FED. ROAD DIST. NO. FED. AID PROJ. NO. FISCAL SHEET TOTAL YEAR NO. SHEETS NO. SHEETS 1989 25 HAWAII HAW. I-H3-1(51)

108 - 12 BORING BORING 108 - 10 **BORING** 108-11 SURFACE ELEVATION 129 <sup>±</sup> feet MSL Datum SURFACE ELEVATION 131 + feet SURFACE ELEVATION 129 <sup>+</sup> feet MSL Datum MSL Datum DESCRIPTION DESCRIPTION DESCRIPTION Reddish brown clayey silty gravel with little fine to coarse sand medium dense (fill) MH | Brown sandy clayey silt with gravel, medium stiff (fill) Reddish brown clayey silty gravel, little fine to coarse sand, very loose to loose (fill) 26.1 92 9/3" 17.0 89 GM/ Mottled reddish brown, tan, and gray sandy clayey silt interbedded MH with highly weathered basalt gravel, dense (old alluvium) 16 boulder 12/4" 6/5" Gray slightly silty basalt gravel and cobbles loose to medium dense (fill) grading more cobbly 23 22 56.8 64 10 MH Brown clayey silt with gray streaks, stiff to hard (old alluvium) 20 -20 -34.4 86 28 41.1 81 30 boulder 24/6" 46.1 74 23 24 Reddish brown sandy clayey silty gravel, loose to medium dense Interbedded mottled brown and tan sandy clayey silt and highly weathered rounded basalt gravel, stiff and dense (old alluvium) 58 GP Dark gray basalt and reddish brown sandy gravel, cobbles and boulders, dense (possible recent stream alluvium) 49.9 70 21 27 34/5" 32 13 Dark gray basalt gravel, cobbles, and boulders, dense (possible recent stream alluvium) 40 -48.9 70 37 105/ 9" 50 -28 GM/ Mottled reddish brown and gray sandy clayey silty basalt gravel, SM dense (old alluvium) 56.0 68 GM/ Reddish brown sandy clayey silty basalt gravel, medium dense 52.6 70 17 51.6 71 30 to dense (old alluvium) . 60 62.1 64 20 GM Dark gray and brown silty sandy basalt gravel and cobbles, very dense (basalt is moderately weathered, old alluvium) 54.7 70 22 36 50.0 74 27 MH Brown clayey silt with trace fine to coarse grained sand, stiff (old alluvium) 70 21 GM Mottled reddish brown and dark gray sandy clayey silty basalt gravel, dense (old alluvium) 22 grades dense to very dense basalt fragments, less weathered 47 34 Greenish gray and brown highly weathered aa basalt formation consisting of weathered massive basalt and clinkers 44.8 79 24 90 52 25 Mottled brown and tan silt and highly weathered basalt, hard (old alluvium) Boring completed at 96.5 feet on 08-01-84 ML Mottled brown and tan silt and highly weathered basalt, very stiff (old alluvium) Groundwater not encountered Boring completed at 101.5 feet on 07-31-84 Boring completed at 101.5 feet on 07-30-84 Groundwater not encountered Groundwater not encountered STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION REGISTERED LOG OF BORINGS NOTES: PROFESSIONAL

-DEPTH AT WHICH UNDISTURBED SAMPLE WAS TAKEN

-DEPTH AT WHICH DISTURBED SAMPLE WAS TAKEN -DEPTH AT WHICH SAMPLE WAS LOST DURING EXTRACTION

I -DEPTH AND LENGTH OF CORE RUN

DRIVING ENERGY- 300 -LB WEIGHT DROPPING 30 INCHES

LOG OF BORINGS

ENGINEER No. 3587-C

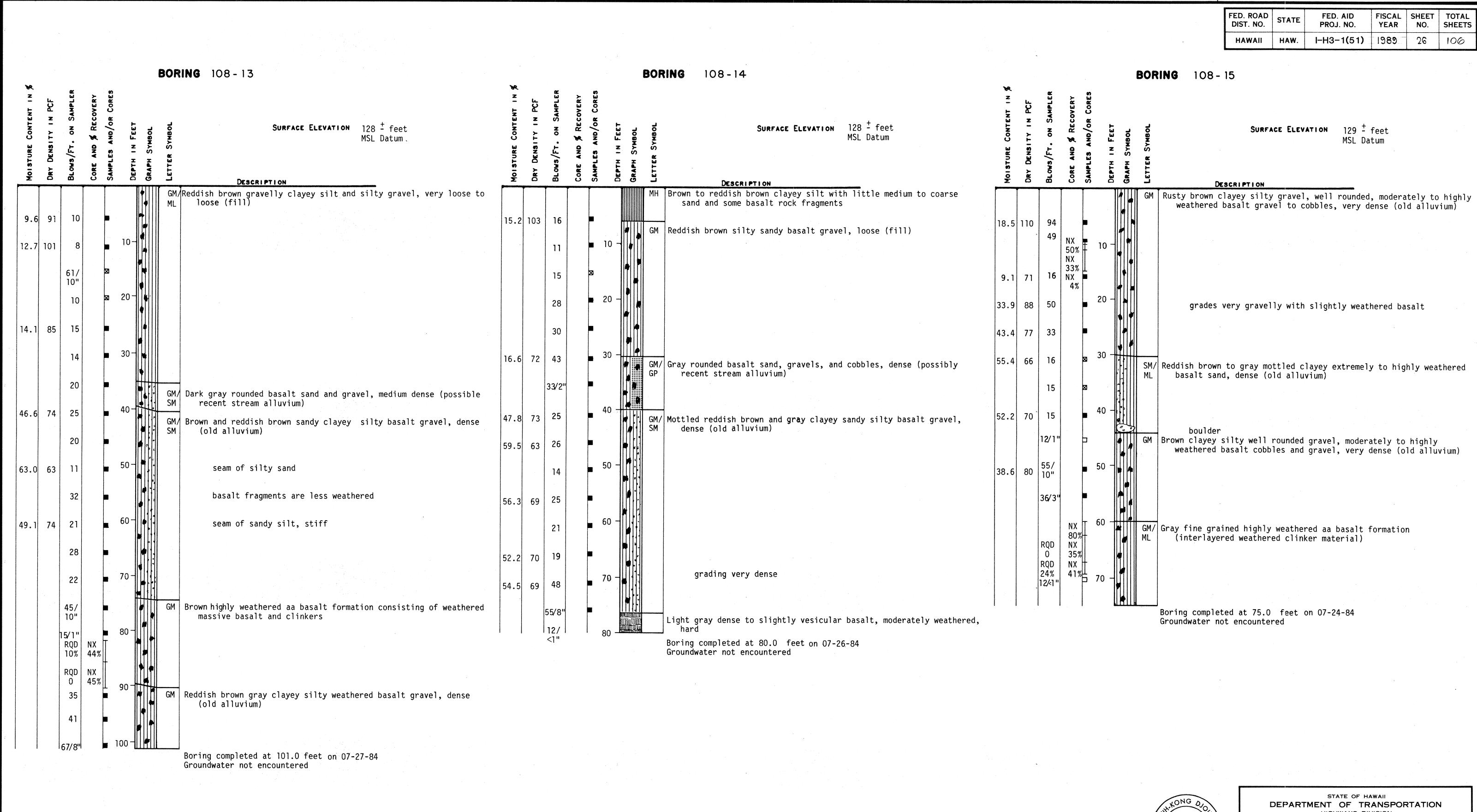
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

INTERSTATE ROUTE H-3 F.A.I. PROJECT NO. I-H3-1(51)

NOT TO SCALE

DATE: AUG. 1988

SHEET NO. PI OF 4 SHEETS

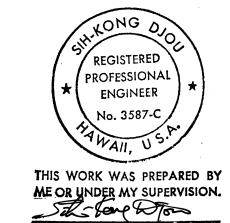


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NOTES:

-DEPTH AT WHICH UNDISTURBED SAMPLE WAS TAKEN -DEPTH AT WHICH DISTURBED SAMPLE WAS TAKEN -DEPTH AT WHICH SAMPLE WAS LOST DURING EXTRACTION I -DEPTH AND LENGTH OF CORE RUN DRIVING ENERGY- 300 -LB WEIGHT DROPPING 30 INCHES

LOG OF BORINGS



HIGHWAYS DIVISION

## LOG OF BORINGS

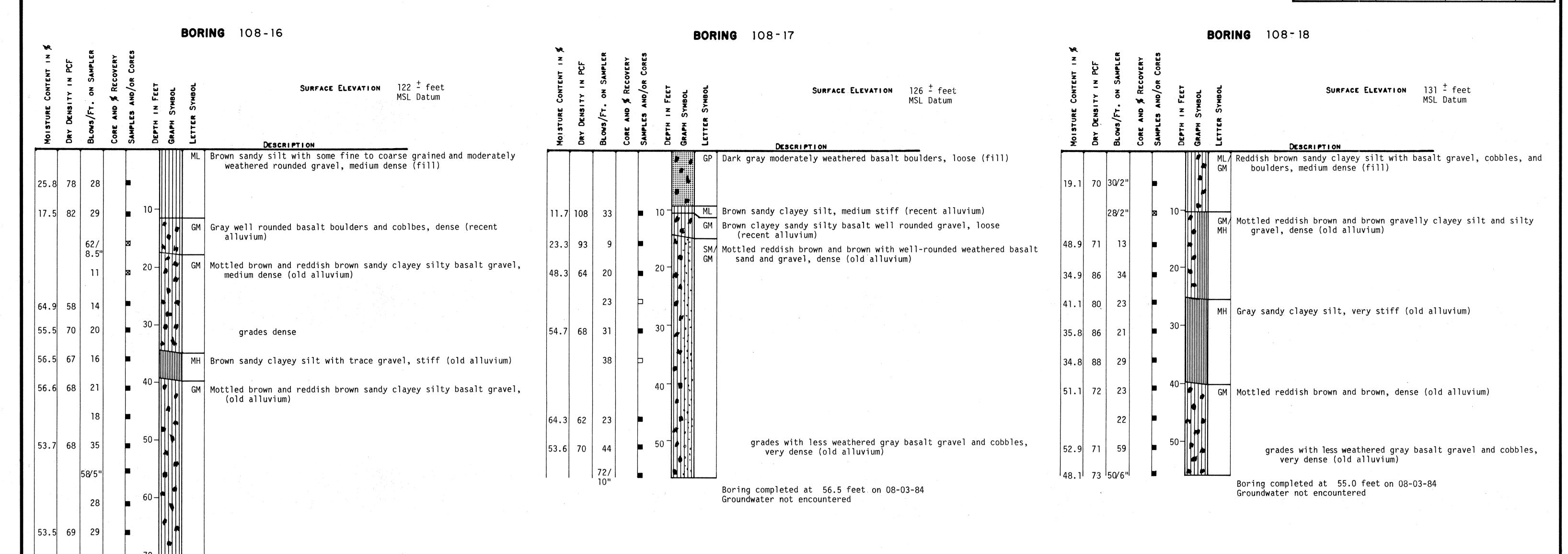
INTERSTATE ROUTE H-3 F.A.I. PROJECT NO. I-H3-1(51)

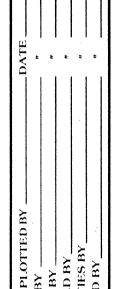
NOT TO SCALE

DATE: AUG. 1988

SHEET NO. P2 OF 4 SHEETS

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	I-H3-1(51)	1989	27	106





60.5 65 23

52.3 71 24

46.9 74 34

50.3 72 37

GM Gray moderately to highly weathered aa basalt

Boring completed at 101.3 feet on 08-06-84

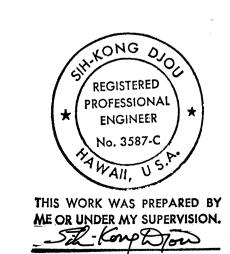
Groundwater not encountered

GM/ Brown clayey silt and weathered basalt, stiff to very stiff MH (old alluvium)

NOTES:

-DEPTH AT WHICH UNDISTURBED SAMPLE WAS TAKEN -DEPTH AT WHICH DISTURBED SAMPLE WAS TAKEN -DEPTH AT WHICH SAMPLE WAS LOST DURING EXTRACTION I -DEPTH AND LENGTH OF CORE RUN DRIVING ENERGY- 300 -LB WEIGHT DROPPING 30 INCHES

LOG OF BORINGS



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

## LOG OF BORINGS

INTERSTATE ROUTE H-3 F.A.I. PROJECT NO. I-H3-1(51)

NOT TO SCALE

DATE: AUG. 1988

SHEET NO. P3 OF 4 SHEETS

FED. ROAD DIST. NO. STATE FED. AID PROJ. NO. FISCAL SHEET NO. SHEETS

HAWAII HAW. I-H3-1(51) 1989 28 106

**BORING** 108-19 **BORING** 108 - 20 Surface ELEVATION 142 + feet Surface Elevation 146 + feet MSL Datum MSL Datum DESCRIPTION DESCRIPTION Reddish brown sandy gravelly clayey silt with frequent basalt boulders, medium stiff and loose (fill) MH Brown clayey sandy silt with some gravel and occasional cobbles and boulders (fill) 18 42.2 76 MH/ Mottled gray and brown clayey silt with occasional basalt gravel, CH soft to medium stiff (fill) GP Well rounded basalt cobbles and boulders, medium dense (stream boulder at 14 feet 39.3 76 59 GM/ Mottled brown, reddish-brown, and gray clayey silty basalt gravel MH and cobbles, dense and stiff (old alluvium) 22.3 75 44.1 76 4 boulder at 19 feet 29.1 89 49.3 72 31 30.3 89 16 MH/ Dark brown clayey sandy silt, stiff (recent alluvium) 32.2 89 18 55.3 69 17 GM/ Reddish brown clayey sandy highly weathered basalt gravel and silt, ML medium dense (old alluvium) boulder 30.2 94 14 34.7 85 69 18 27 39.8 81 27 33.9 86 40 -40 - 17 81/5" 31 17.9 103 MH Dark brown clayey silt with occasional cobbles and boulders, very stiff (old alluvium) 58.2 67 42.2 81 13 50 -31.2 91 102/ grades with less weathered gray basalt gravel and cobbles, very dense (old alluvium) 44.9 78 54 grades to brown color, very stiff to hard 35.6 86 89/8" 33.3 89 105/ 60 -60 RQD NX 1 0 43% RQD NX 54% 71% RQD NX 74% 92% 54.8 69 34 31.5 95 35 55 67 48 78/6" grades with weathered basalt gravel and cobbles RQD | NX | 27% | 38% | RQD | NX 50.3 72 MH Grayish brown silty clay, hard (old alluvium) 39 40.3 81 100% 100% 80 80 69/ 61/4" 34.8 87 77" RQD NX 0 10% 10% 62/ RQD NX יירר יי 20% 0 73/ 10" 90 -GM/ Brown sandy clayey silt and weathered basalt gravel, cobbles, ML and boulders (possibly highly weathered aa basalt formation) RQD NX 104/ Mottled brown, reddish brown, and gray sandy clayey basalt gravel (weathered basalt formation) RQD NX 57% 93% RQD NX 0 5% Boring completed at 96.5 feet on 08-02-84 Groundwater not encountered Boring completed at 103.0 feet on 07-20-84

SURFACE ELEVATION 144 + feet MSL Datum DESCRIPTION GM | Reddish brown clayey silty sand and gravel (fill) MH Grayish brown and reddish brown clayey silt with some sand and gravel, medium stiff (fill) 8 10 -7 20 -12 MH Brown clayey sandy silt, stiff (recent alluvium) 19.1 101 39/7" GM/ Mottled grayish brown clayey silt, occasional basalt gravel, cobbles, MH and boulders, stiff (old alluvium) 18 90 113/ 6" 40 110/ Mottled reddish brown silt with weathered to highly weathered basalt gravel and cobbles, very stiff (old alluvium) 11.1 123 87/4.5" 50 -GM Gray highly weathered vesicular basalt

**BORING** 108-21

Boring completed at 75.0 feet on 07-17-84 Groundwater not encountered

Dark gray highly vesicular basalt, moderately weathered

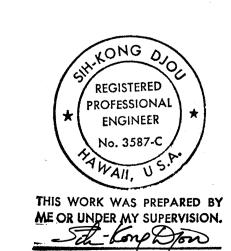
NOTES:

ORIGINAL SURVEY PLOTT
PLAN DRAWN BY \_\_\_\_
TRACED BY \_\_\_\_
NOTE BOOK DESIGNED BY \_\_\_\_
QUANTITIES BY

-DEPTH AT WHICH UNDISTURBED SAMPLE WAS TAKEN
-DEPTH AT WHICH DISTURBED SAMPLE WAS TAKEN
-DEPTH AT WHICH SAMPLE WAS LOST DURING EXTRACTION
I-DEPTH AND LENGTH OF CORE RUN
DRIVING ENERGY- 300 -LB WEIGHT DROPPING 30 INCHES

LOG OF BORINGS

Groundwater not encountered



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

## LOG OF BORINGS

INTERSTATE ROUTE H-3
F.A.I. PROJECT NO. I-H3-1(51)

NOT TO SCALE

DATE: AUG. 1988

SHEET No. P4 OF 4 SHEETS

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