATION.	
Source supply. -Well.	yes no	
-Appropriate headwater.	yes no	
-River.	yes 110	
-Rain.	yes X no	
NOIE;		

Only with Raining.

.

,

. •

D. USE FERTILIZERS.				
-Does fertilizer use?	yes <u> </u>	no		
-Fertilizer class.	TRIPLE 20	0		:
				•
-Method application.	Manual and r	mechanical.		
	€			6
-Utilized quantity.	One time a y	year.		
AND PERIOD OF APPLICATION:		and August).		
		Manzana = 960 gq.		
-Knowledge of organic fertilizers.	yes <u>X</u>	_ R0		
-Would you deal with applying the	m? yesX	no		
E. USES [BIOCIDAS]				
-Do you use (biocida)?	yes	no	<u>(</u>	C
-Specify class and name?				
	<u>+,</u>			
	<u> </u>		·	
			, 	
	<u></u>	······································		

۰.

.

-Method application.	
	ورد. سه روی سه های است که کنه کنه
we that the state of the state	
-Period application.	an a
-Utilized quantity.	
-Othered durantes.	╊╋╪╪┉╧╗╡╡╱┥╫┸╄┉╔┉╗┲╖╘┉╧╍┶╍╌┺┷╌┶┷╼┶┶╧┷┷╪╤╗╤╦╤╤╡╤╤╤╌┷╼┷┶┵╤╧╺╤╌┺┵╴╴╘╺╪╴╌╸╡ ╴

NOTE:

蠶

Information was supplied by Mr. Ignacio Jimenez Hernandes, General Manager.

A. GENERAL INFORMATION

-Name.	FINCA "EL SOCORRO"
-Unicipality of the farm	Fraijanes, Guatemala
-Localization map	Km. 23.5 Carretera to El Salvador, Co-ordenades 71-03 to 7
-Area farm	5 Caballerías
B. PRODUCT	
-Name of products And product a	Riea Corn= 15 manzanas
	Coffee= 20 manzanas (catuai)
	·
-Annual estimated production.	Kg(Ton) Corn= 675 qq, coffee= 1,200 qq (ripe)
C. UTILIZATION OF THE REC	COURSE WATER FOR IRRIGATION.
Source supply. -Well.	yes no X
-Appropriate headwater.	yes noX
-River.	yes noX
-Rain.	yesnoX

D.	USE	FERTIL	JZERS.
----	-----	--------	--------

8

×

Urea Triple (20-20-20)
Manual
Manual
Corn Coffee Total Urea= 150 gg - 80 gg = 230 gg
Triple (20-20-20)=100 qg = 100 qg
One time a year
yes <u>X</u> no
n? yes no
yes no
Volaton
Malation
Thiodan

DB - 45

-Method application.

•

Manual and pumping

-Period application.

According to sampling (May-June)

-Utilized quantity.

Volaton= 30 qq

6

0

Malation= 30 Lts.

Thiodan= 40 Lts.

The information was supplied by: Agr.Santiago Chicol. General Manager.

•

A. GENERAL INFORMATION COMPAÑIA "CHESTNUT HILL S.A." -Name. Fraijanes, Guatemala. -Unicipality of the farm Km.24, Road to El Salvador, Co-ordinate 72-02 to 73-01 -Localization map 96 Manzanas. -Area farm **B. PRODUCT** Strawberry -Name of products And product area 35 - 60 Manzanas. _____ Kg (Ton) No data. -Annual estimated production. C. UTILIZATION OF THE RECOURSE WATER FOR IRRIGATION. Source supply. v (a)

鈞

-Well.	yes(2)	no
-Appropriate headwater.	yes	no
-River.	yes	no
-Rain.	yes	no

D, USE FERTILIZERS.

-Does fertilizer use?	yes <u>X</u> no
-Fertilizer class.	Urea
	Nitrato de Potasio.
-Method application.	Watering Trickle.
	••••••••••••••••••••••••••••••••••••••
-Utilized quantity.	One time at Month.
AND PERIOD OF APPLICATION:	Urea = 720 qq.
	Nitrato de Potasio = 720 qq.
-Knowledge of organic fertilizers.	yesX no
-Would you deal with applying the	m? yes X no
E. USES [BIOCIDAS]	
-Do you use [biocida]?	yes no
-Specify class and name?	Fungicide CAPTAN
	Fungicide PENOMIL

0

-Method application.	Manual and Pumping.	
-Period application.	<u>6 Months in dry season</u> ,	
	Every 15 days.	······································
-Utilized quantity.	CAPTAN = 30 gq.	·
	PENOMIL = 16 qq .	
	╪ <u>╴╼╾</u> ┎┑┯┯╌┎┙╶┎╕╼┹ [┲] ╼╷┍╼╧╼┷╬ _{╋┍} ┇╼╍╬╴╬╶┲╱╬╧ [┿] ╊╬ _╋ ╍┯┿╋┷╫ _┺ ┲╍╖╶╍╍╫╻┲╸┆╼╍╬┥┪╶╖╧╫╫┧ _┺ ┎ _╋ ┯┯╸┺	

NOTE:

.

0

Information was supplied by Ing. José Bran, Production chief.

.

A. GENERAL INFORMATION

-Name.	FINCA AVICOLA "CAMPO NUEVO"	
-Unicipality of the farm	Zone 17, Guatemala.	
-Localization map	Road to Aldea Los Ocotes, Co-ordinate 78-20 and 79-19	
-Area farm	7 Caballerias.	
B. PRODUCT		0
-Name of products And product ar	ca <u>Corn and Beans</u> = 100 Manzanas.	
•	Hog Pear = 40 Manzanas.	
	Oranges = 18 Manzanas.	
	Tomatoe = 3 Manzanas.	
-Annual estimated production.	Kg (Ton) Hog Pear = 8,000 qq, tomatoe = 1,000 boxes Orange = 150,000 units, corn = 3,000qq. beans	
C. UTILIZATION OF THE RECO	DURSE WATER FOR IRRIGATION. 2,000 qq	
Source supply. -Well.	yes	
-Appropriate headwater.	yes_X (2) no	
-River.	yes no	
-Rain.	yesno	

NOTE:

In dry season, Villa Lobos River water is used.

D. USE FERTILIZERS.

-Does fertilizer use?

-Method application.

-Utilized quantity.

Fowl Manure = 100 qq.

-Fertilizer class.

yes X no_____ Urea, Sulfato de Amonio, Triple 15 Fowl Manure 20-20-0 Manual + Pumping and watering trickle. Fowl Manure = One time at year, Urea = 3 times at year, triple 15 = 3 times at year, AND PERIOD OF APPLICATION: Sulfato de amonio = 3 times at Year, 20-20-0 = Urea = 1,908 gq. 20-20-0 1800qq-3 times at year. Sulfato de Amonio = 2,400 qq. -Knowledge of organic fertilizers. yes___X___no_____ -Would you deal with applying them? yes X no _____

E. USES [BIOCIDAS]

-Do you use [biocida]?

۲

-Specify class and name?

yes	<u>x</u>	no
Insecticide	=	TAMARON And METAXISTO
Nematicide	=	COUNTER
Foliar	=	COMPRASAL.

-Method application.

Manual + Pumping, and watering trickle

-Period application.

According to cultivation

-Utilized quantity.

TAMARON = 571 lts., METAXISTO = 81 lts.,

0

COUNTER = 1,200 lts., COMPRASAL = 450 lts.

NOTE:

Information was supplied by: Mr. Victor Manuel Sandoval and Mr. Jorge Alfredo Sandoval, General Manager and agronomist.

.

A. GENERAL INFORMATION

9

-Name.	FINCA "MONTERREY"		
-Unicipality of the farm	Zona 17, Guatemala		
-Localization map	Canino a la aldea Los Ocotes, Co-ordenades 78-19 to 79-18		
-Area farm	8 Caballerías		
B. PRODUCT			
-Name of products And product ar	ca <u>Coffee (caturra)= 24 manzanas</u>		
	Corn= 22 manzanas		
	Bean= 22 manzanas		
	Forrest=		
-Annual estimated production.	Kg(Ton) Coffee= 600 qq (ripe)		
· · · ·	<u>Corn= 880 qq</u> Bean= 550 qq		
C. UTILIZATION OF THE RECO	PURSE WATER FOR IRRIGATION.		
Source supply. -Well.	yes no		

-Appropriate headwater.	yesX	no
-River.	yes	no
-Rain.	yes	no

No used watering in the production.

-Does fertilizer use?	yes <u> X </u>
-Fertilizer class.	Urea
	20-20-0
	Triple 15
	Sulfato de amonio
-Method application.	Manua)

-Utilized quantity.	Urea= 100 qq
and period of application	2020-0= 100 gq
	Triple 15= 70 ca
	Sulfato de amonio= 70 qq One time a year
	one chie a jear
Knowledge of organic fertilizers	s. yes X no
	-
	s. yes <u>X</u> no
Would you deal with applying the	s. yes <u>X</u> no
Would you deal with applying the world you deal with applying the world be world be written applying the written applying the world be written applying the written applyin	s. yes <u>X</u> no
-Would you deal with applying th E. USES (BIOCIDAS) -Do you use [biocida]?	s. yes <u>X</u> no hem? yes <u>X</u> no,
-Would you deal with applying th E. USES (BIOCIDAS) -Do you use [biocida]?	s. yes <u>X</u> no hem? yes <u>X</u> no yes <u>X</u> no
	s, yes X no hem? yes X no yes X no Thiodan

-Method application.

Manual pumping

-Period application.

.

One time at year.

(According to sampling).

-Utilized quantity.

8

5

Thiodan= 24 Lts.	
	•
Aerofos= 132 Lbs.	
Counter= 132 Lbs.	

The information was supplied by: Mr. Donato Moguel.

A. GENERAL INFORMATION			
-Name.	FINCA "EL SINIUL"		
-Unicipality of the farm	Zona 17, Guatemala,		
-Localization map	Aldea Los Ocotes, Co-ordenate 79-16 and 80-15		
-Area farm	2 Caballerias.		
B. PRODUCT			
-Name of products And product are	a Hog Pear = 32 Manzanas.		
	<u>Corn = 64 Manzanas.</u>		
	Bean = 64 Manzanas.		
-Annual estimated production.	Kg (Ton) <u>Hog Pear = 8,000 gg, Corn = 2,560 gg</u> . black bean = 1,920 gg.		
C. UTILIZATION OF THE RECO	URSE WATER FOR IRRIGATION.		
Source supply. -Well.	yesno		
-Appropriate headwater.	yes X no		
-River.	yês no		
-Rain.	yesno		
NOTE:			
Only watering in a	dry season (Appropiate headwater).		

D. USE FERTILIZERS.

.

8

0

-Does fertilizer use?	yes X no
-Fertilizer class.	Urea, Sulfato de Amonio, and
	fowl manure.
-Method application.	Manual and pumping.
	According to production
-Utilized quantity. AND PERIOD OF APPLICATION:	According to production. Urea = 1,344 qq, Sulfato de Amonio = 1,152 qq, and fowl manure = 960 qq.
-Knowledge of organic fertilizers. -Would you deal with applying the	
E. USES [BIOCIDAS]	
-Do you use (biocida)?	yes X no
-Specify class and name?	TAMARON
	CIDIAL

.

-Method application.	Manual and pumping.		
-Period application.	Twice_at_year		
-Utilized quantity.	TAMARON = 64 1ts/year.		
- Courses Annuals	CIDIAL = 64 lts/year.		

NOTE:

.

Information was supplied by: Mr. Jackson García Proprietary.

6

()

A. GENERAL INFORMATION

-Name.

CASERIO "LOS ANGELES"

-Unicipality of the farm

Zona 17, Guatemala Pegerb a la riviera del Río Los Cootes, intersección del camino a lo tes y Las Canoitas. Co-ordenades 78-21.

-Area farm

-Localization map

9 manzanas

B. PRODUCT

6

-Name of products And product area

Hog pear= 3 manzanas

<u>Corn= 4 manzanas</u>

-Annual estimated production.

Kg (Ton) Hog pear= 225 qq Corn= 200 qq

C. UTILIZATION OF THE RECOURSE WATER FOR IRRIGATION.

Source supply. -Well.	yes	no
-Appropriate headwater.	yes	no
-River.	yesX	no
-Rain.	yes	no

Watering of Los Ocotes to hog pear.

D. USE FERTILIZERS.	
-Does fertilizer use?	yes <u>X</u> no
-Fertilizer class.	Urea
	Triple 15
	Sulfato de amonio
	Fowl manure
-Method application.	Manual
	<u> </u>
-Utilized quantity.	Urea= 72 gg
and period of application	<u>Triple 15= 72 gg</u>
	Sulfato= 24 gg
	Fowl manure= 24 qq According to harvest.
-Knowledge of organic fertilizers.	yes X no
-Would you deal with applying the	n? yes X no
E. USES [BIOCIDAS]	
-Do yon use (biocida)?	yesX no
-Specify class and name?	Tamaron
	Folipol

0

.

.

.

-Method application.

Manual pumping

-Period application.

Every month, every sir months.

. .

-Utilized quantity.

•

8

鹶

 Tamaron=	54	Lts.	
Folipol=	54	Lts.	

This information was supplied by: mr. agustin alvizurez, Agronomist.

STUDY FOR THE IMPROVEMENT OF THE MANAGEMENT THE RESIDUAL WATERS INTO THE METROPOLITAN AREA OF GUATEMALA.

A. GENERAL INFORMATION

-Name.	FINCA "RANCHITO D	ULCE"	والمحاجب والمحاج والمحا			
-Unicipality of the farm						
-Localization map	Entrada colonia El ros Co-cerdenades 24-72 an	sario d 23-71	· · ·			
-Area farm	5 Caballerías					
B. PRODUCT						
-Name of products And product area	Coffee= 116 r	manzanas				
. · ·	Forrest.					
-Annual estimated production.	Kg (Ton) <u>Coffee= 27</u> Coffee= 6,3	<u>,600 qq (ripe)</u> 270 qq (pergamino)				
C. UTILIZATION OF THE RECOU	IRSE WATER FOR IR	RIGATION.				
Source supply. -Well.	yesX	no				
-Appropriate headwater.	yes	no				
-River.	yes	no				
-Rain.	yes	no				

0

\$

D. USE FERTILIZERS.

0

0

-Does fertilizer use?	yes X no
-Fertilizer class.	Urea, cal dolomitica, zinc, boro, cobre,
	cittowet
-Method application.	Watering pump
-Utilized quantity.	Urea= 628 qq?year Cal dolomitica= 600 qq/year
and period of application	zinc= 1,485 Lts/year Boro= 183 Lbs./year
	Cittowet= 205 Lts./year. Mar and August at year
-Knowledge of organic fertilizers.	yesX no
-Would you deal with applying the	n? yes <u> </u>
E. USES [BIOCIDAS]	
-Do you use [biocida]?	yes no
-Specify class and name?	Nemacur
	Captafor
	•

....

.

-Method application.

-Period application.

-Utilized quantity.

.

Manual pumping
According to sampling
Minimum

0

0

The information was supplied by:

Mr. David Huas Piril, General Manager Mr. Raul Ramírez, Technical Agronomist Mr. Fredy Sandoval, Laborer

STUDY FOR THE IMPROVEMENT OF THE MANAGEMENT THE RESIDUAL WATERS INTO THE METROPOLITAN AREA OF GUATEMALA.

• '

A. GENERAL INFORMATION

-Name.	FINCA "MARIANA"			
-Unicipality of the farm	Colonia El Frutal, Villa Nueva Guatemala.			
-Localization map	Road to Villa Lobos River, co-ordinate 63-06			
-Area farm	50 Manzanas.			
B. PRODUCT				
-Name of products And product ar	ea <u>Blackberry = 6 Manzanas</u> .			
	Raspberry = 6 Manzanas.			
	Vegetables = 12 Manzanas.			
	- -			
-Annual estimated production.	Kg (Ton)No data			
C. UTILIZATION OF THE RECO	DURSE WATER FOR IRRIGATION.			
Source supply. -Well.	yesX no			
-Appropriate headwater.	yes no			

-River.

-Rain.

yes_____

yes_____

no_____

no_____

D. USE FERTILIZERS.

-Does fertilizer use?	yes X no	
-Fertilizer class.	Muriato de Potasio, Urea, 10-50-0,	
	Nitrato de calcio, Nitrato de potasio,	
	fosforo, fowl manure.	
-Method application.	Watering trickle.	
		0
-Utilized quantity. AND PERIOD OF APPLICATION:	One time every three months, Muriato de Potasio = 1,20 qq/year, Urea = 720 qq/year, 10-50-0 = 1,480 qq/year.,	
	fowl manure = 1,600 qq. Nitrato de Potasio = 88 qq/yea fosforo = 6 qq./year.	1
-Knowledge of organic fertilizers.	yes X no	
-Would you deal with applying the	a? yes X no	
E. USES (BIOCIDAS)		
-Do you use [biocida]?	yes X no	0
-Specify class and name?	TRISEL 20, GRAMOXON, DIVERINO,	
	CARVENDACIN, AFALON, VOLATRON	
	GRANULADO	

.

.

-Method application.

Manual and pumping.

-Period application.

According to harvest.

-Utilized quantity.

.

邈

63

TRISEL 20 = 16 qq/year, GRAMOXON = 24 lts/year, DIVERINO = 2 qq./year, CARVENDACIN = 288 lts/year, AFALON = 25 lbs/year, VOLATON GRANULADO = 24 lbs./year

.....

NOIE:

This information was supplied by: Mr. Miguel Angel Argueta, General Manager.

STUDY FOR THE IMPROVEMENT OF THE MANAGEMENT THE RESIDUAL WATERS INTO THE METROPOLITAN AREA OF GUATEMALA.

i

A. GENERAL INFORMATION

-Name.	ALDEA "CEBADILLA GRANDE"
-Unicipality of the farm	Zona 17, Guatemala
-Localization map	Co-ordenades 80-22 and 81-21
-Area farm .	Aproximadamente 50 lotes de 2 manzanas cada uno.
B. PRODUCT	
-Name of products And product area	Corn= 60 manzanas
-Annual estimated production.	Kg (Ton) 2,400 qq= 40 qq/manzana
C NTH 17 I TION OF THE DECOL	BOD WATED FOD IDDICATION

C. UTILIZATION OF THE RECOURSE WATER FOR IRRIGATION.

Source supply. -Well.	yes	no
-Appropriate headwater.	yes	no
-River.	yes	no
-Rain.	yes <u> </u>	no

In dry season is not harvest.

D. USE FERTILIZERS.

.

-Does fertilizer use?	yesX no
-Fertilizer class.	Sulfato de amonio
	Fowl manure
-Method application.	Manual
	**** ********************************
Ittlined quantity	One time at year
-Utilized quantity. and period of application	One time at year
	Sulfato= 240 gg/year = 4 gg/manzana
	Fowl manure= 300 qq/año = 5 qq/manzana
.Knowledge of organic fertilizers.	yes X no
-Would you deal with applying them	1? yes no
E. USES (BIOCIDAS)	
-Do you use [biocida]?	yesno
-Specify class and name?	Counter
	<u> </u>

-Method application.	Manual.		
-Period application.	One at year		
-Utilized quantity.	Counter= 6 Lbs./manzana= 4 gg		

靈

63

.

The information was supplied by: Mr. Felipe de Jesús Estrada, farmer.

•

STUDY FOR THE IMPROVEMENT OF THE MANAGEMENT THE RESIDUAL WATERS INTO THE METROPOLITAN AREA OF GUATEMALA.

A. GENERAL INFORMATION

-Name.	ALDEA '	'LAS CANOITAS''	
-Unicipality of the farm	Zone 17, Guatemala.		
-Localization map	Coorder	nate 80-20 and 80-21	
-Area farm	100 mar	Izanas.	
B. PRODUCT -Name of products And product are	10	Corn.	
-name of products And product and	- -	50 Manzanas.	
	-		
	.		
-Annual estimated production.	Kg (Ton) 2,000 qq. = 40 qq. per Manzana.	

C. UTILIZATION OF THE RECOURSE WATER FOR IRRIGATION.

Source supply. -Well.	yes	
-Appropriate headwater.	yes	no
-River.	yes	no
-Rain.	yesX	110

NOTE:

In dry season is not harvest.

D. USE FERTILIZERS.		
-Does fertilizer use?	yes <u>X</u> no	
-Fertilizer class.	Sulfato_de_Amonio, Triple_15,	
	Fowl manure.	
-Method application.	Manual	
	•••••••••••••••••••••••••••••••••••••••	
		۲
-Utilized quantity.	One time at year, Sulfato de amonio = 200 qq/year.	
AND PERIOD OF APPLICATION:	Triple 15 = 200 qq/year, Fow1 Manure = 250 qq./year.	•
-Knowledge of organic fertilizers.	yes no	
-Would you deal with applying the	m? yes no	
E. USES [BIOCIDAS]		
-Do you use [biocida]?	yesX no	0
-Specify class and name?	VOLATON AND COUNTER.	
	•	

-Method application.	Manua 1
-Period application.	One time at year.
-Utilized quantity.	VOLATON = 6 gg/year
	COUNTER = 3 og/year.

NOTE:

1

1

1

The information was supplied by: Mr. Jesús Reyes, farmer.

STUDY FOR THE IMPROVEMENT OF THE MANAGEMENT THE RESIDUAL WATERS INTO THE METROPOLITAN AREA OF GUATEMALA.

A. GENERAL INFORMATION	•			
-Name.	VALL	es de san cristoba	L	
-Unicipality of the farm	Mixco, Guatemala (El Campanero)			
-Localization map	(E1 Campanero) Co-oerdenades 58-115 and 58-16			
-Area farm	Aproximadamente 4 manzanas			
B. PRODUCT				
-Name of products And product area	L	Corn= 4 manzanas		

		•		
-Annual estimated production.	Kg (To	n) <u>140 qq= 35 qq</u> /	manzana	
C. UTILIZATION OF THE RECOU	RSEV	WATER FOR IRRIG	ATION.	
Source supply. -Well.		yes	R0	
-Appropriate headwater.		yes	no	

嬼

-River.

-Rain.

In dry season is not harvest.

yes_____

yes

Х

. _____ no_____

no<u>.</u>

D. USE FERTILIZERS.

-

8

緣

-Does fertilizer use?	yes <u>X</u> no
-Fertilizer class.	Triple 15
-Method application.	Manual
-Utilized quantity.	One a year
and period of application	Triple 15= 5 gg/manzana/year= 20 gg
-Knowledge of organic fertilizers.	yes <u>X</u> no
-Would you deal with applying the	n? yes no
E. USES [BIOCIDAS]	
-Do you use [biocida]?	yes <u>x</u> no
-Specify class and name?	Volaton granulado
	•
	·

.

-Method application.	Manual
-Period application.	Once a year
-Utilized quantity.	Volaton= 15Lbs/manzana/year= 60 Lbs.

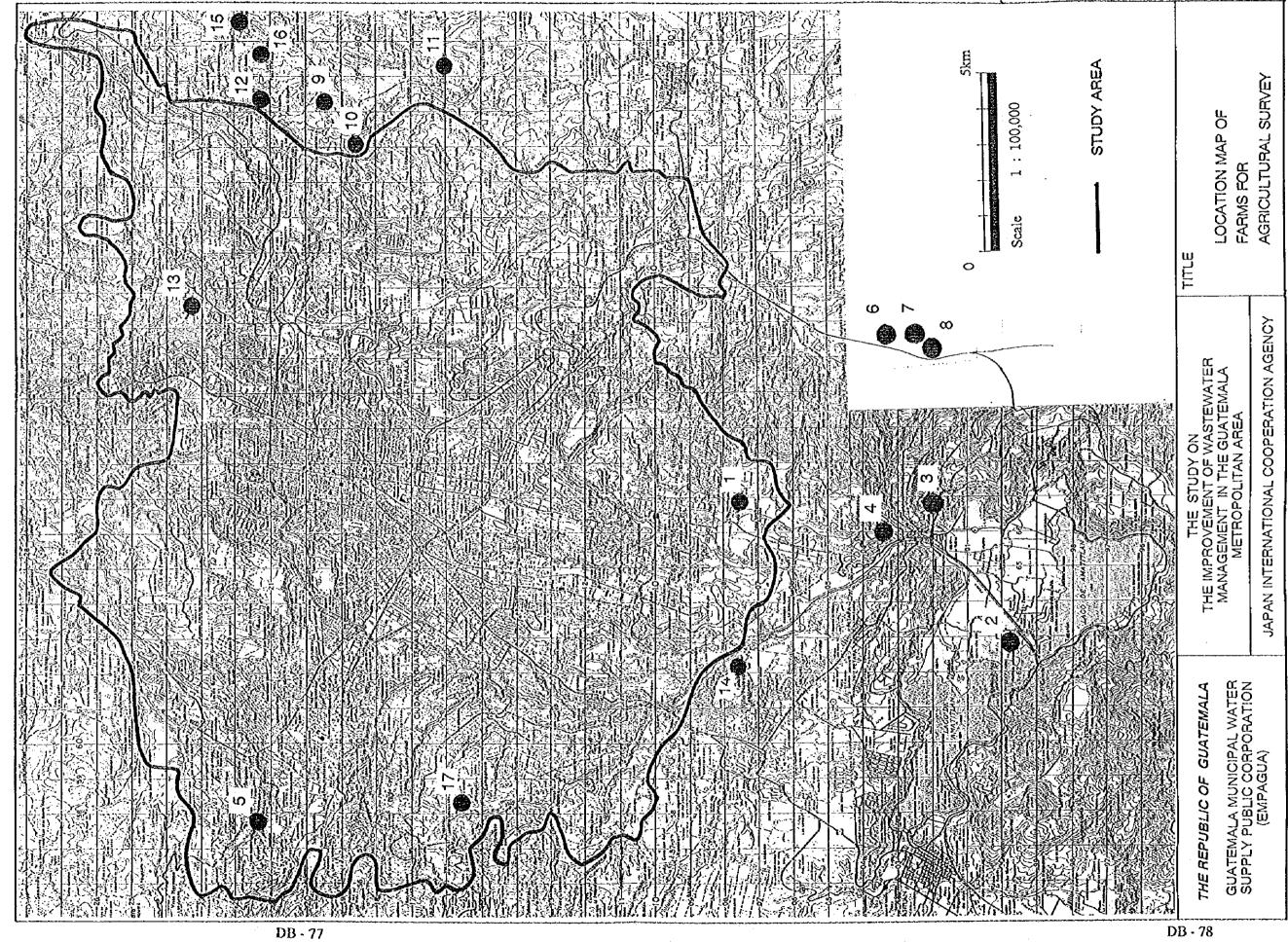
.

6

0

.

The information was supplied by: Mr. Juan Guarchaj, Laborer.



DATA BOOK DC

6

PHOTOGRAPHS OF TOPOGRAPHIC AND

GEOTECHNIC SURVEYS

DATA BOOK DC

PHOTOGRAPHS OF TOPOGRAPHIC AND GEOTECHNIC SURVEYS

- DC 1 Photographs of Topographic and Geotechnic Surveys
- **DC 2** Photographs of Borehole Logs
- DC 3 Photographs of Benchmarks
- DC 4 Photographs of Benchmarks
- DC 5 Photographs of WWTP Sites

9

鍧

. .

. .

. .

.

.

DC 1 Photographs of Topographic and Geotechnic Surveys

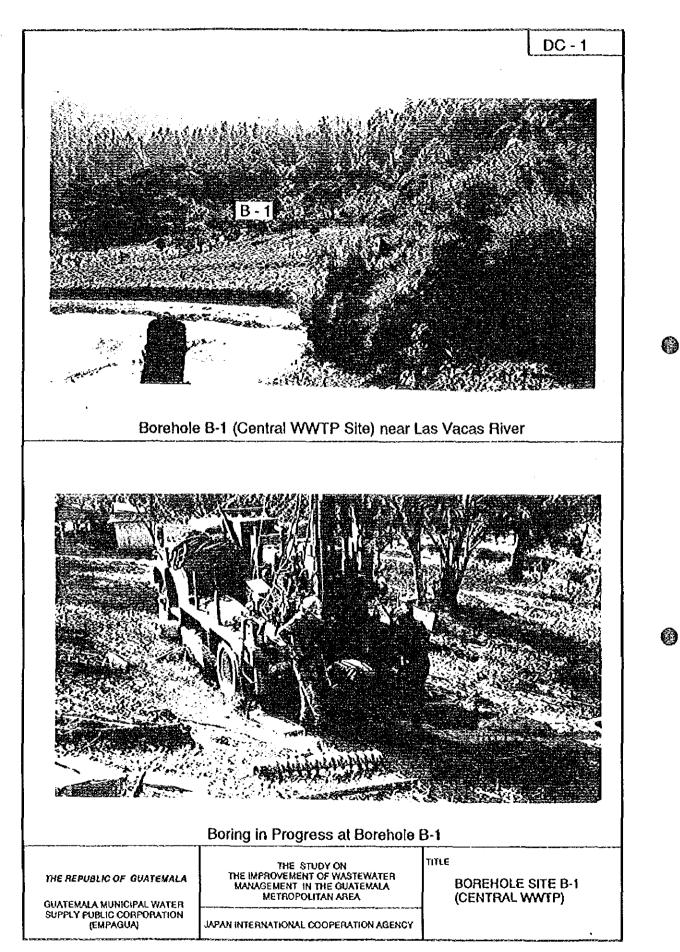
- DC 1 Borehole Site B-1 (Central WWTP)
- DC-2 Borehole Site B-1: Boring Rod with Bit Used
- DC 3 Borehole Site B-1: Core Samples
- DC-4 Borehole Sites B-1 and B-2
- DC 5 Borehole Site B-6,7 (Chinautla River Crossing)(1/2)
- DC 6 Borehole Site B-6,7 (Chinautla River Crossing)(2/2)
- DC 7 Borehole Site B-8 (Tzalja River Crossing) (1/4)
- DC 8 Borehole Site B-8 (Tzalja River Crossing) (2/4)

DC - 9 Borehole Site B-8 (Tzalja River Crossing) (3/4)

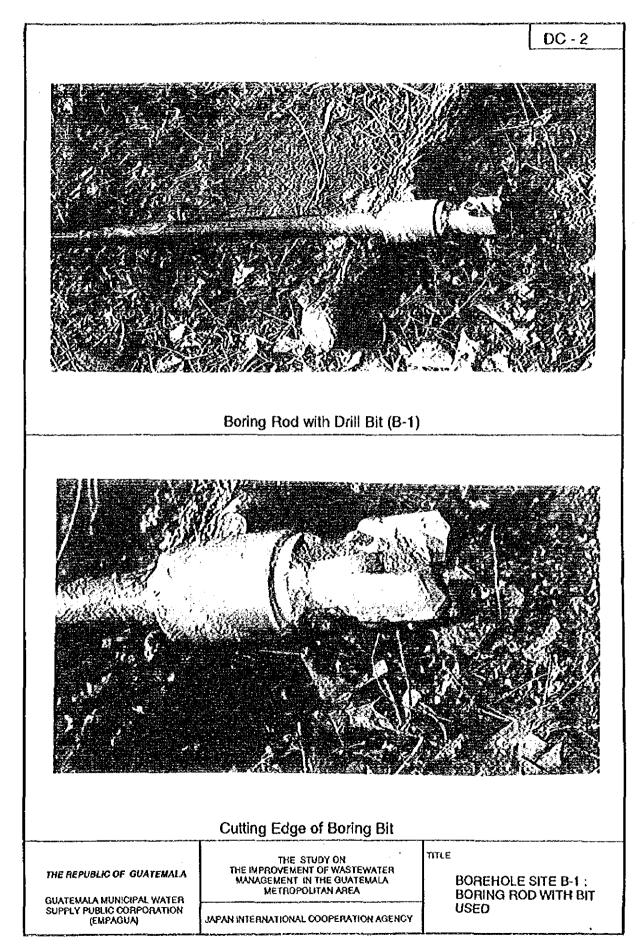
- DC 10 Borehole Site B-8 (Tzalja River Crossing) (4/4)
- DC 11 Borehole Site B-9 (Branch of Tzalja River Crossing) (1/2)
- DC 12 Borehole Site B-9 (Branch of Tzalja River Crossing) (1/2)
- DC 13 Borehole Sites B-10 and B-11

DC - 14 Soil Percolation Testing at Boreholes B-16 and B-19

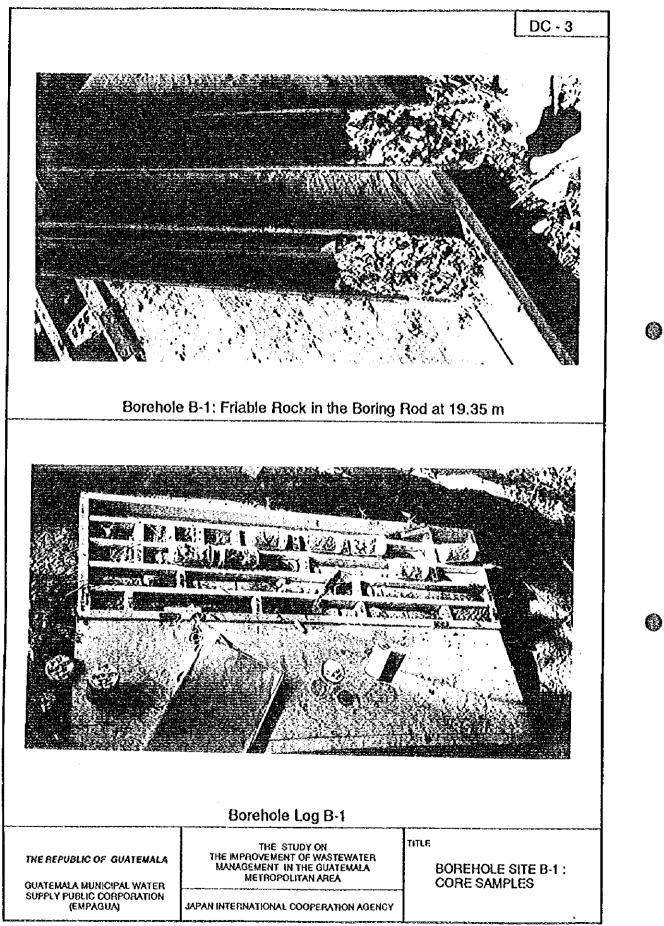
DC - 1



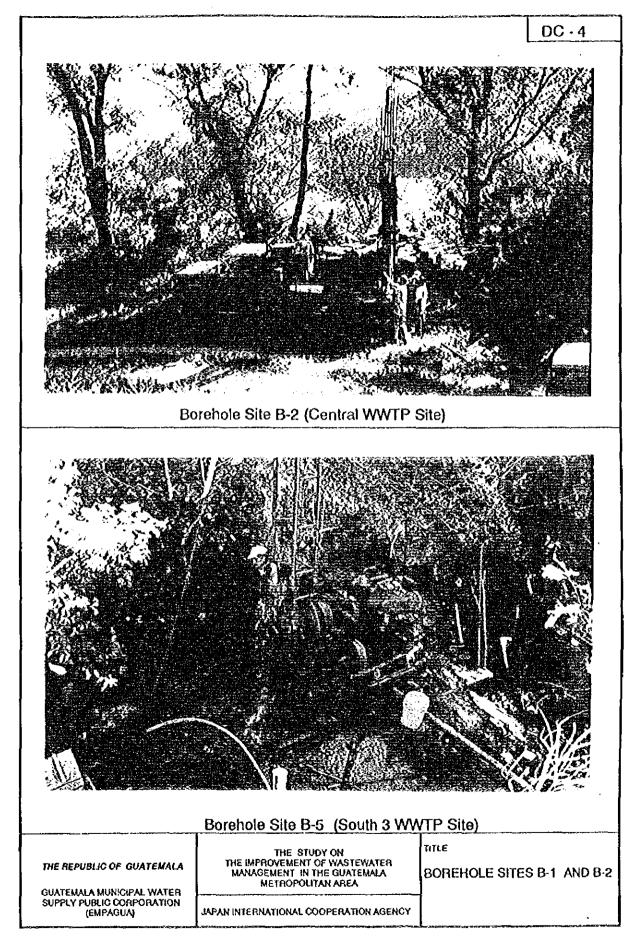
DC - 2



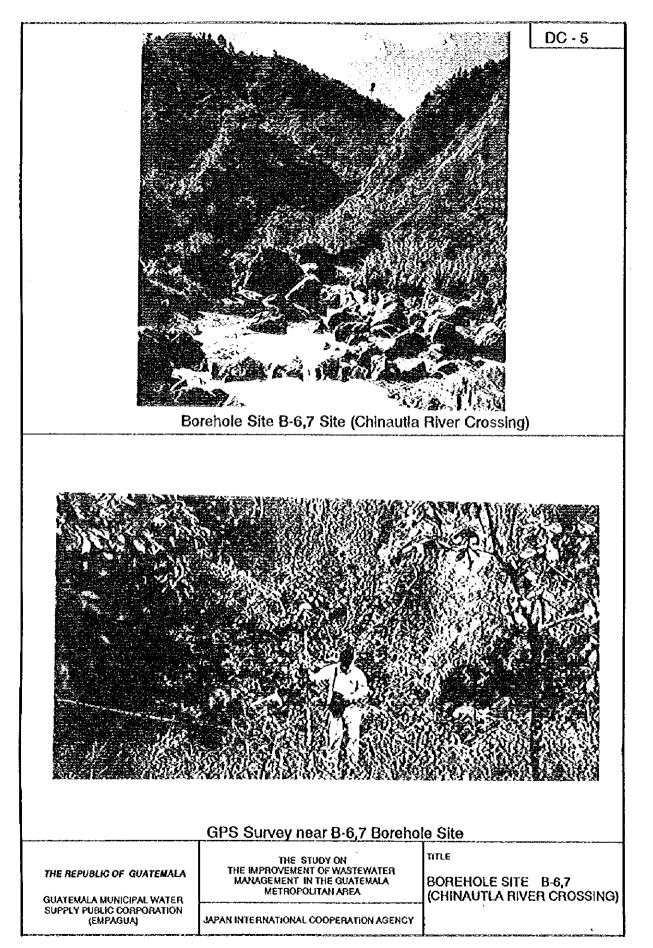




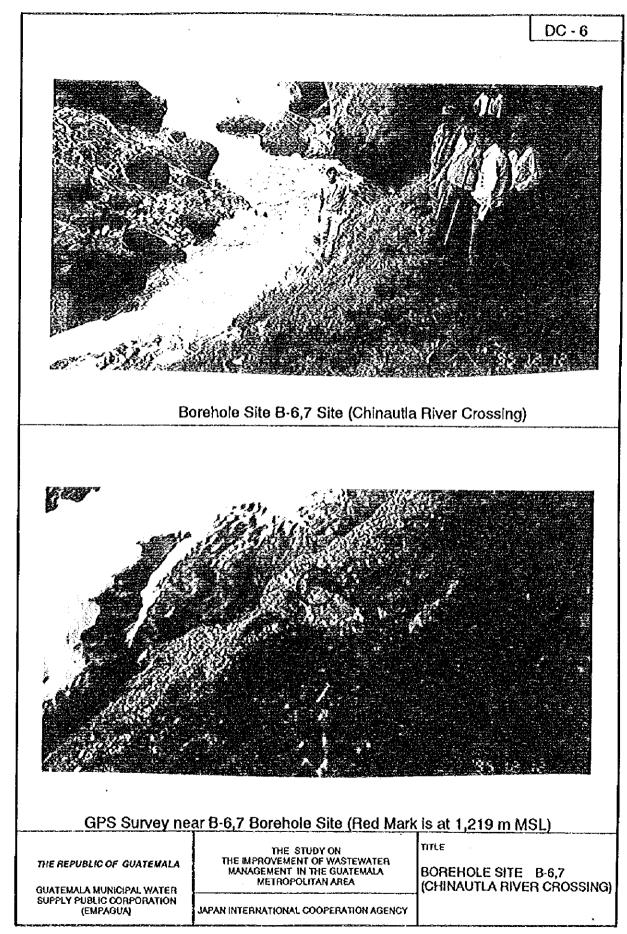




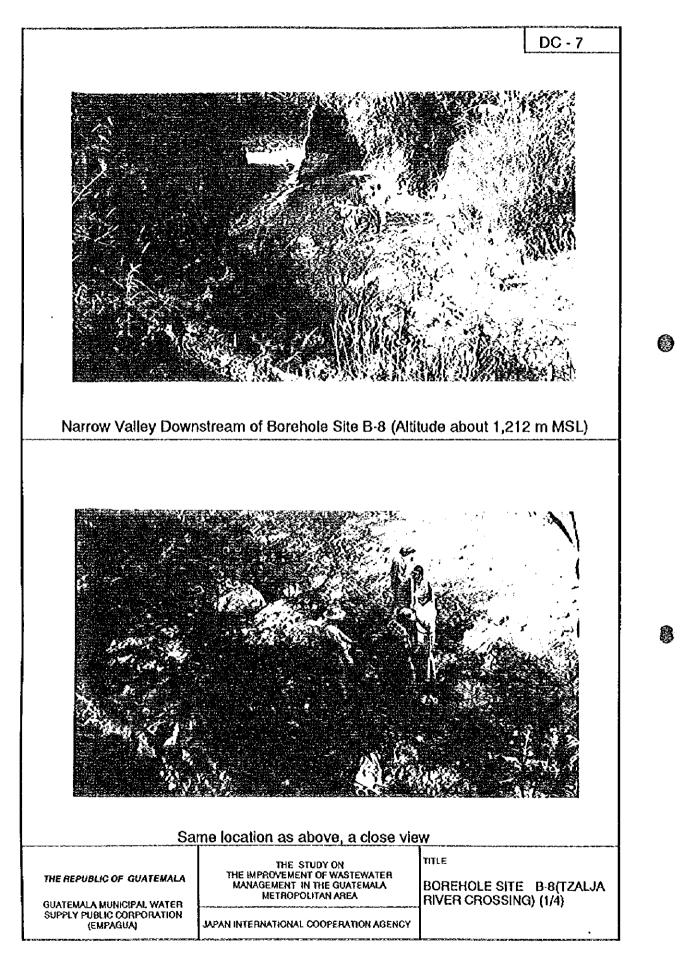
DC - 5

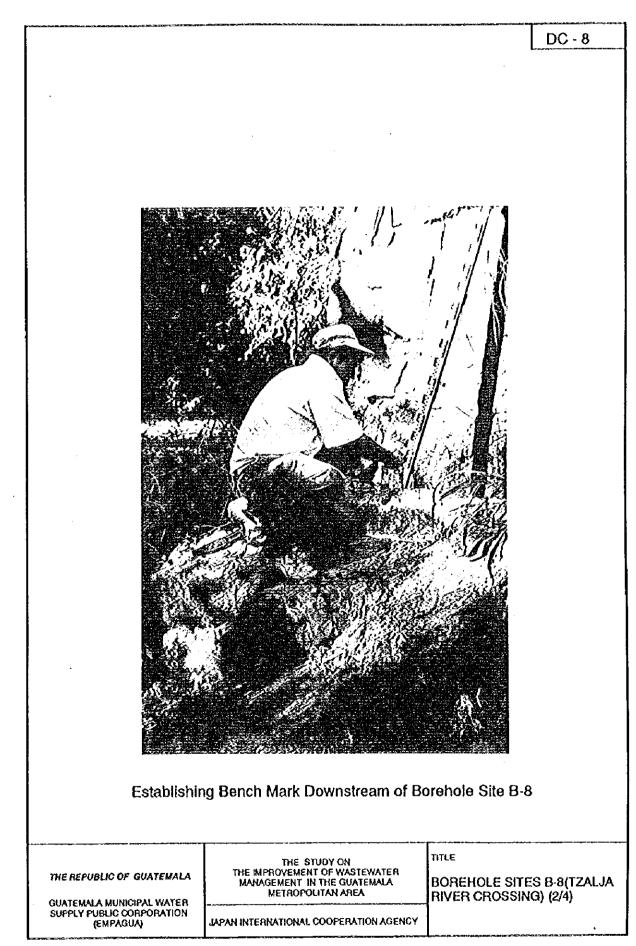


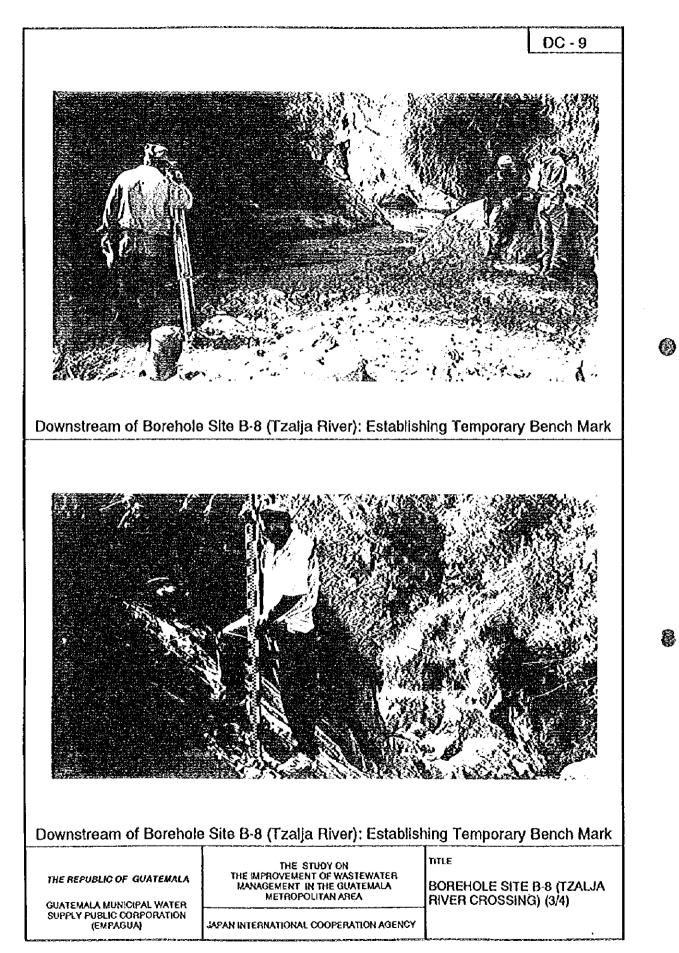
DC - 6



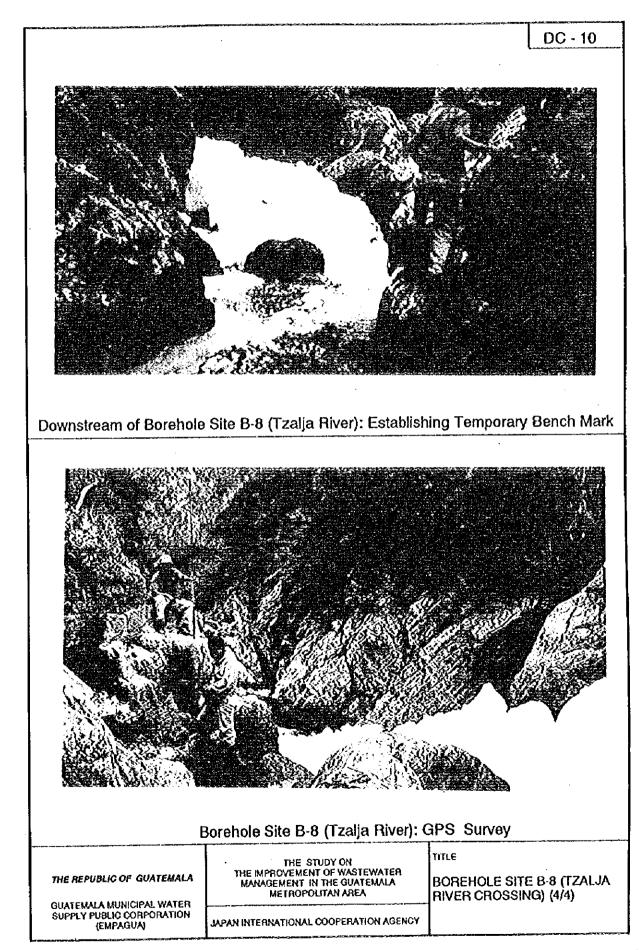
DC - 7

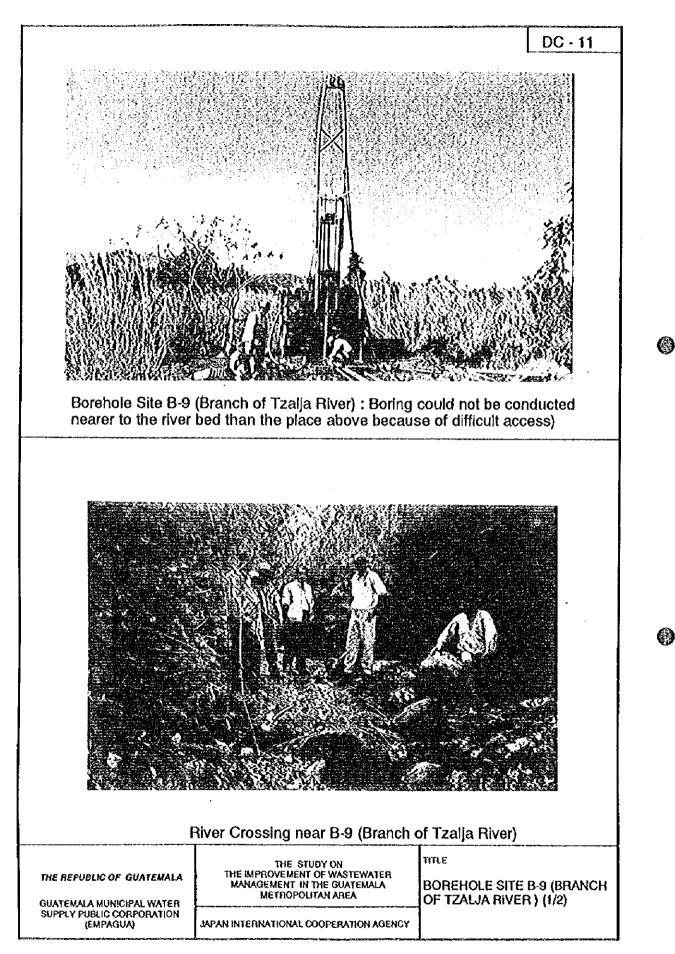


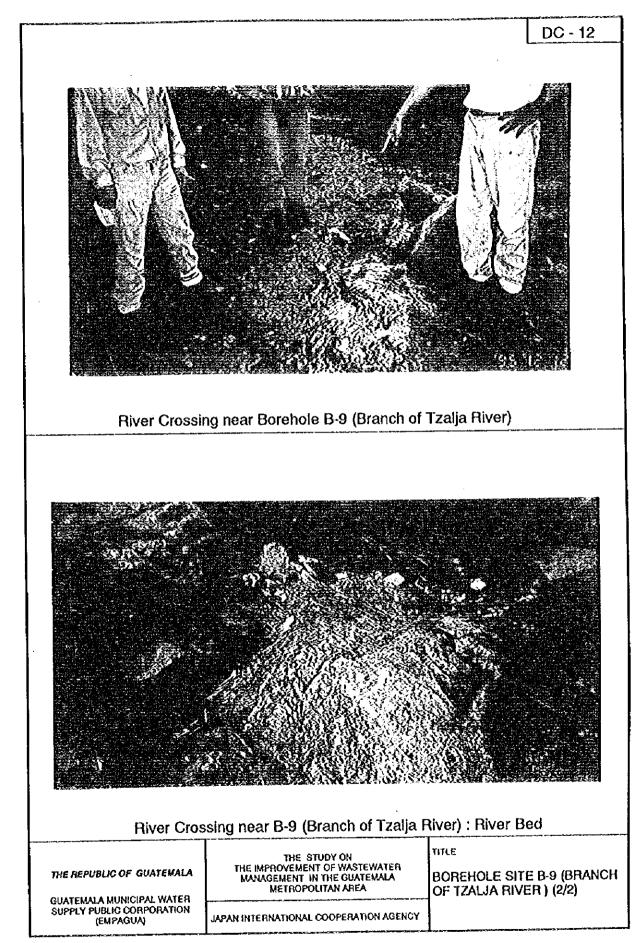




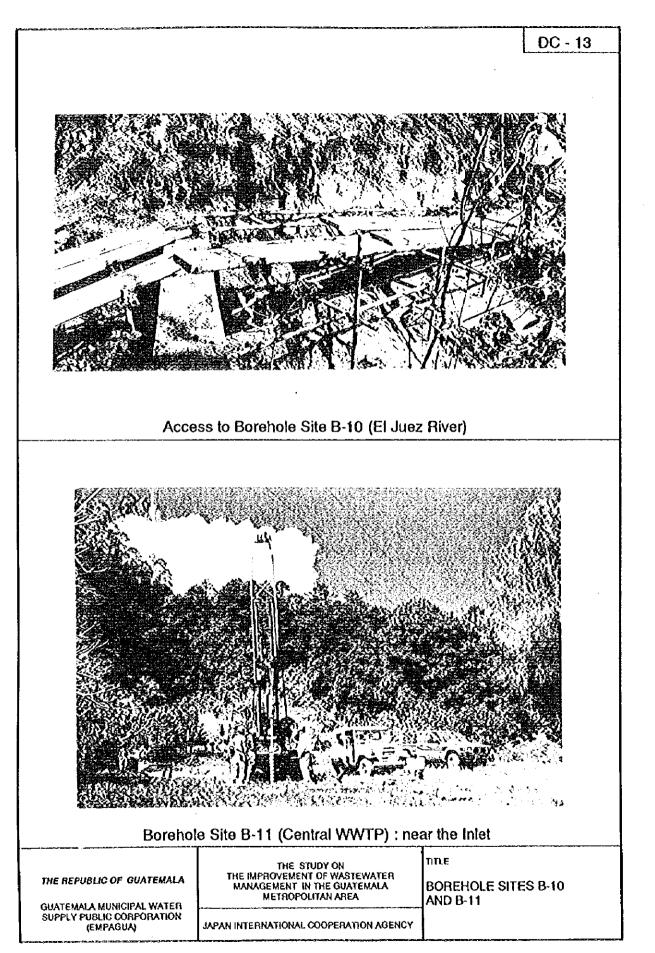
DC - 10

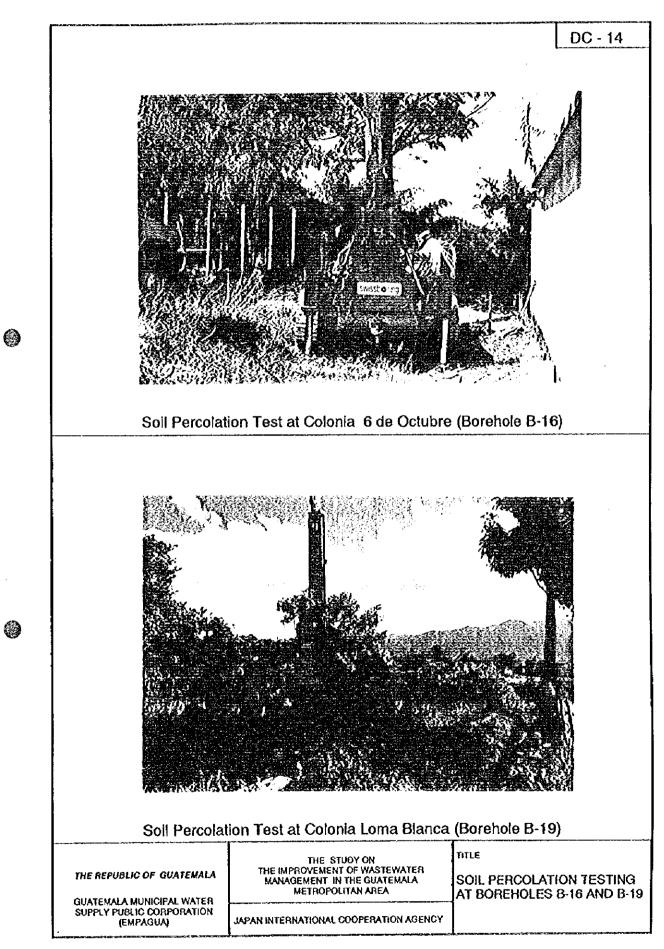






DC - 13



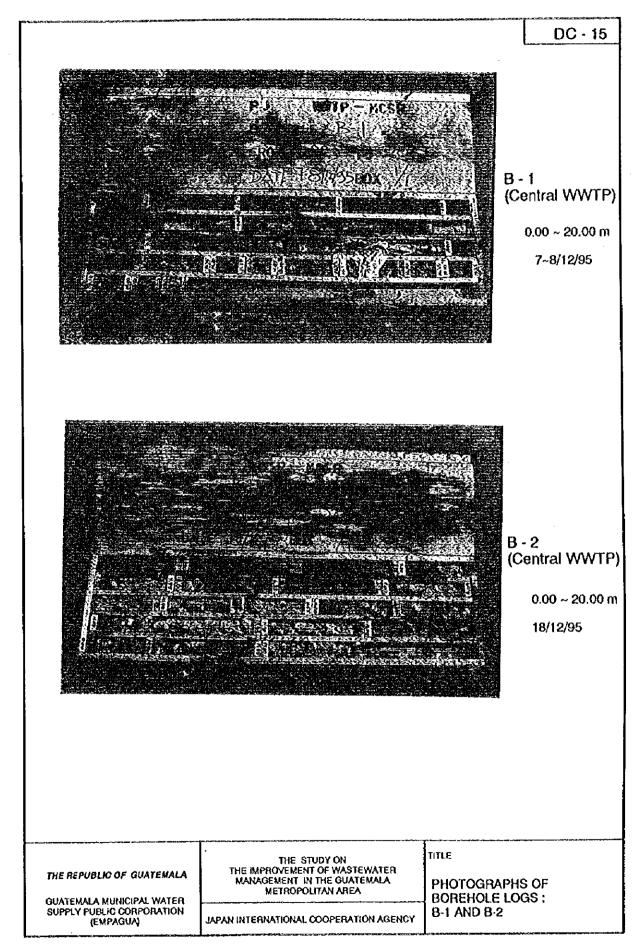


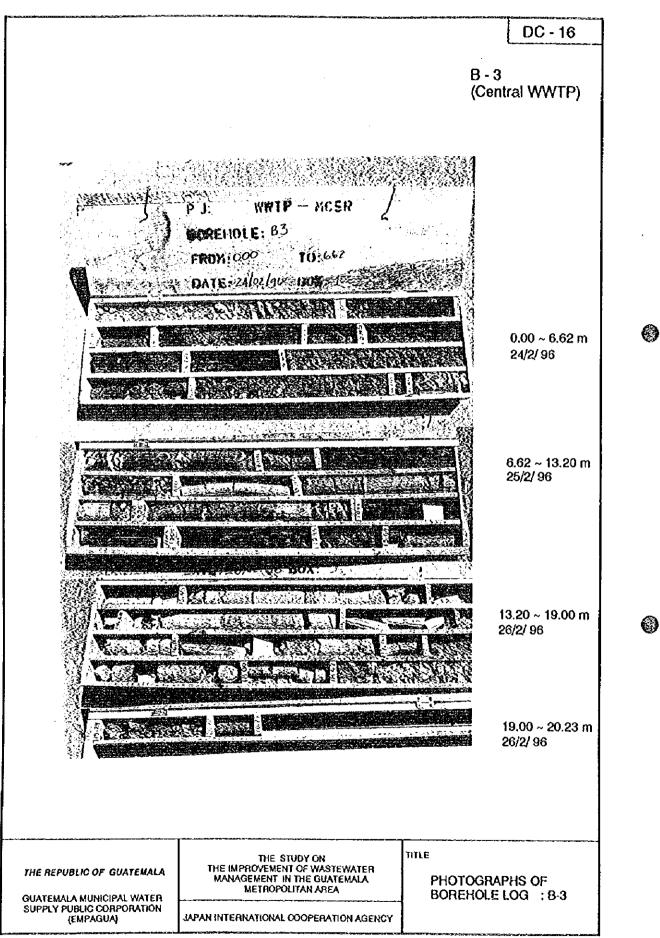
DC 2 Photographs of Borehole Logs

DC - 15 Photographs of Borehole Logs : B-1 and B-2

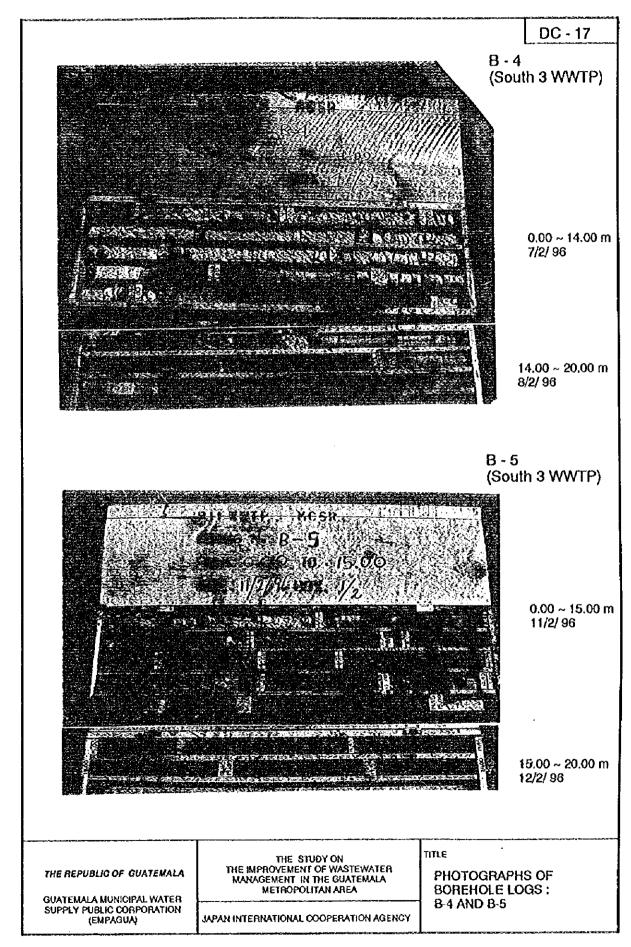
0

- DC 16 Photographs of Borehole Logs : B-3
- DC 17 Photographs of Borehole Logs : B-4 and B-5
- DC 18 Photographs of Borehole Logs : B-6,7
- DC 19 Photographs of Borehole Logs : B-8
- DC 20 Photographs of Borehole Logs ; B-9
- DC 21 Photographs of Borchole Logs : B-10
- DC 22 Photographs of Borehole Logs : B-11 and B-12
- DC 23 Photographs of Borehole Logs : B-13(1/2)
- DC 24 Photographs of Borehole Logs : B-13(2/2)
- DC 25 Photographs of Borehole Logs : B-14
- DC 26 Photographs of Borehole Logs : B-15 and B-16
- DC 27 Photographs of Borehole Logs : B-17 and B-18
- DC 28 Photographs of Borehole Logs : B-1 and B-19





DC • 18



DC • 19