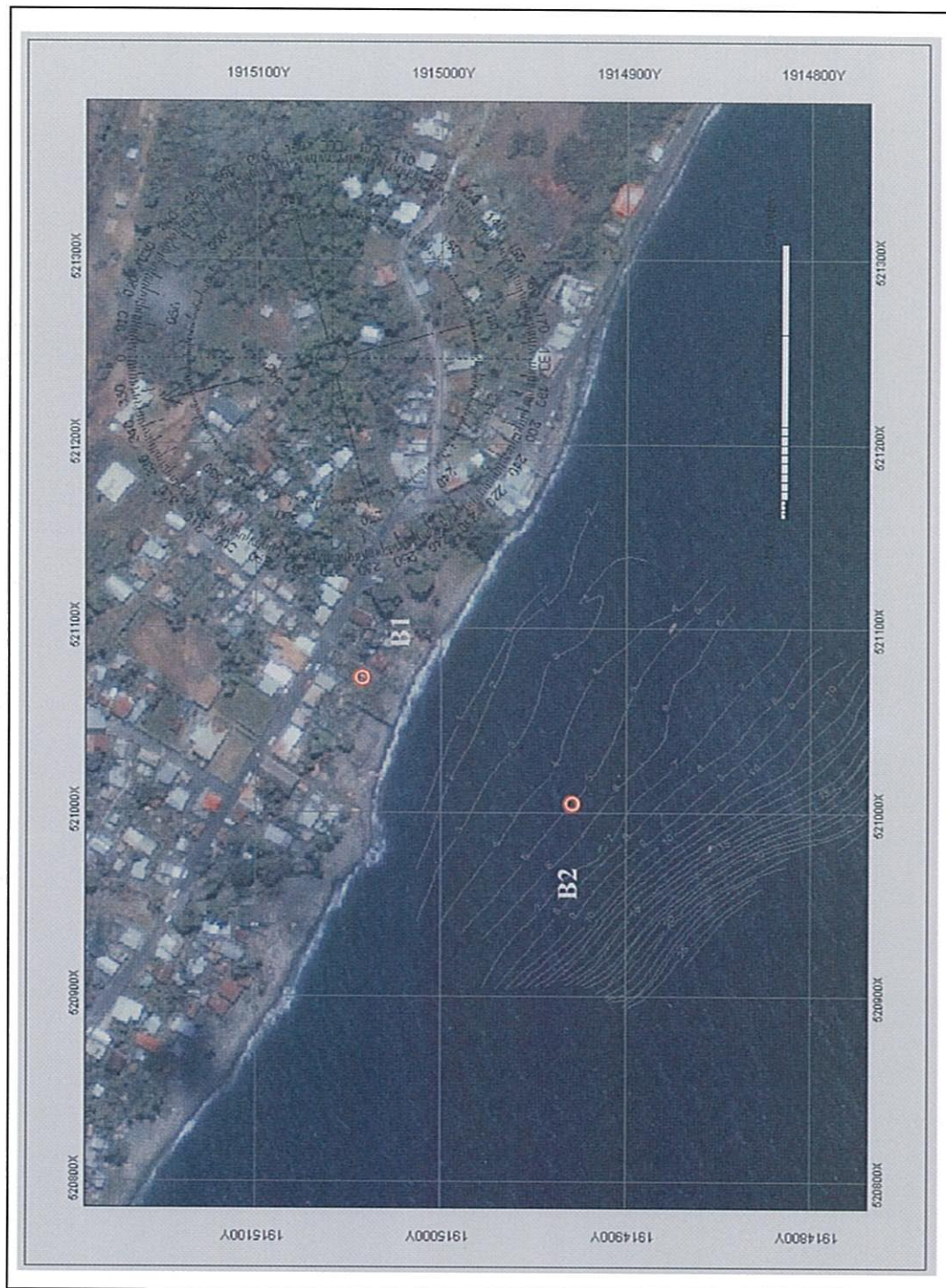


(2) Soil Condition Survey (Land & Sea)

# Bore hole locations at Old Road





# BOREHOLE LOG

BOREHOLE No: **B 1**  
Sheet 1 of 1

Client: **ICONS International Cooperation Inc.**  
Project: **Soil Inv. for Fishing Facilities**  
Location: **Old Road, St. Kitts**  
Ground Elevation: **m**  
Boring Method: **Auger Stem**  
Prep by: **M. Joab**  
Boring Started on: **04/10/23** Completed on: **04/10/23**

- Drive, No Sample Collected
- ⊗ Disturbed Sample
- ▨ Split Spoon Sample
- Shelby Tube Sample
- Core Sample
- ▽ Water Level at End of Drilling
- ▼ Water Level 24 hrs. or more

- Water Content (W%)  
Plastic and Liquid Limit **┆---┆**  
Natural Moisture Content **-X--**
- Shear Strength (Cu)  
Unconsolidated Undrained Triaxial, UU **■**  
Unconfined Compression, UC **○**  
1" Picon Vane Shear, PV **+**  
1" Field Vane Shear, FV **⊗**  
Penetration Resistance (N)  
Standard Penetration Test **—●—**

Symbol	Soil Description	Depth (m)	w%				Sample Type	Wet Density kN/m3	Additional Tests and Remarks
			20	40	60	80			
	Ground Surface	0	N-value (Blows/0.3m)						
	Dense, brown, SAND, trace gravel and silt.	0 - 1	20	40	60	80	1		
	Medium dense, brown and grey, SAND, some gravel, trace clay and silt with isolated cobbles.	1 - 2					2		
	Medium dense, yellowish brown, SILTY SAND, some clay.	2 - 3					3		
	Medium dense, grey, SANDY GRAVEL, trace silt and clay with cobbles.	3 - 5					4		
	Very loose, yellowish brown, GRAVELLY SAND.	5 - 6					5		
	Medium dense, yellowish brown, SILTY SAND with numerous isolated cobbles.	6 - 7					6		
		7 - 8					7		
		8 - 9					8		
		9 - 10					9		
		10 - 11					10		
	End of Borehole at 9.60m	11					11		

RUI P-25X-0437A.GBL 05/2016

U.S. SIEVE OPENING IN INCHES

U.S. SIEVE NUMBERS

ENCLOSURE No. 11  
HYDROMETER



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Id.	Depth, m	Classification	MC%	LL	PL	PI	Cc	Cu
● B 1/S10	8.6						2.15	202.9

Sample Id.	Depth, m	D100	D60	D50	D30	%Gravel	%Sand	%Silt	%Clay
● B 1/S10	8.6	25.00	12.50	6.687	1.287	53.8	35.8	6.6	3.8

PROJECT Soil Inv. for Fishing Facilities - Old Road, St. Kitts

JOB NO.  
DATE

GA 04 376-A  
December 2004



**GRADATION CURVES**

Geotech Associates Ltd.  
Tunapuna

GRSZL-2 0437A.GPJ 05/01/17

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 1/ S 1

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G. CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		A	J
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	655.3	653.4
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	639.3	637.6
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25.0	25.0
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.682	2.711

**REMARKS**

AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.697

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 1/S 3

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		F	J
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	653.1	653.1
TEMPERATURE, ( $T_w$ )	°C	28	28
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	637.6	637.6
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9980	0.9980
$G_s$		2.626	2.626

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.626**

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 1/ S 5

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		N	5A
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	658.2	641.7
TEMPERATURE, ( $T_w$ )	°C	28	28
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	642.1	625.6
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9980	0.9980
$G_s$		2.803	2.803

**REMARKS**

AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.803

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 1/S 7

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G. CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		P	O
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	658.7	657.1
TEMPERATURE, ( $T_w$ )	°C	28	28
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	642.9	641.2
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9980	0.9980
$G_s$		2.712	2.742

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.727**



**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 1/ S 10

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G. CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		E	C
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	656.0	660.1
TEMPERATURE, ( $T_w$ )	°C	28	28
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	640.1	644.3
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9980	0.9980
$G_s$		2.742	2.712

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.727**



# BOREHOLE LOG

BOREHOLE No: B 2  
Sheet 1 of 2

Client: ICONS International Cooperation Inc.

Project: Soil Inv. for Fishing Facilities

Location: Old Road, St. Kitts

Ground Elevation: m

Boring Method: Rotary

Prep by: M. Joab

Boring Started on: 04/10/23 Completed on: 04/10/23

- Drive, No Sample Collected
- ⊗ Disturbed Sample
- ⊘ Split Spoon Sample
- Shelby Tube Sample
- Core Sample
- ▽ Water Level at End of Drilling
- ▼ Water Level 24 hrs. or more

Water Content (W%)

Plastic and Liquid Limit

Natural Moisture Content

Shear Strength (Cu)

Unconsolidated Undrained Triaxial, UU

Unconfined Compression, UC

1" Picon Vane Shear, PV

1" Field Vane Shear, FV

Penetration Resistance (N)

Standard Penetration Test

┌───┐  
└───┘

■  
○  
⊗  
⊘

Symbol	Soil Description	Depth (m)	w%				Sample	Wet Density	Additional Tests and Remarks
			20	40	60	80			
			Cu (kPa)				Type	Numb	
			50	100	150	200			
			N-value (Blows/0.3m)						
			20	40	60	80			
	Water Surface	0							
	Water	0							
		1							
		2							
		3							
		4							
	Medium dense, grey SAND, with cobbles.	5							
		6							
		7							
		8							
		9							
		10							

Continued Next Page



**GEOTECH ASSOCIATES LTD.**  
TRINIDAD, WI

REPORT No. GA 04 376-B

ENCLOSURE No. 3

# BOREHOLE LOG

BOREHOLE No: **B 2**  
Sheet 2 of 2

Client: **ICONS International Cooperation Inc.**

Project: **Soil Inv. for Fishing Facilities**

Location: **Old Road, St. Kitts**

Ground Elevation: **m**

Boring Method: **Rotary**

Prep by: **M. Joab**

Boring Started on: **04/10/23** Completed on: **04/10/23**

- ☐ Drive, No Sample Collected
- ⊗ Disturbed Sample
- ▨ Split Spoon Sample
- Shelby Tube Sample
- ▭ Core Sample
- ∇ Water Level at End of Drilling
- ▼ Water Level 24 hrs. or more

Water Content (W%)

Plastic and Liquid Limit

Natural Moisture Content

Shear Strength (Cu)

Unconsolidated Undrained Triaxial, UU

Unconfined Compression, UC

!Pilon Vane Shear, PV

!Field Vane Shear, FV

Penetration Resistance (N)

Standard Penetration Test

┌──┐

─┴─

■

○

⊗

⊗

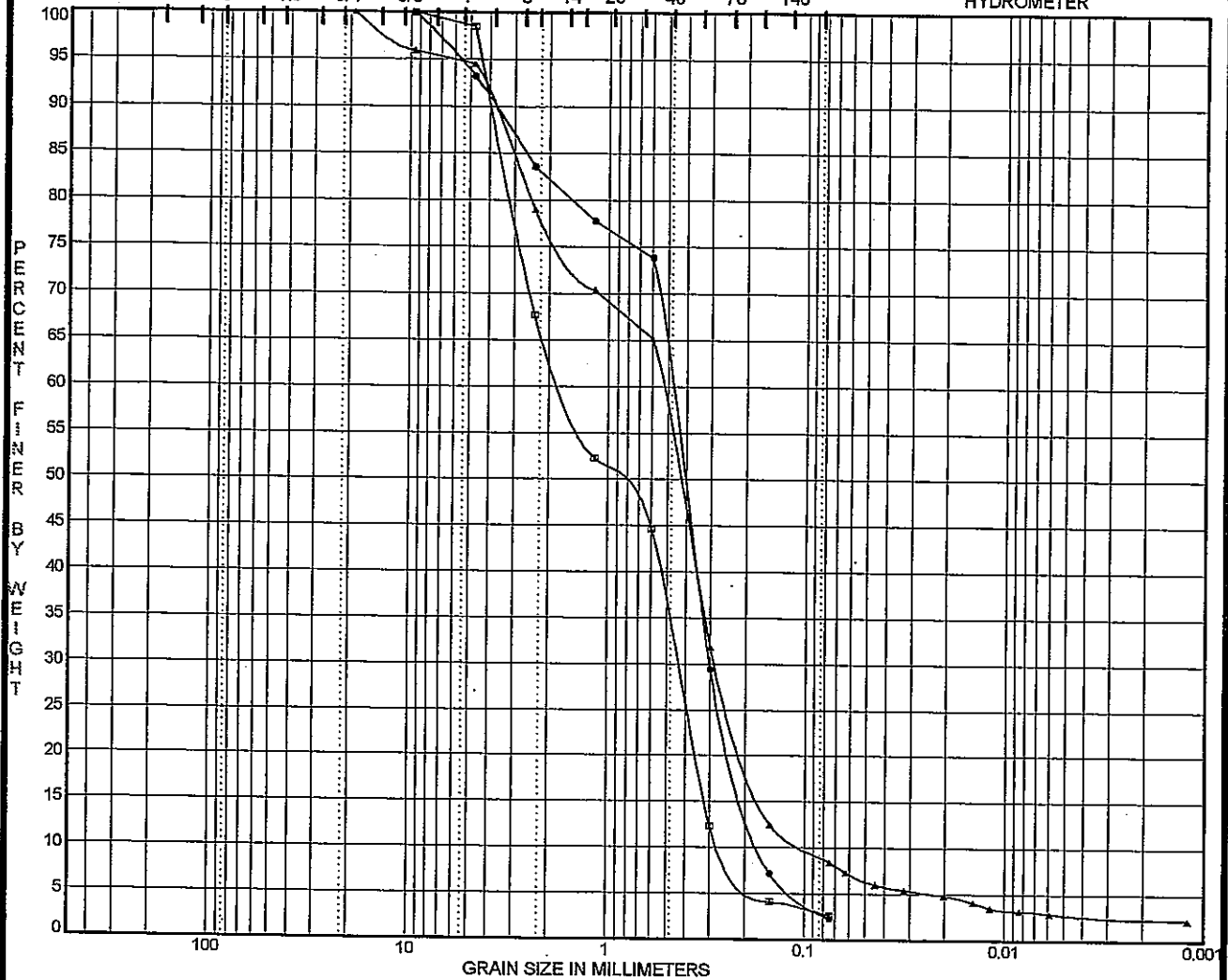
—

Symbol	Soil Description	Depth (m)	w% (kPa)				Sample Type	Sample Numb	Wet Density kN/m <sup>3</sup>	Additional Tests and Remarks
			20	40	60	80				
	(continued)		N-value (Blows/0.3m)							
	Medium dense, grey SAND, with cobbles.	10	20	40	60	80				
	Dense to very dense SAND, trace gravel, silt and clay.	11					4			
		12								
		13					5			
		14					6			
		15								
	End of Borehole at 16.0m	16					7			

U.S. SIEVE OPENING IN INCHES

U.S. SIEVE NUMBERS

ENCLOSURE No. 4  
HYDROMETER



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Id.	Depth, m	Classification				MC%	LL	PL	PI	Cc	Cu
● B 1/S 2	8.2	POORLY GRADED SAND SP								1.16	3.0
☒ B 1/S 4	11.2	POORLY GRADED SAND SP								0.47	6.8
▲ B 1/S 7	15.8									1.49	5.5
Sample Id.	Depth, m	D100	D60	D50	D30	%Gravel	%Sand	%Silt	%Clay		
● B 1/S 2	8.2	9.50	0.48	0.413	0.303	6.8	90.9	2.3			
☒ B 1/S 4	11.2	9.50	1.67	0.964	0.439	1.5	95.9	2.6			
▲ B 1/S 7	15.8	19.00	0.54	0.438	0.281	5.5	86.1	6.0	2.4		

PROJECT Soil Inv. for Fishing Facilities - Old Road, St. Kitts

JOB NO. GA 04 376-B  
DATE December 2004

**GRADATION CURVES**

Geotech Associates Ltd.  
Tunapuna



GRSZL-2 0437A.GPJ 05/3/16

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 2/ S 1

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		A	J
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	655.3	653.4
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	639.3	637.6
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.682	2.711

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.697**

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 2/ S 2

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		#254	#40
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	656.9	657.1
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	640.8	641.1
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.803	2.771

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.787**

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 2/ S 4

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		#654	#41
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	657.0	657.2
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	640.8	641.1
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.834	2.803

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.819**

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Old Road, St. Kitts SPECIMEN ID. B 2 / S 7

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G. CHECKED BY A. Budhram

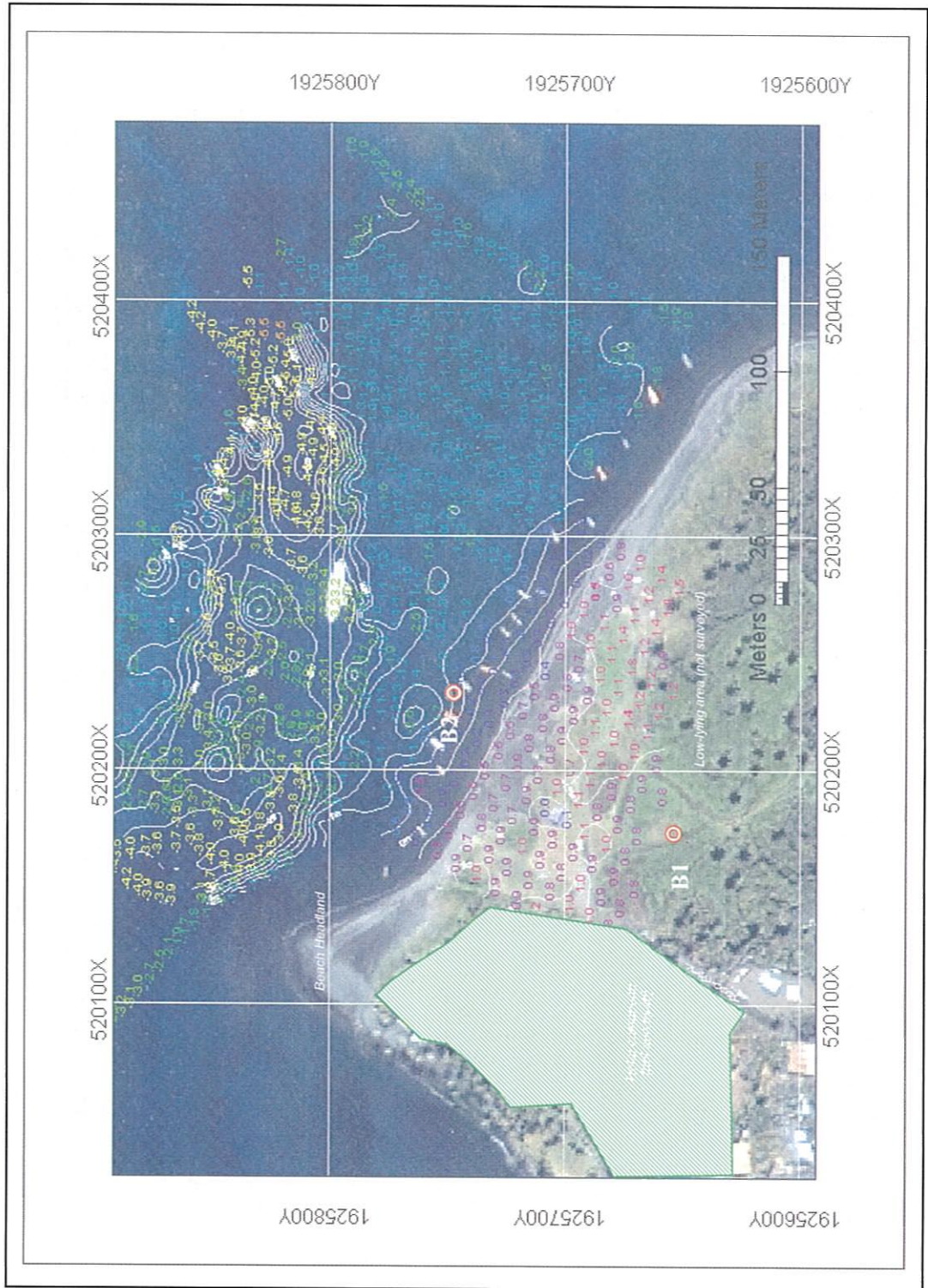
TEST No.		1	2
BOTTLE No.		#164	#52
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	656.9	657.1
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	640.8	641.1
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.803	2.771

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.787**



# Bore hole locations at Dieppe Bay





# BOREHOLE LOG

BOREHOLE No: **B 1**  
Sheet 1 of 1

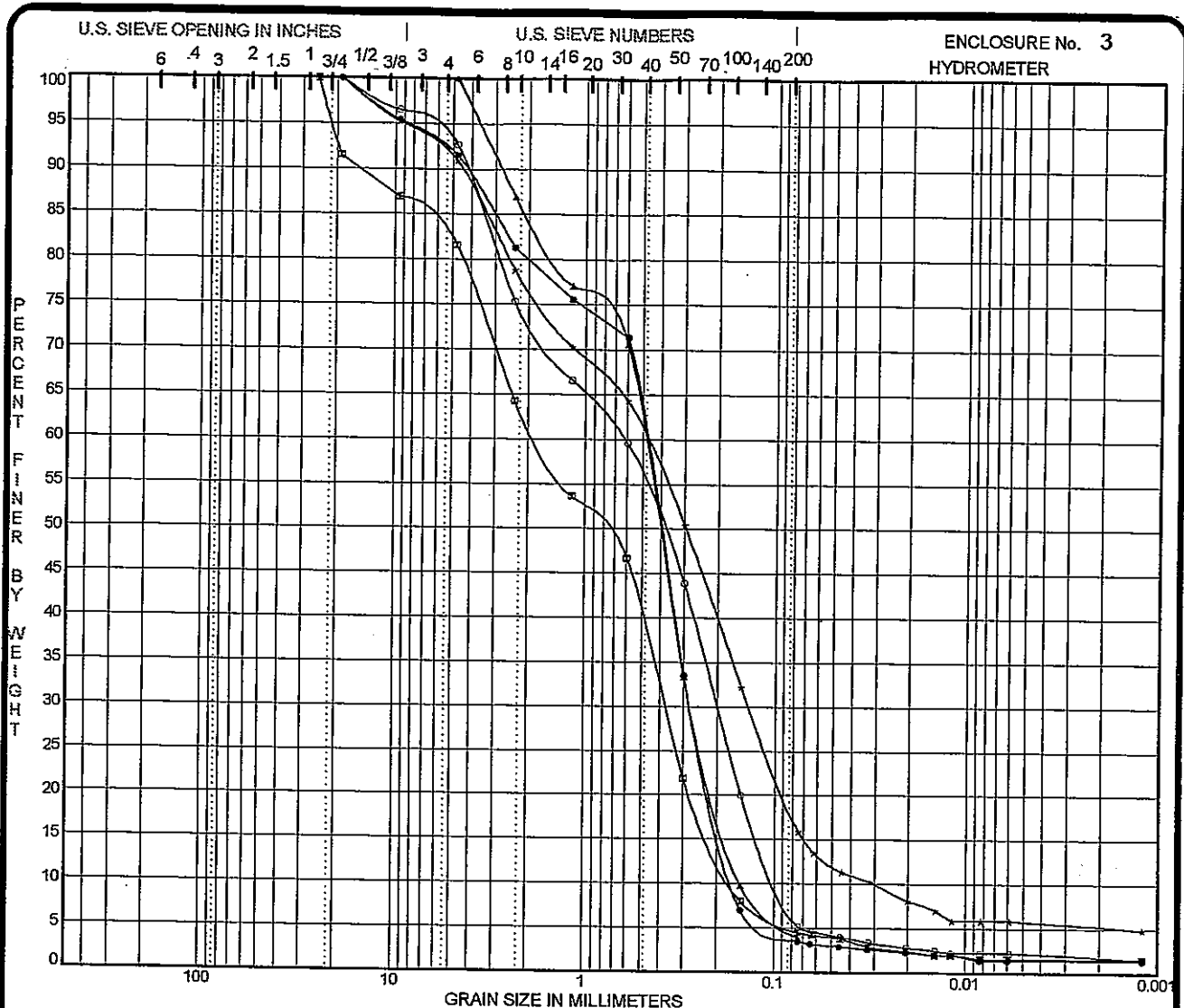
Client: **ICONS International Cooperation Inc.**  
Project: **Soil Inv. for Fishing Facility**  
Location: **Dieppe, St. Kitts**  
Ground Elevation: **m**  
Boring Method: **Hollow Stem Augering**  
Prep by: **M. Joab**  
Boring Started on: **04/10/25** Completed on: **04/10/25**

- Drive, No Sample Collected
- ⊗ Disturbed Sample
- ▨ Split Spoon Sample
- Shelby Tube Sample
- Core Sample
- ▽ Water Level at End of Drilling
- ▼ Water Level 24 hrs. or more

- Water Content (W%)
- Plastic and Liquid Limit **┆---┆**
- Natural Moisture Content **---X---**
- Shear Strength (Cu)
- Unconsolidated Undrained Triaxial, UU **■**
- Unconfined Compression, UC **○**
- 1" Picon Vane Shear, PV **+**
- 1" Field Vane Shear, FV **×**
- Penetration Resistance (N)
- Standard Penetration Test **—●—**

Symbol	Soil Description	Depth (m)	w% (kPa)				Sample Type	Wet Density (kN/m <sup>3</sup> )	Additional Tests and Remarks
			20	40	60	80			
	Ground Surface	0	N-value (Blows/0.3m)						
	Dense, grey, fine SAND, with occasional gravel and coral fragments.	0 - 1	20	40	60	80	1		
	Medium dense, grey, SAND, some gravel.	1 - 2					2		
	Very dense, grey, SAND, some gravel.	2 - 3					3		
	Loose, grey, SAND with gravel.	3 - 4					4		
	Medium dense, grey, SAND.	4 - 5					5		
	Very dense, grey, GRAVEL, with isolated cobbles.	5 - 6					6		
	Medium dense, grey, SAND, some gravel and silt.	6 - 7					7		
	Dense to very dense, grey, SAND trace gravel.	7 - 8					8		
		8 - 9					9		
		9 - 10					10		
		10 - 11					11		
	End of Borehole at 9.60m	9.60							

RHI 0125X\_04376.GP1\_05/04/05



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Id.	Depth, m	Classification				MC%	LL	PL	PI	Cc	Cu
● B 1/S 1	1.0	POORLY GRADED SAND SP								0.95	3.0
☒ B 1/S 3	2.5	POORLY GRADED SAND with GRAVEL SP								0.48	10.8
▲ B 1/S 5	4.0	POORLY GRADED SAND SP								0.99	3.3
★ B 1/S 8	7.1								1.27	16.0	
○ B 1/S 10	8.6								0.69	6.6	
Sample Id.	Depth, m	D100	D60	D50	D30	%Gravel	%Sand	%Silt	%Clay		
● B 1/S 1	1.0	19.00	0.49	0.406	0.274	8.5	88.0	2.1	1.4		
☒ B 1/S 3	2.5	25.00	1.79	0.829	0.376	18.4	77.1	2.9	1.6		
▲ B 1/S 5	4.0	4.75	0.49	0.409	0.272	0.0	96.1	3.9			
★ B 1/S 8	7.1	19.00	0.48	0.295	0.137	9.1	75.0	10.7	5.2		
○ B 1/S 10	8.6	19.00	0.62	0.393	0.200	7.3	87.5	3.5	1.7		

PROJECT Soil Inv. for Fishing Facility - Dieppe, St. Kitts

JOB NO. GA 04 376-A  
DATE March 2005



### GRADATION CURVES

Geotech Associates Ltd.  
Tunapuna

\*GRSL-2 04376.GPJ 05/3/15

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376-A PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 1/ S 1

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G. CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		A	D
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	655.5	659.4
TEMPERATURE, ( $T_w$ )	°C	28	28
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	639.4	643.3
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9980	0.9980
$G_s$		2.803	2.803

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.803**

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376-A PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 1/S 3

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		M	D
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	658.1	659.6
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	641.7	643.3
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.900	2.867

REMARKS

AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.844

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376-A PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 1/ S 5

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		H	E
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	657.3	656.8
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	640.8	640.3
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.934	2.934

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.934**

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376-A PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 1/ S 8

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		P	O
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	658.9	657.3
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	642.7	641.1
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.834	2.834

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.834**

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376-A PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 1/ S 10

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		5A	1A
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	641.6	651.0
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	625.6	634.9
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.771	2.803

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.787**





# BOREHOLE LOG

BOREHOLE No: **B 2**  
Sheet 1 of 1

Client: **ICONS International Cooperation Inc.**

Project: **Soil Inv. for Fishing Facility**

Location: **Dieppe, St. Kitts**

Ground Elevation: **m**

Boring Method: **Rotary**

Prep by: **M. Joab**

Boring Started on: **04/10/21** Completed on: **04/10/21**

- Drive, No Sample Collected
- ⊗ Disturbed Sample
- ▨ Split Spoon Sample
- Shelby Tube Sample
- Core Sample
- ▽ Water Level at End of Drilling
- ▼ Water Level 24 hrs. or more

**Water Content (W%)**

Plastic and Liquid Limit **┆---┆**

Natural Moisture Content **---\*---**

**Shear Strength (Cu)**

Unconsolidated Undrained Triaxial, UU **■**

Unconfined Compression, UC **○**

1" Picon Vane Shear, PV **⊕**

1" Field Vane Shear, FV **⊗**

**Penetration Resistance (N)**

Standard Penetration Test **—●—**

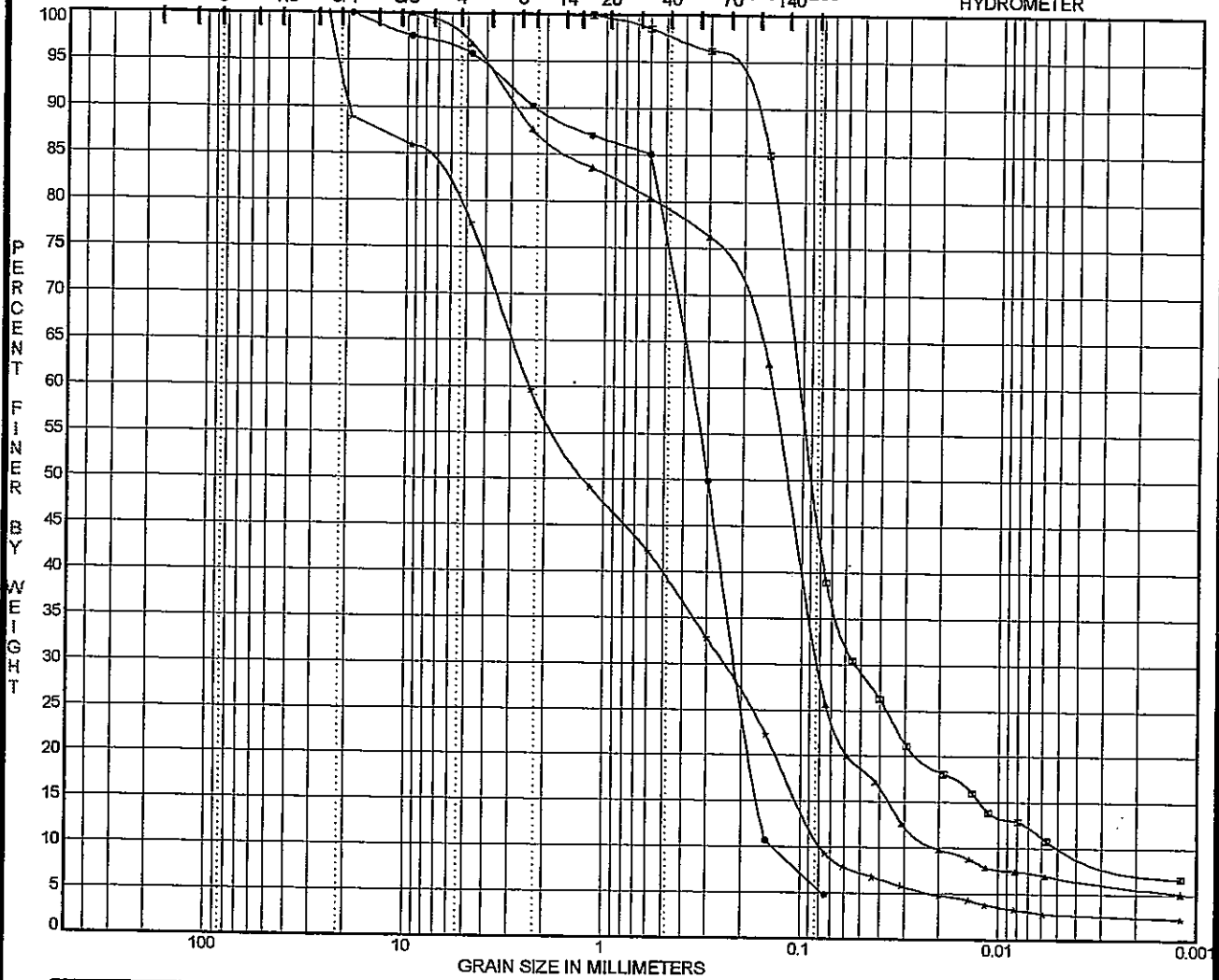
Symbol	Soil Description	Depth (m)	w% 20 40 60 80				Sample Type	Wet Density kN/m3	Additional Tests and Remarks
			Cu 50	100	150	200 (kPa)			
	Water Surface	0	N-value (Blows/0.3m)						
	Water.	0	20	40	60	80			
	Loose, grey, SAND with frequent gravel particles.	1							
	Medium dense, grey, SAND trace gravel.	2					1		
		3					2		
		4					3		
		5					4		
	Dense, grey, SILTY SAND trace clay.	5					5		
	Medium dense, grey, SILTY SAND trace gravel and clay.	6					6		
		7					7		
		8					8		
	Very dense, grey, GRAVELLY SAND trace silt and clay.	8					9		
		9					10		
	End of Borehole at 9.60m	9.60					11		

RHL P42RY 04376.GBL 05/10/22

U.S. Sieve Opening in Inches

U.S. Sieve Numbers

ENCLOSURE No. 10  
HYDROMETER



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Id.	Depth, m	Classification	MC%	LL	PL	PI	Cc	Cu
● B 2/S 3	3.5	POORLY GRADED SAND SP					0.88	2.6
☒ B 2/S 5	5.0						6.59	24.5
▲ B 2/S 7	6.6						2.26	7.0
* B 2/S 9	8.1						0.33	30.8

Sample Id.	Depth, m	D100	D60	D50	D30	%Gravel	%Sand	%Silt	%Clay
● B 2/S 3	3.5	19.00	0.37	0.301	0.211	4.3	90.9	4.8	
☒ B 2/S 5	5.0	1.18	0.10	0.089	0.053	0.0	61.1	30.9	8.0
▲ B 2/S 7	6.6	9.50	0.14	0.118	0.081	3.2	71.2	19.9	5.7
* B 2/S 9	8.1	25.00	2.40	1.252	0.249	22.4	68.3	6.8	2.5

PROJECT Soil Inv. for Fishing Facility - Dieppe, St. Kitts

JOB NO. GA 04 376-B  
DATE December 2004



**GRADATION CURVES**

Geotech Associates Ltd.  
Tunapuna

\*GRSZL2 04376.GPJ 05/22

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 2/ S 3

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G. CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		#514	#450
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	657.0	657.2
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	640.8	641.1
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.834	2.803

**REMARKS**

AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.819

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 2/ S 5

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G. CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		N	C
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	658.0	660.2
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	642.1	644.2
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.741	2.771

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.756**

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 2/ S 7

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G. CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		G	F
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	658.0	653.7
TEMPERATURE, ( $T_w$ )	°C	29	29
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	642.0	637.6
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9977	0.9977
$G_s$		2.771	2.803

REMARKS

AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.787

**DETERMINATION OF SPECIFIC GRAVITY  
(FINE AGGREGATES)**

PROJECT No. GA 04 376 PROJECT NAME: Soil Inv. for Fisheries Dev. Project

SOURCE Dieppe, St. Kitts SPECIMEN ID. B 2/ S 9

MATERIAL DESCRIPTION \_\_\_\_\_

TESTED BY A.G.

CHECKED BY A. Budhram

TEST No.		1	2
BOTTLE No.		IA	H
Wt. BOTTLE + WATER + SOIL = $W_{bws}$	g	651.2	657.2
TEMPERATURE, ( $T_w$ )	°C	28	28
Wt. BOTTLE + WATER = $W_{bwc}$ (From calibrated curve)	g	634.9	640.8
Wt. OF EVAP. OF DISH + DRY SOIL	g		
Wt. OF EVAP. OF DISH	g		
Wt. OVEN DRY SOIL = $W_s$	g	25	25
SG of Water at $T_w$		0.9980	0.9980
$G_s$		2.868	2.901

**REMARKS**

**AVERAGE SPECIFIC GRAVITY ( $G_s$ ) = 2.885**