TEL. 787-259-1410
FAX: 787-259-1604

VICTOR E. RIVERA & ASSOCIATES
GEOTECHNICAL ENGINEERS

PO BOX 32198
PONCE, PR 00732-2198

PROJECT: **Municipal Landfill Lateral Expansion** BORING NO.: **107** SHEET NO.: **1/3**

LOCATION: **Barinas Ward, Yauco, Puerto Rico** CLIENT: **LM Waste Service Corp.**

INSPECTOR: **J. Nazario** DRILLER: **E. Vargas** WORK STARTED: **3-13-07** WORK FINISHED: **3-15-07**

POWER DRIVEN HOLLOW STEM AUGER; SAMPLE-TYPES & SIZES **1 3/8" I.D. SPLIT SPOON** HAMMER WGT: **140 POUNDS**

HAMMER DROP: **30"** DRILLING FLUID: **NONE** CORE DATA-TYPE BARREL: **------** TYPE & SIZE BIT: **------**

GROUND WATER: DATE AND DEPTH: **3-13-07; -75.0 FT. (ELEV.= 97.29 M)** DRILL MANUFACTURER TYPE & NO. **CME – 55**

"X" COORDINATE: **154546.8531** "Y" COORDINATE: **218492.4008** ELEVATION: **120.15 M** JOB NO.: **06-2749**

DEPTH (FT.)	ELEV. (M)	S.P.T. "N" VALUES	GEOLOGIC DESCRIPTION OF MATERIALS [a	N	W_N	Qu	PIEZOMETER [b	Td
1		6 – 6	Yellowish marly material with hard limestone fragments	6	14	---		
2		20 – 11	(Fill)					
3		3 – 4	Dry	11	17	---		
4		7 – 13						
5		3 – 3		7	21	---		
6		4 – 7						
7		6 – 4		9	22	---		
8		5						
9								
10		4 – 5		23	16	---		
11		18						
12			Yellowish brown – semi consolidated. Sandy silt with some clay dry (Fill?) and limestone rock fragments. Becoming more clayey and hard with depth					A
13								
14								
15		8 – 12		28	26	---		
16		16						
17								
18								
19								
20		10 – 18		39	24	---		
21		21						
22								
23								
24	112.83		-24.0'					
25		10 – 22		56	22	---		B
26		34						
27			Yellowish brown silty clay mottled with marly – calcareous material – semi-consolidated					
28								
29			Dry					
30	111.00	13 – 20	-30.0'	49	25	---		A
31		29						
32			Brown hard to semi-consolidated sandy silt – becoming sandier and friable at depth and with some rounded gravel fragments. Dry					
33								
34								
35		18 – 54		54/6"	18	---		B

* = INDICATED AS NEEDED (1) NO. OF BLOWS REQUIRED TO DRIVE SAMPLER 0"-6", 6"-12", 12"-18"
(2) FORCE TO CAUSE THIN WALLED SAMPLER TO PENETRATE AT RATE ½ FT/SEC.

W_N = NATURAL MOISTURE CONTENT IN % OF DRY WEIGHT
Qu = UNCONFINED COMPRESSIVE STRENGTH IN TONS PER SQ. FT.
Td = TYPE OF DRILLING
(A) = STANDARD BORING IN SOILS SHOWING "N" VALUES BELOW 50
(B) = ROTARY DRILLING USING ALLOY DRAG BIT AND/OR IN SOILS SHOWING "N" VALUES ABOVE 50

N = SUM OF THE LAST 12" OF SAMPLER PENETRATION
LL = LIQUID LIMIT
PI = PLASTICITY INDEX
% = PERCENT FINER THAN NO. 200 SIEVE

[a Description made by Mr. Mario Soriano Ressy, Geologist
[b = SEE ATTACHED PIEZOMETER DETAILS

TEL. 787-259-1410
FAX: 787-259-1604

VICTOR E. RIVERA & ASSOCIATES
GEOTECHNICAL ENGINEERS

PO BOX 32198
PONCE, PR 00732-2198

PROJECT: **Municipal Landfill Lateral Expansion** BORING NO.: **107** SHEET NO.: **2/3**

LOCATION: **Barinas Ward, Yauco, Puerto Rico** CLIENT: **LM Waste Service Corp.**

INSPECTOR: **J. Nazario** DRILLER: **E. Vargas** WORK STARTED: **3-13-07** WORK FINISHED: **3-15-07**

POWER DRIVEN HOLLOW STEM AUGER; SAMPLE-TYPES & SIZES **1 3/8" I.D. SPLIT SPOON** HAMMER WGT: **140 POUNDS**

HAMMER DROP: **30"** DRILLING FLUID: **NONE** CORE DATA-TYPE BARREL: **------** TYPE & SIZE BIT: **------**

GROUND WATER: DATE AND DEPTH: **3-13-07; -75.0 FT. (ELEV.= 97.29 M)** DRILL MANUFACTURER TYPE & NO. **CME – 55**

"X" COORDINATE: **154546.8531** "Y" COORDINATE: **218492.4008** ELEVATION: **120.15 M** JOB NO.: **06-2749**

DEPTH (FT.)	ELEV. (M)	S.P.T. "N" VALUES	GEOLOGIC DESCRIPTION OF MATERIALS [a	N	W_N	Qu	PIEZOMETER [b	Td
36								
37								
38								
39								
40		34 – 50/6"		50/6"	8	---		
41								
42			Brown hard to semi-consolidated sandy silt – becoming sandier and friable at depth and with some rounded gravel fragments. Dry					
43								
44								
45		42 – 60		60/6"	14	---		
46								
47								
48								
49								
50	104.91	15 – 26	-50.0'	50/2"	28	---		
51		50/2"						
52								
53								
54								
55		18 – 28	Brown hard to semi-consolidated sandy silt – becoming sandier and friable at depth and with some rounded gravel fragments. Dry with lenses or seams of sandy clay interbbeded in the about. With rock fragments	75	28	---		
56		47						
57								
58								
59								
60		50/6"		50/6"	22	---		
61								
62	101.25		-62.0'					
63								
64								
65		50/3"		50/3"	11	---		
66			Dark – brown weathered conglomerate lense of highly weathered rock inter-mixed with sandy loose material, occasional clay seams. Moist to wet at 79'					
67								
68								
69								
70		8 – 25 – 32		57	22	---		

B

* = INDICATED AS NEEDED (1) NO. OF BLOWS REQUIRED TO DRIVE SAMPLER 0"-6", 6"-12", 12"-18"
(2) FORCE TO CAUSE THIN WALLED SAMPLER TO PENETRATE AT RATE ½ FT/SEC.

W_N = NATURAL MOISTURE CONTENT IN % OF DRY WEIGHT
Qu = UNCONFINED COMPRESSIVE STRENGTH IN TONS PER SQ. FT.
Td = TYPE OF DRILLING
(A) = STANDARD BORING IN SOILS SHOWING "N" VALUES BELOW 50
(B) = ROTARY DRILLING USING ALLOY DRAG BIT AND/OR IN SOILS SHOWING "N" VALUES ABOVE 50

N = SUM OF THE LAST 12" OF SAMPLER PENETRATION
LL = LIQUID LIMIT
PI = PLASTICITY INDEX
% = PERCENT FINER THAN NO. 200 SIEVE

[a Description made by Mr. Mario Soriano Ressy, Geologist
[b = SEE ATTACHED PIEZOMETER DETAILS

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FAX: 787-259-1604

VICTOR E. RIVERA & ASSOCIATES
GEOTECHNICAL ENGINEERS

PO BOX 32198
PONCE, PR 00732-2198

PROJECT: **Municipal Landfill Lateral Expansion** BORING NO.: **107** SHEET NO.: **3/3**

LOCATION: **Barinas Ward, Yauco, Puerto Rico** CLIENT: **LM Waste Service Corp.**

INSPECTOR: **J. Nazario** DRILLER: **E. Vargas** WORK STARTED: **3-13-07** WORK FINISHED: **3-15-07**

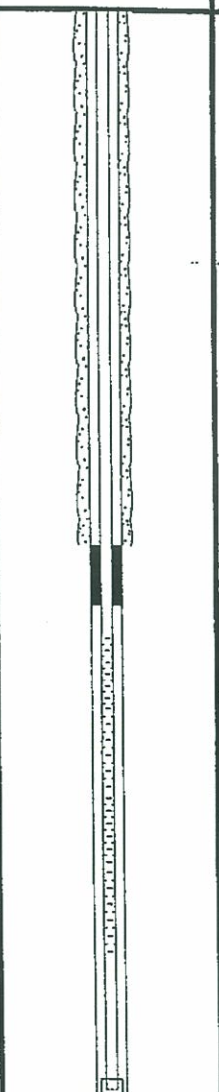
POWER DRIVEN HOLLOW STEM AUGER; SAMPLE-TYPES & SIZES **1 3/8" I.D. SPLIT SPOON** HAMMER WGT: **140 POUNDS**

HAMMER DROP: **30"** DRILLING FLUID: **NONE** CORE DATA-TYPE BARREL: **------** TYPE & SIZE BIT: **------**

GROUND WATER: DATE AND DEPTH: **3-13-07; -75.0 FT. (ELEV.= 97.29 M)** DRILL MANUFACTURER TYPE & NO. **CME – 55**

"X" COORDINATE: **154546.8531** "Y" COORDINATE: **218492.4008** ELEVATION: **120.15 M** JOB NO.: **06-2749**

DEPTH (FT.)	ELEV. (M)	S.P.T. "N" VALUES	GEOLOGIC DESCRIPTION OF MATERIALS [a	N	W_N	Qu	PIEZOMETER [b	Td
71								
72								
73								
74								
75	▼	15 – 32		80	25	---		
76		48	Dark – brown weathered conglomerate lense of highly weathered rock inter-mixed with sandy loose material, occasional clay seams. Moist to wet at 79'					
77								
78								
79								
80		50/2"		50/2"	21	---		
81								
82								
83	94.84		-83.0'					
84								
85		29 – 42		42/6"	20	---		
86								
87								
88								
89								
90		50/3"		50/3"	15	---		
91								
92								
93			Brown – sandy silt with some clay and weathered rock fragments embedded – (saprolitic material of a conglomeratic layer. Moist to wet saturated at 99' at it becomes more sandy and friable					
94								
95		50/3"		52/3"	21	---		
96								
97								
98								
99								
100		50/4"		50/4"	31	---		
101								
102								
103								
104	88.14	50/5"	-104.4'	50/5"	18	---		
105			**END OF BORING**					



* = INDICATED AS NEEDED (1) NO. OF BLOWS REQUIRED TO DRIVE SAMPLER 0"-6", 6"-12", 12"-18"
(2) FORCE TO CAUSE THIN WALLED SAMPLER TO PENETRATE AT RATE ½ FT/SEC.

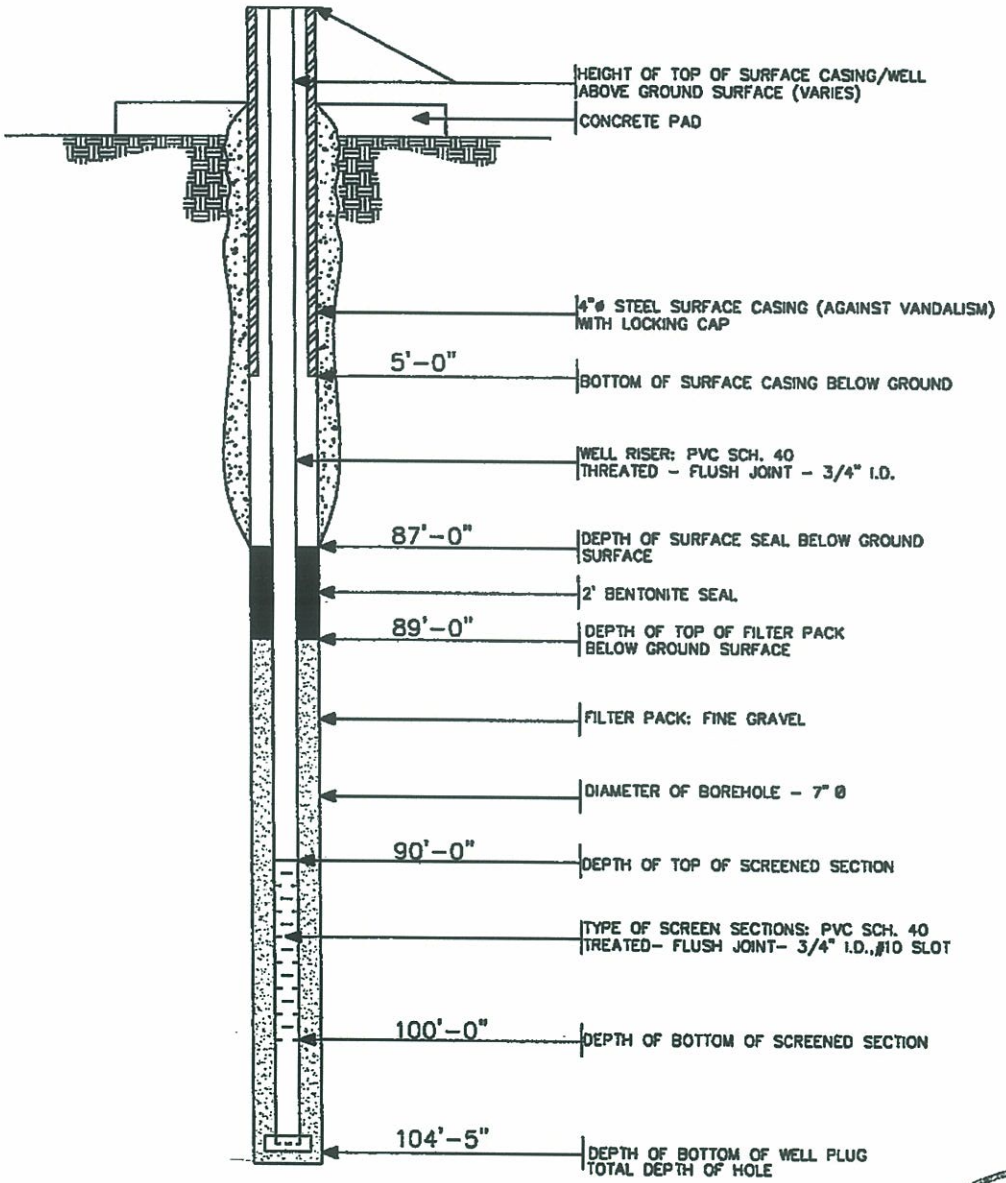
W_N = NATURAL MOISTURE CONTENT IN % OF DRY WEIGHT
Qu = UNCONFINED COMPRESSIVE STRENGTH IN TONS PER SQ. FT.
Td = TYPE OF DRILLING
(A) = STANDARD BORING IN SOILS SHOWING "N" VALUES BELOW 50
(B) = ROTARY DRILLING USING ALLOY DRAG BIT AND/OR IN SOILS SHOWING "N" VALUES ABOVE 50

N = SUM OF THE LAST 12" OF SAMPLER PENETRATION
LL = LIQUID LIMIT
PI = PLASTICITY INDEX
% = PERCENT FINER THAN NO. 200 SIEVE
[a = DESCRIPTION MADE BY MR. MARIO SORIANO RESSY, GEOLOGIST
[b = SEE ATTACHED PIEZOMETER DETAILS

LATERAL EXPANSION
MUNICIPAL LANDFILL

BARINAS WARD, YAUCO, P.R.

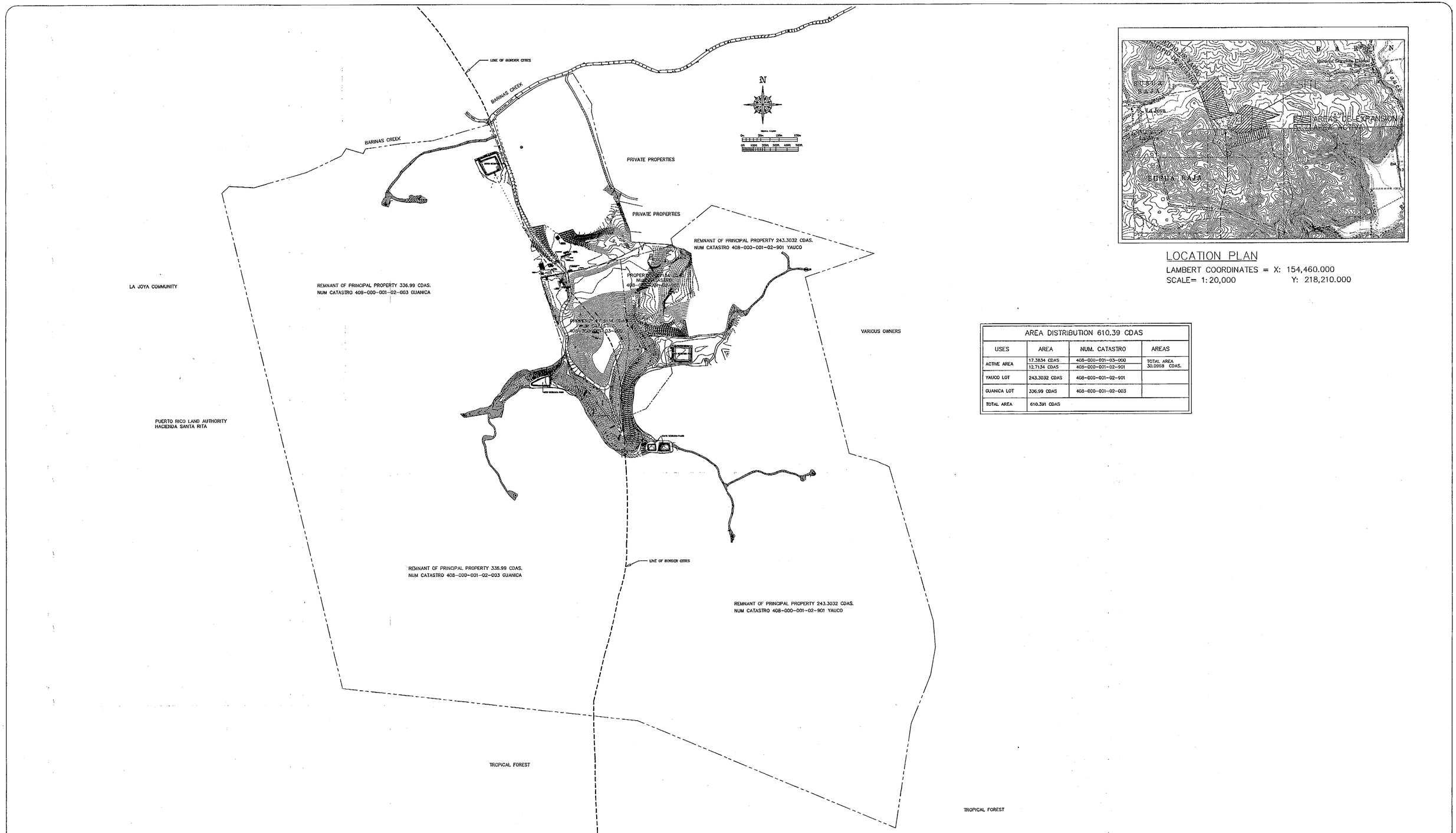
LM WASTE SERVICES, INC



PIEZOMETER # 107
CONSTRUCTION DETAILS

NOT TO SCALE

JOSÉ RAUL RIVERA NAZARIO
INGENIERO
LICENCIADO
LIC. # 9525
RIVERA
13 NOV. 20
PUERTO RICO



LOCATION PLAN

LAMBERT COORDINATES = X: 154,460.000
SCALE= 1:20,000 Y: 218,210.000

AREA DISTRIBUTION 610.39 CDAS			
USES	AREA	NUM. CATASTRO	AREAS
ACTIVE AREA	17.3834 CDAS	408-000-001-03-000	TOTAL AREA 30.0968 CDAS.
	12.7134 CDAS	408-000-001-02-901	
YAUCO LOT	243.3032 CDAS	408-000-001-02-901	
GUANICA LOT	336.99 CDAS	408-000-001-02-003	
TOTAL AREA	610.391 CDAS		

TECHNOLOGY GROUP , Inc.
P.O. BOX 4985 P.M.B 312
CAGUAS, P.R. 00726-4985
Tel. 743-8826 Fax 286-7473
e-mail sales@rrtecgrp.com

ING. JOSE L. FRANCES SANTIAGO
LIC. NUM. 16286
INGENIERO LICENCIADO
PUERTO RICO

REVISIONS	
0	
1	
2	
3	
4	
5	

Date Drawn	JANUARY 25, 2008
Scale	AS SHOWN IN METERS
Designed by	J.L.R.
Drawn by	R.G.R

NOTE:
DIMENSIONS AND/OR ELEVATIONS SHOWN ARE IN METRIC SYSTEM UNLESS OTHERWISE NOTED.
THIS PLAN HAS BEEN PREPARED CONSIDERING INFORMATION PROVIDED BY: ESTUDIO DE TITULO: REFERENCE, FINCA 35680 DE YAUCO. CASO: FINCA EN BARRIOS, SUSUA BAJA Y BARINAS BAJA DE YAUCO. REGISTRO DE LA PROPIEDAD DE PUERTO RICO: SECCION EN SAN GERMAN EN RELACION CON LA FINCA NUM. 35680 DEL TERMINO MUNICIPAL DE YAUCO.

VERTEDERO DE YAUCO

YAUCO, PUERTO RICO

PLANO DE SEGREGACION
FINCA DE MUNICIPIO YAUCO

Sheet Number
1 OF 2

Apéndice 6:

Log of Exploratory Boring-AGES

AGES APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-147-01 Date 06/29/93
Client MUNICIPIO DE YAUCO
Location VERTEDERO MUNICIPAL
Logged By C. RODRIGUEZ Drilling Company AGES

Boring No. B-1
Sheet 1 of 2

FIELD LOCATION OF BORING:

Drilling Method MOBILE DRILLING CO. MODEL B-57 HOLLOW STEM AUGER Hole Dia. 8"

Well Installation Data TOTAL DEPTH = 50' BACKFILLED WITH NATIVE SOIL

DEPTH (feet)	GRAPHIC LOG	BLOW/ft	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
						Water Level / Time / Date
1						
2						
3						
4						
5		48	-	Split Spoon	sm	Calcarenite, fine-grained, 10YR 7/1 light gray, dense, slightly moist, subrounded pebbles and cobbles.
6						
7						
8						
9						
10		100/6"	-	Split Spoon	ls	Limestone, 10YR 7/1 light gray, moderately hard, mud supported.
11						
12						
13				—		
14						
15		50/6"	-	Split Spoon	ls	Limestone, 5Y 8/1 white, moderately hard, slightly moist, moderately consolidated, mud supported.
16						
17						
18						
19	o o o o o					
20	o o o o o	100/3"	-	Split Spoon	sp	Calcarenite, fine-to coarse-grained sand, very dense, slightly moist, moderately to poorly consolidated.
21	o o o o o					
22	o o o o o					
23	o o o o o					
24	o o o o o					
25		100/12"	-	Split Spoon	sm	Silty Sand, fine-to coarse-grained, 2.5Y 3/3 light olive brown, very dense, slightly moist, subrounded pebbles and cobbles (serpentinite, andesite, and mudstone).
26						
27						
28						
29						
30		100/10"	-	Split Spoon	sp	Calcarenite, medium-to coarse-grained, 2.5Y 5/6 light olive brown, very dense, slightly moist, poorly consolidated.
31	o o o o o					
32	o o o o o					

AGES APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-147-01 Date 06/23/93
Client MUNICIPIO DE YAUCO
Location VERTEDERO MUNICIPAL
Logged By C. RODRIGUEZ Drilling Company AGES

Boring No. B-1
Sheet 2 of 2

FIELD LOCATION OF BORING:

Drilling Method MOBILE DRILLING CO. MODEL B-57 HOLLOW STEM AUGER
Hole Dia. 8"

Well Installation Data

Water Level					
Time					
Date					

DEPTH (feet)	LOG	BLOW/ft	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
33						
34						
35		100/8"	-	Split Spoon	sm	Silty Sand, fine-to medium-grained, 7.5Y 4/3 olive brown, very dense, slightly moist.
36						
37						
38						
39						
40		60/12"	-	Split Spoon	sm	Silty Sand, fine-grained, 10YR 4/3 brown, very dense, slightly moist, subrounded pebbles and cobbles (andesite, mudstone and serpentinite).
41						
42						
43						
44						
45		100/12"	-	Split Spoon	sc	Clayey Silt, 10YR 5/1 gray, very dense, slightly moist, subrounded pebbles and cobbles (andesite, mudstone and serpentinite).
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						

AGES APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-147-01 Date 06/29/93
Client MUNICIPIO DE YAUCO
Location VERTEDERO MUNICIPAL
Logged By C. RODRIGUEZ Drilling Company AGES
Boring No. B-2 Sheet 1 of 2

FIELD LOCATION OF BORING:

Drilling Method MOBILE DRILLING CO. MODEL B-57 HOLLOW STEM AUGER Hole Dia. 8"
Well Installation Data TOTAL DEPTH = 50'
BACKFILLED WITH NATIVE SOIL

DEPTH (feet)	GRAPHIC LOG	BLOW/ft.	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
						Water Level / Time / Date
1						
2						
3						
4						
5		50	-	Split Spoon	sc	Calcareous Siltstone, 5YR 8/2 pinkish white, very dense, slightly moist, poorly consolidated, subrounded pebbles and cobbles (limestone).
6						
7						
8						
9						
10		52/12"	-	Split Spoon	sc	Calcareous Siltstone, 7.5YR 4/4 brown, very dense, slightly moist, subrounded pebbles and cobbles (limestone, mudstone, and serpentinite).
11						
12						
13						
14						
15		13/12"	-	Split Spoon	sm	Calcarenite, fine-grained sand, 2.5Y 4/2 dark grayish brown, very dense, slightly moist, poorly consolidated.
16						
17						
18						
19						
20		42/12"	-	Split Spoon	sm	Calcarenite, fine-to coarse-grained, 10YR 5/4 yellowish brown, very dense, slightly moist, poorly consolidated.
21						
22						
23						
24						
25		57/12"	-	Split Spoon	sm	Calcarenite, fine-grained, 10YR 5/4 yellowish brown, very dense, slightly moist, poorly consolidated, subrounded pebbles and cobbles (limestone, mudstone and serpentinite).
26						
27						
28						
29						
30		60/12"	-	Split Spoon	sp	Sand, medium-to coarse-grained, 7.5YR 5/2 grayish brown, very dense, slightly moist, subrounded pebbles and cobbles (andesite, mudstone, and serpentinite).
31						
32						

AGES APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-141-01 Date 06/29/93
Client MUNICIPIO DE YAUCO
Location VERTEDERO MUNICIPAL
Logged By C. RODRIGUEZ Drilling Company AGES

Boring No. B-2
Sheet 2 of 2

FIELD LOCATION OF BORING:

Drilling Method MOBILE DRILLING CO. MODEL B-57
HOLLOW STEM AUGER Hole Dia. 8"

Well Installation Data

Water Level					
Time					
Date					

DEPTH (feet)	LOG	BLOWS/FOOT	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
33						
34						
35		80/12"	-	Split Spoon	gm	Silty Gravel, 2.5YR 5/4 light olive brown, very dense, slightly moist, contains angular to well rounded volcanic clasts.
36						
37						
38						
39						
40		100/5"	-	Split Spoon	gm	Silty Gravel, 2.5YR 5/4 light olive brown, very dense, slightly moist, contains angular to well rounded volcanic clasts.
41						
42						
43						
44						
45		5"	-	Split Spoon	gm	Silty Gravel, 2.5YR 5/4 light olive brown, very dense, slightly moist, contains angular to well rounded volcanic clasts.
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						

AGES — APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-147-01 Date 06/29/93
Client MUNICIPIO DE YAUCO
Location VERTEDERO MUNICIPAL
Logged By C. RODRIGUEZ Drilling Company AGES

Boring No. B-3
Sheet 1 of 2

FIELD LOCATION OF BORING:

Drilling Method MOBILE DRILLING CO. MODEL B-57
HOLLOW STEM AUGER Hole Dia. 8"

Well Installation Data TOTAL DEPTH = 50'
BACKFILLED WITH NATIVE SOIL

DEPTH (feet)	GRAPHIC LOG	BLOW/ft.	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
		Water Level				
		Time				
		Date				
1						
2						
3						
4						
5		65	-	Split Spoon	sp	Calcarenite, fine-to medium-grained sand, 5YR 4/4 reddish brown, very dense, slightly moist, poorly consolidated, subrounded pebbles and cobbles (limestone).
6						
7						
8						
9						
10		65	-	Split Spoon	sp	Calcarenite, fine-to medium-grained, 5YR 4/4 reddish brown, very dense, slightly moist, subrounded pebbles and cobbles (andesite, serpentinite and mudstone).
11						
12						
13						
14						
15		100/12"	-	Split Spoon	sm	Calcarenite, 7.5YR 4/4 brown, very dense, slightly moist, poorly consolidated, subrounded pebbles and cobbles (andesitic clasts)
16						
17						
18		100	-	Split Spoon	gw	Gravel, coarse-grained, very dense, slightly moist, poorly sorted, subrounded to rounded.
19						
20						
21						
22		100/12"	-	Split Spoon	sm	Calcareous Silty Clay, 10YR 6/6 brownish yellow to 5G 6-1 grayish gray, very dense, slightly moist, paleoroots.
23						
24						
25		100/12"	-	Split Spoon	ls	Argillaceous Limestone, 10YR 8/1 white, very dense, slightly moist, poorly consolidated.
26						
27						
28						
29						
30		100/9"	-	Split Spoon	ls	Argillaceous Limestone, 5YR 6/3 light reddish brown, very dense, slightly moist, subrounded pebbles and cobbles (mudstone and siltstone).
31						
32						

AGES APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-141-01 Date 06/29/93
Client MUNICIPIO DE YAUCO
Location VERTEDERO MUNICIPAL
Logged By C. RODRIGUEZ Drilling Company AGES
Drilling Method MOBILE DR. LNG CO. MODEL B-57 HOLLOW STEM AUGER Hole Dia. 8"
Boring No. B-3 Sheet 2 of 2

FIELD LOCATION OF BORING:

Well Installation Data

Water Level					
Time					
Date					

DEPTH (feet)	LOG	BLOW/ft	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
33		100/2 1/2"	-	Split Spoon	ml	Calcareous Silt, 7.5YR 5/8 strong brown, very dense, moist, poorly consolidated, subrounded (mudstone).
34						
35						
36						
37						
38						
39						
40		100/3"	-	Split Spoon	ml	Calcareous Silt, 7.5YR 5/8 strong brown, very dense, moist, poorly consolidated, subrounded (mudstone).
41						
42						
43						
44						
45		-	-	-	-	Calcareous Silt, 7.5YR 5/8 strong brown, very dense, moist, poorly consolidated, subrounded (mudstone).
46						
47						
48						
49						
50		-	-	-	-	Calcareous Silt, 7.5YR 5/8 strong brown, very dense, moist, poorly consolidated, subrounded (mudstone).
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						

AGES — APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-147-01 Date 06/29/93
Client MUNICIPIO DE YAUCO
Location VERTEDERO MUNICIPAL
Logged By C. RODRIGUEZ Drilling Company AGES

Boring No. B-4
Sheet 1 of 2

FIELD LOCATION OF BORING:

Drilling Method MOBILE DRILLING CO. MODEL B-57 HOLLOW STEM AUGER Hole Dia. 8"

Well Installation Data TOTAL DEPTH = 50'
BACKFILLED WITH NATIVE SOIL

	Water Level				
	Time				
	Date				

DEPTH (feet)	GRAPHIC LOG	BLOW/ft	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
1						
2						
3						
4						
5		100/8"	-	Split Spoon	sm	Calcarenite, fine-to medium-grained sand, 7.5YR 5/4 brown, very dense, slightly moist, subrounded pebbles and cobbles (mudstone, siltstone, and limestone).
6						
7						
8						
9						
10		100/12"	-	Split Spoon	sm	Calcarenite, fine-grained sand, 7.5YR 5/8 strong brown, very dense, slightly moist, subrounded pebbles and cobbles (mudstone, siltstone, andesite).
11						
12						
13						
14						
15		100/12"	-	Split Spoon	sm	Calcarenite, fine-grained sand, 7.5YR 5/8 strong brown, very dense, slightly moist, subrounded pebbles and cobbles (mudstone, siltstone, andesite).
16						
17						
18						
19						
20		100/12"	-	Split Spoon	ml	Sandy Silt, fine-grained sand, 5YR 5/8 yellowish brown very dense, slightly moist.
21						
22						
23						
24						
25		100/10"	-	Split Spoon	sm	Sandy Silt, fine-grained sand, 5YR 5/2 olive gray, very dense, slightly moist.
26						
27						
28						
29						
30		100/9 1/2"	-	Split Spoon	sp	Sand, fine-grained, 2.5YR 5/3 light olive brown very dense, slightly moist.
31						
32						

AGES — APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-147-01 Date 06/29/93
Client MUNICIPIO DE YAUCO
Location VERTEDERO MUNICIPAL
Logged By C. RODRIGUEZ Drilling Company AGES

Boring No. B-4
Sheet 2 of 2

FIELD LOCATION OF BORING:

Drilling Method MOBILE DRILLING CO. MODEL B-57 HOLLOW STEM AUGER
Hole Dia. 8"

Well Installation Data

Water Level					
Time					
Date					

DEPTH (feet)	LOG	BLOW/ft.	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
33						
34						
35		100	-	Split Spoon	sp	Sand, fine-grained, 5Y 5/2 olive gray, very dense, slightly moist.
36						
37						
38						
39						
40		100/10"	-	Split Spoon	sm	Sandy Silt, fine-grained sand, 5Y 5/2 olive gray, very dense, slightly moist.
41						
42						
43						
44						
45		100/12"	-	Split Spoon	sp	Sandstone, fine-to medium-grained, 2.5Y 5/3 light olive brown, very dense, slightly moist, poorly consolidated.
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						

AGES APPLIED GEOSCIENCES & ENVIRONMENTAL SERVICES, INC.

LOG OF EXPLORATORY BORING

Project # 93-147-01 Date 07/2/93

Client MUNICIPIO DE YAUCO

Location VERTEDERO MUNICIPAL

Logged By C. RODRIGUEZ Drilling Company AGES

Boring No. B-5 Sheet 1 of 1

FIELD LOCATION OF BORING:

Drilling Method MOBILE DRILLING CO. MODEL B-57 HOLLOW STEM AUGER Hole Dia. 8"

Well Installation Data TOTAL DEPTH =50'-0" BACKFILLED WITH NATIVE SOIL.

Water Level				
Time				
Date				

DEPTH (feet)	GRAPHIC LOG	BLOW/ft.	METER READING	SAMPLE TYPE & DEPTH	U.S.C.S. SYMBOL	LITHOLOGIC DESCRIPTION
1						
2						
3						
4						
5		100/8"	-	Split Spoon	sm	Calcarenite, fine-to medium-grained sand, 7.5YR 5/4 brown, very dense, slightly moist, subrounded pebbles and cobbles (andesite and mudstone).
6						
7						
8						
9						
10		100/6"	-	Split Spoon	sm	Sand, fine-to coarse-grained, 7.5YR 5/4 brown, very dense, slightly moist, subrounded pebbles and cobbles (serpentinite, andesite and mudstone).
11						
12						
13						
14						
15		100/8"	-	Split Spoon	sm	Calcarenite, fine-grained sand, 7.5YR 5/6 strong brown, very dense, slightly moist, subrounded pebbles and cobbles (serpentinite, andesite and mudstone).
16						
17						
18						
19						
20		100/9"	-	Split Spoon	ml	Sandy Silt, fine-grained sand, 7.5YR 5/6 strong brown, very dense, slightly moist, subrounded pebbles and cobbles (serpentinite, andesite and mudstone).
21						
22						
23						
24						
25		100/8"	-	Split Spoon	sm	Gravely Silty Sand, fine-grained sand, 10YR 5/6 yellowish brown, very dense, slightly moist, subrounded pebbles and cobbles (serpentinite, andesite and mudstone).
26						
27						
28						
29						
30		100/8"	-	Split Spoon	sm	Gravely Silty Sand, fine-to medium-grained, 10YR 5/4 yellowish brown, very dense, subrounded pebbles and cobbles (serpentinite, andesite and mudstone).
31						
32						