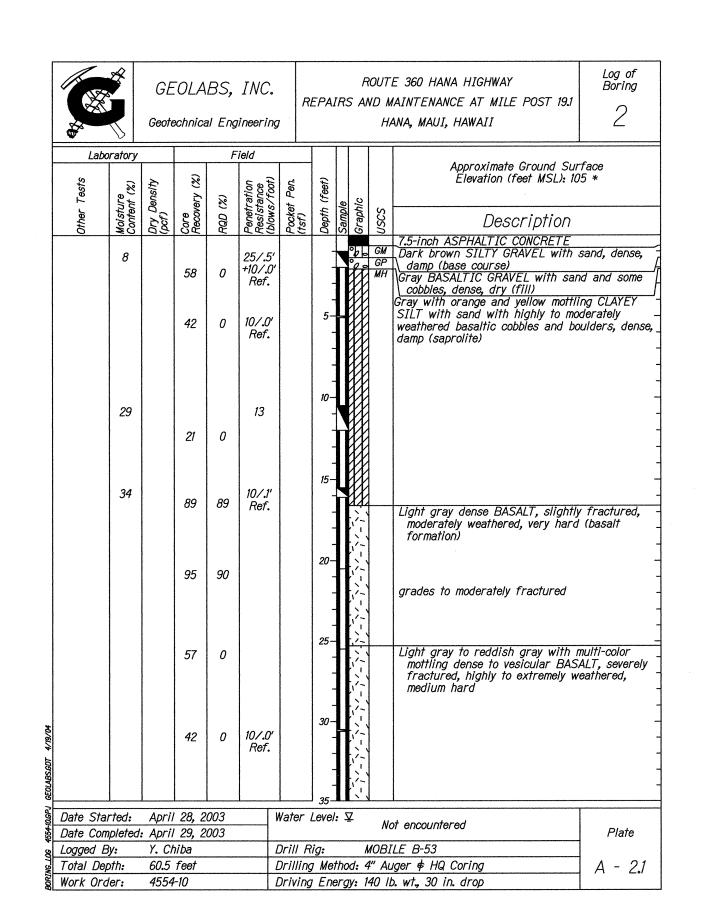
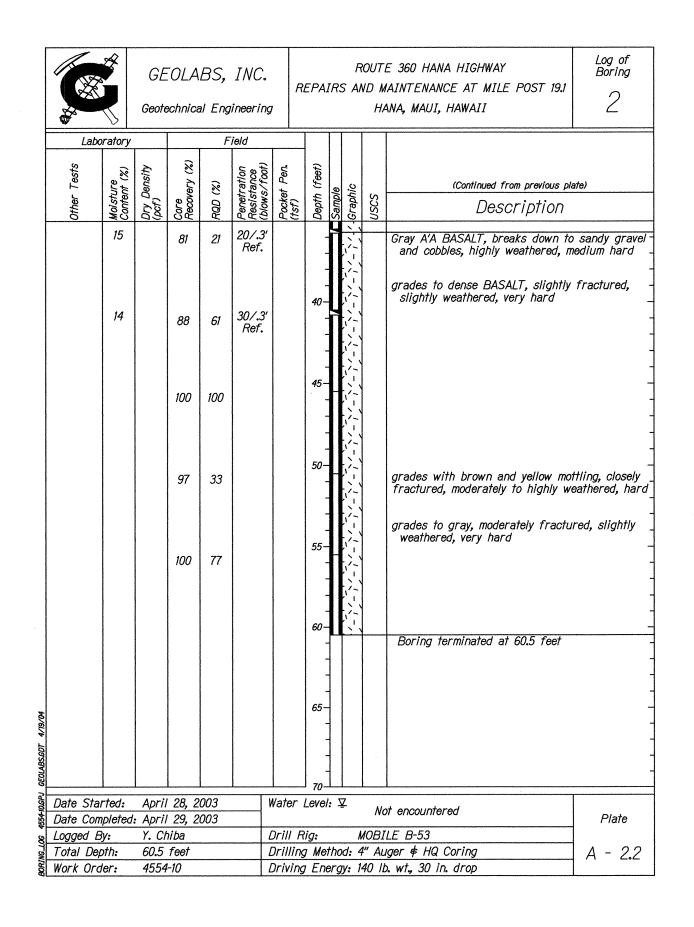


	GEOLABS, INC. Geotechnical Engineering					ROUTE 360 HANA HIGHWAY REPAIRS AND MAINTENANCE AT MILE POST 19.1 HANA, MAUI, HAWAII							
Labor	ratory			F	ield			П					
Other Tests	Moisture Content (%)	Dry Density (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (†sf)	Depth (feet)	Sample	Graphic	sosn	(Continued from previous pl	ate)	
											Boring terminated at 70 feet * Elevations estimated fro Topographic Survey Map trans Okahara & Associates, Inc. on Note: Elevations referenced from mark of +100.00 feet at Sta. CP	mitted by 03/06/03.	
Date Star Date Com	oleted:	: May					105- Level	: <u>Z</u>			ot encountered	Plate	
Logged By: Y. Chiba Total Depth: 70 feet					Drill Rig: MOBILE B-53 Drilling Method: 4" Auger & HQ Coring						A - 1.3		
Work Ord		4554									o. wt., 30 in. drop	1 / 1.5	



SURVEY PLOTTED
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY



	NC. eering	Boring Log Legend					
	UNIFIED) SOIL CLASSI	FICA	ΤΙΟΛ	SYSTEM (USCS)		
	MAJOR DIVISIO	NS	US	cs	TYPICAL DESCRIPTIONS		
		CLEAN GRAVELS	0000	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES		
COARSE		LESS THAN 5% FINES	000	GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES		
GRAINEL SOILS	MORE THAN 50% OF COARSE	GRAVELS WITH FINES	9-19	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES		
	FRACTION RETAINED ON NO. 4 SIEVE	MORE THAN 12% FINES		GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES		
		CLEAN SANDS	0	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES		
MORE THAN S		LESS THAN 5% FINES		SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES		
RETAINED ON 200 SIEVE	NO. 50% OR MORE OF COARSE FRACTION PASSING	SANDS WITH FINES		SM	SILTY SANDS, SAND-SILT MIXTURES		
	THROUGH NO. 4 SIEVE	MORE THAN 12% FINES		sc	CLAYEY SANDS, SAND-CLAY MIXTURES		
		a a la composition de la composition della compo		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SAND OR CLAYEY SILTS WITH SLIGHT PLASTICIT	S Y	
FINE- GRAINEL SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS		
30113				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY		
				мн	INORGANIC SILT, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS	************	
50% OR MORE MATERIAL PAS THROUGH NO. SIEVE	SING	LIQUID LIMIT 50 OR MORE		СН	INORGANIC CLAYS OF HIGH PLASTICITY		
SIEVE	CLAIS			ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS		
	HIGHLY ORGANIC S	SOILS	7 77 7 27, 77	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS		
VOTE: DUAL	SYMBOLS ARE USE	D TO INDICATE	BORD	ERLII	NE SOIL CLASSIFICATIONS		
LEGEND (2-INCH) O.D. STANDARD PENET	RATION TEST		Ш	LIQUID LIMIT		
(3-INCH	O.D. MODIFIED CALIFO	ORNIA SAMPLE		ΡΙ	PLASTICITY INDEX		
SHELBY	TUBE SAMPLE			TV	TORVANE SHEAR (tsf)		
G GRAB SAMPLE				PEN	POCKET PENETROMETER (tsf)		
CORE S	AMPLE			UC	UNCONFINED COMPRESSION (psi)	Plate	
				₮	WATER LEVEL OBSERVED IN BORING	A	

GEOTECHNICAL NOTES

1. A geotechnical engineering report entitled "Geotechnical Engineering Exploration, Route 360 Hana Highway, Repairs and Maintenance at Mile Post 191, Hana, Maui, Hawaii" dated January 26, 2004 has been prepared by Geolabs, Inc. A copy of the report is on file at the office of the Engineer for review by the Contractor.

FED. ROAD

DIST. NO.

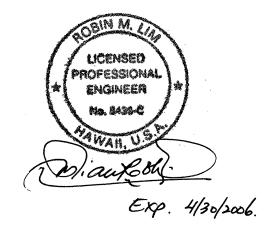
HAWAII

STATE

PROJ. NO.

наw. |360AB-02-03M| 2003

- 2. For boring locations, see Sheet 7.
- 3. The information presented in the logs of borings depict the subsurface conditions encountered at that specified location and at the time of the field exploration only. Variations of subsoil conditions from those depicted in the logs of borings may occur between and beyond the borings.
- 4. The penetration resistance shown on the logs of borings indicate the number of blows required for the specific sampler type used. The blow counts may need to be factored to obtain the Standard Penetration Test (SPT) blow counts.
- 5. The data given is for general information only. Bidders shall examine the site and the boring data and draw their own conclusions therefrom as to the character of materials to be encountered. The Engineer will not assume responsibility for variations of subsoil quality or conditions other than at the boring locations shown and at the time the borings were taken.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING LOGS

HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-02-03M

Scale: N/A

Date: April, 2004

SHEET No. 1

1 OF 1

15

SHEETS

SHEET

NO.

15

FISCAL

YEAR

TOTAL

SHEETS

15