Station Name and Number : L-52A				Flood Control for r Mount Pinatubo
Original Station Established by : CERTEZA SYSTEMS,	SURVEYING & AEROPHO	то	Date:	January 2003
Existing Station Marked by :			Date:	
Island : Luzon	Province :	Zaml	oales	
	Sitio:			
City/Municipality : San Marcelino	Barangay :	Santa	a Fe	
Station Station	Marking and Access			
Mark is a 12mm iron bolt centered or Inscribed on top is "L-52A, 2003 DPWH".	n top of a 20cm x 20cm	n x 60	Ocm con	crete monument.
Reference Marks :				
RM - 1 is a Mango tree, 10 meters, N 8 d	deg W			
Descriptions:				
Zambales, Island of Luzon. From Static kilometers or 45 minutes going to the striver.	on L-52, walk north dire tation. It was established	on the	across la e top ba	ahar about 2.877 ink of Sto. Tomas
(	MANGO TREE			
0	,			
~ STO				
STO TOMA	S RIVER			

Station Name and Number: L-58A Project: The Study on Sabo and Flood Control for Western River Basins for Mount Pinatubo Original Station Established by: CERTEZA SURVEYING & AEROPHOTO Date: January 2003 SYSTEMS, INC. Existing Station Marked by : Date: Island: Luzon Province: Zambales Sitio: City/Municipality: San Marcelino Barangay: Aglaw Station Marking and Access Station Mark: Mark is a 12mm iron bolt centered on top of a 20cm x 20cm x 60cm concrete monument. Inscribed on top is "L-58A, 2003 DPWH". Reference Marks: RM - 1 is an Acacia tree, 3 meters, due North RM - 2 is an Acacia tree, 16 meters, N 58 deg W RM - 3 is an Acacia tree, 18 meters, N 53 deg W Descriptions: Station L-58A is located in Barangay Aglaw, Municipality of San Marcelino, Province of Zambales, Island of Luzon. From San Marcelino town proper, travel northeast direction going to the intersection of dike and road. Turn right and travel by a 4 wheel drive about 30 minutes crossing the river and lahar up to the station. It was established in an open area. RM<sub>3</sub> ACACIA -58A

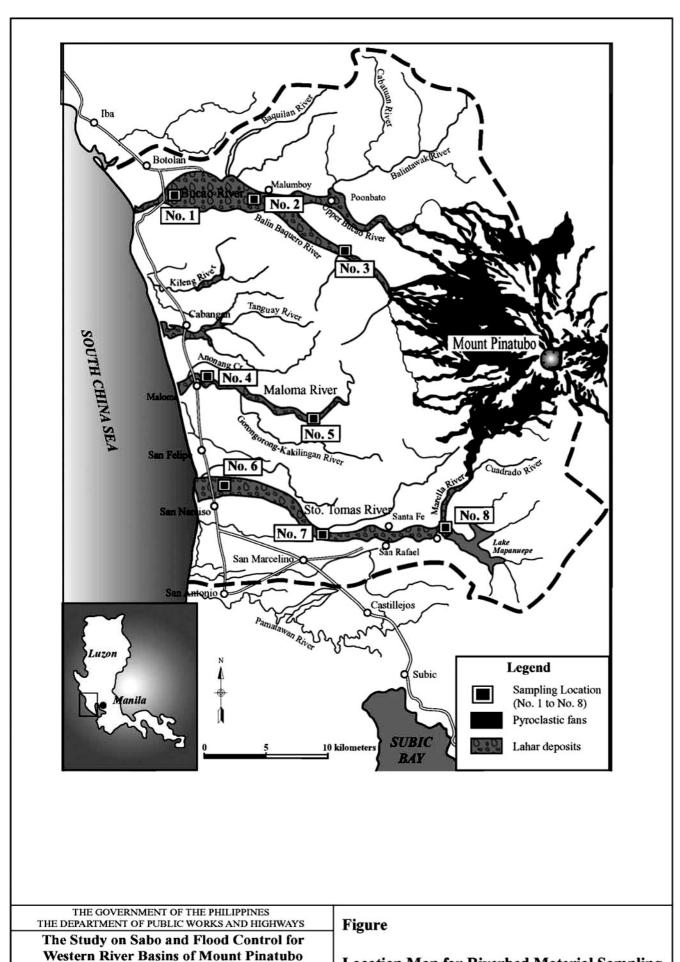
Station Name and Number: L-58B Project: The Study on Sabo and Flood Control for Western River Basins for Mount Pinatubo Original Station Established by : **CERTEZA SURVEYING & AEROPHOTO** Date: January 2003 SYSTEMS, INC. Existing Station Marked by : Date: Island: Luzon Province: Zambales Sitio: City/Municipality: San Marcelino Barangay: Aglaw Station Marking and Access Station Mark: Mark is a 12mm iron bolt centered on top of a 20cm x 20cm x 60cm concrete monument. Inscribed on top is "L-58B, 2003 DPWH". Reference Marks: RM - 1 is an Acacia tree, 25 meters, due East Descriptions: Station L-58B is located in Barangay Aglaw, Municipality of San Marcelino, Province of Zambales, Island of Luzon. From Station L-58A, travel northeast direction by a 4 wheel drive about 30 minutes going to the station. It was established in a cogonal area. \_\_\_\_\_\_ L-58 B RM-I

Station Name and Number: L-64

Station Name and Number : L-64 Project				Flood Control for Mount Pinatubo
Original Station Established by : CERTEZA SURVEYIN SYSTEMS, INC.	G & AEROPHO	то	Date:	January 2003
Existing Station Marked by :			Date:	
Island : Luzon	Province :	Zam	bales	
	Sitio:			
City/Municipality : San Marcelino	Barangay:	Pili		
Station Marking a Station Mark :	nd Access			
Mark is a 12mm iron bolt centered on top of a Inscribed on top is "L-64, 2003 DPWH".	20cm x 20cr	n x 6	0cm con	crete monument.
Reference Marks :				
RM – 1 is a Layasin tree, 12 meters, due South RM – 2 is a Madre Cacao tree, 10 meters, S 25 deg	E			
Descriptions:  Station L-64 is located in Barangay Pili, Municipality of Luzon. From Station L-58B, travel by a 4 whe going to the station. It was established at the lower	el drive northe	east di	irection a	Zambales, Island about 20 minutes
MARELLA RIVER	//////			

Station Name and Number : L-64A Project		Sabo and Flood Control for Basins for Mount Pinatubo
Original Station Established by : CERTEZA SURVEYING SYSTEMS, INC.	Date: January 2003	
Existing Station Marked by :		Date:
Island : Luzon	Province : Z	ambales
	Sitio:	
City/Municipality : San Marcelino	Barangay : Pi	li
Station Marking as Station Mark :	nd Access	
Mark is a 12mm iron bolt centered on top of a Inscribed on top is "L-64A, 2003 DPWH".	20cm x 20cm x	60cm concrete monument.
Reference Marks :		
RM – 1 is an Ipil-ipil tree, 5 meters, N 49 deg W RM – 2 is an Ipil-ipil tree, 5 meters, N 6 deg E RM – 3 is an Acacia tree, 12 meters, N 20 deg E		
Descriptions:		
Station L-64A is located in Barangay Pili, Municipal Island of Luzon. From Station L-64, travel by a 4 whand lahar about 1.023 kilometers or 5 minutes goin bank of the river.	neel drive northea	st direction crossing the river
RM-I O IPIL A RM L-64 A		

# C2 Laboratory Test Results



JAPAN INTERNATIONAL COOPERATION AGENCY

in the Republic of the Philippines

Location Map for Riverbed Material Sampling

Project Location	Location	Designation		USCS		Grain Size Distribution								Atterberg			Specific gravity	
	Number		Soil Description	class	3/4"	1/2"	3/8"	(% F	assing #10	Sieve #20	No.) #40	#50	#100	#200	LL	Limits PL	PI	g/cc
Bucao River (Downstream)	1	Right side	Gray fine to coarse SAND, some pyroclastic materials.	SP		100	99	99	96	83	52	37	9	2				2.56
		Middle side	Gray fine to coarse SAND, with pyroclastic materials.	SP		100	99	97	93	87	76	65	17	2				2.44
		Left Side	Gray fine to coarse SAND, with pyroclastic materials.	SP	100	99	99	97	94	89	80	69	21	5				2.58
Bucao River (Brgy. Malumboy)	2	Right side	Light gray fine to coarse SAND, with pyroclastic materials.	SP		100	99	99	96	84	56	41	36	1				2.51
		Middle side	Gray fine to coarse SAND, traces of pyroclastic materials.	SP	100	100	99	97	93	87	76	65	17	2				2.65
		Left Side	Gray fine to medium SAND, traces of pyroclastic materials.	SP				100	100	98	87	63	9	2				2.76
Bucao River (Upstream)	3	Right side	Light gray fine to coarse SAND, some pyroclastic materials.	SP		100	99	96	90	77	48	30	10	3				2.67
		Middle side	Light gray sand-size PYROCLASTIC materials.	SP		100	99	98	95	84	28	20	8	2				2.38
		Left side	Light gray fine to coarse SAND, some pyroclastic materials.	SP			100	98	85	60	31	16	3	1				2.62
Maloma River (Downstream)	4	Right side	Grayish brown fine to coarse SAND, traces of pyroclastic materials.	SP		100	99	98	96	84	44	19	3	1				2.65
		Middle side	Light gray fine to coarse SAND, some pyroclastic materials.	SP	100	99	98	96	92	74	29	12	1	1				2.48
		Left Side	Brownish gray fine to coarse SAND, some pyroclastic materials.	SP	100	99	99	98	96	81	38	17	2	1				2.57



ADVANCED GEOTECHNICAL ENGINEERING SERVICES

103 Dunhill St., East Fairview, 1118 Quezon City, Philippines Tel. 939-63-68 Fax. 938-1638

Project:	
	SAMPLING OF RIVER BED MATERIAL
Location:	
W	ESTERN RIVER BASINS OF MT. PINATUBO

Project Location	Location	Designation		USCS				Grain	n Size	Distrib	ution					Atterber	Specific gravity	
	Number		Soil Description	class	3/4"	1/2"	3/8"	(% P	assing #10	Sieve #20	No.) #40	#50	#100	#200	LL	Limits PL	PI	g/cc
Maloma River (Upstream)	5	Right side	Gray fine to coarse SAND, some pyroclastic materials.	SP		100	99	98	96	84	44	19	3	1				2.520
		Middle side	Light gray fine to coarse SAND, traces of pyroclastic materials.	SP	100	99	98	96	92	74	29	12	1	1				2.64
		Left Side	Brownish gray fine to coarse SAND, some pyroclastic materials.	SP	100	99	99	98	96	81	34	17	2	1				2.58
Sto. Tomas (Downstream)	6	Right side	Gray fine SAND, traces of pyroclastic materials.	SP		100	100	100	99	99	89	85	20	3				2.72
		Middle side	Light gray fine SAND, with pyroclastic materials.	SP	100	99	99	95	80	67	55	39	9	1				2.37
		Left Side	Gray fine to coarse SAND, some pyroclastic materials.	SP			100	99	96	89	78	64	18	4				2.52
Sto. Tomas (Upstream)	7	Right side	Light gray sand-size PYROCLASTIC materials.	SP		100	100	98	89	67	43	29	7	1				2.3
		Middle side	Light gray fine SAND, traces of pyroclastic materials.	SP				100	100	98	88	72	19	4				2.69
		Left Side	Light gray fine SAND, traces of pyroclastic materials.	SP			100	100	99	95	85	66	14	1				2.67
Sto. Tomas (Upstream near Mount Babang)	8	Right side	Light gray fine to coarse SAND, traces of pyroclastic materials.	SP	100	99	98	94	84	54	26	18	6	3				264
		Middle side	Light gray fine SAND, traces of pyroclastic materials.	SP			100	100	97	74	34	17	3	0				2.72
		Left Side	Light gray fine SAND, traces of pyroclastic materials.	SP-SM				100	99	82	45	30	12	7				2.64



ADVANCED GEOTECHNICAL **E**NGINEERING **S**ERVICES

103 Dunhill St., East Fairview, 1118 Quezon City, Philippines Tel. 939-63-68 Fax. 938-1638

Project:
SAMPLING OF RIVER BED MATERIAL
Location:
WESTERN RIVER BASINS OF MT. PINATUBO

Title: Sheet SUMMARY OF LAB. TEST RESULTS

2/2 Date/checked by: 05-08-02/ESBC