

R0437

March 19, 2003
1731-2G

Mr. Amir Gholami
ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, California 94502

**RE: 2901 GLASCOCK STREET
OAKLAND, CALIFORNIA**

Dear Mr. Gholami:

As requested, this letter transmits copies of boring logs for 2901 Glascock Street in Oakland, California (Site). In addition, additional information discussed on March 18, 2003 is addressed below.

Diesel Concentration Spikes

During August 2002, concentrations of diesel increased in monitoring wells MW-1, MW-2, and MW-6. Shaw Environmental, the consultant performing the quarterly monitoring at 2901 Glascock Street, reported that the spikes in diesel concentrations were the result of laboratory error. Diesel concentrations detected in November 2002 were consistent with analytical results from the previous six quarters (excluding the August 2002 spike).

Cleanup Goals

Soil and ground water cleanup goals have been approved by the California Regional Water Quality Control Board for 303/315 Derby Avenue. Because subsurface materials and ground water conditions are consistent between 2901 Glascock Street and 303/315 Derby Avenue and the parcels will be combined for redevelopment, the approved cleanup goals appear appropriate for the Site.

As discussed, concentrations of petroleum hydrocarbons detected in soil were below the cleanup goals for the Site. In addition, concentrations of petroleum hydrocarbons, including gasoline, diesel, and benzene, have been below the residential cleanup goals since quarterly monitoring began in 1995. Concentrations of petroleum hydrocarbons in ground water have been decreasing over time. During November 2002, no petroleum fuel hydrocarbons were detected in ground water above the ecological cleanup goals, with the exception of monitoring well MW-2, where diesel slightly exceeded the cleanup goal. Monitoring well MW-2 is located 240 feet from the estuary. Based on the measured ground water flow direction and analytical results from down-gradient well MW-6, the diesel above ecological cleanup goal appears limited in extent and does not likely extend to the estuary. In addition, the ecological cleanup goals for 303/315 Derby Avenue are for a 50-foot wide buffer from the top of the estuary bank. Because MW-2 is significantly outside the ecological buffer zone, ground water beneath 2901 Glascock Street appears appropriate for case closure.

As discussed in the March 6, 2003 summary report, two isolated areas of soil exceeding cleanup goals were identified during previous investigations. These two areas, shown on Figure 2 of the summary report, will require soil removal before residential redevelopment. The soil removal will occur after the demolition of the on-site structure, likely during July or August 2003. Verification soil sampling and laboratory analyses are described in the February 3, 2003 risk management plan.

If you have any questions, please call and we will be glad to discuss them with you.

Very truly yours,

LOWNEY ASSOCIATES



Peter M. Langtry, R.G., C.H.G.
Principal Environmental Geologist

Copies: Addressee (1)
Signature Properties (1)
Attn: Mr. Patrick Van Ness

Attachment: Exploratory Boring Logs

OK P:\Projects\1700\1731-2 Derby-Glascock\1731-2G remediation\1731-2G Glascock 031903 letter.doc

WELL CONSTRUCTION DETAIL

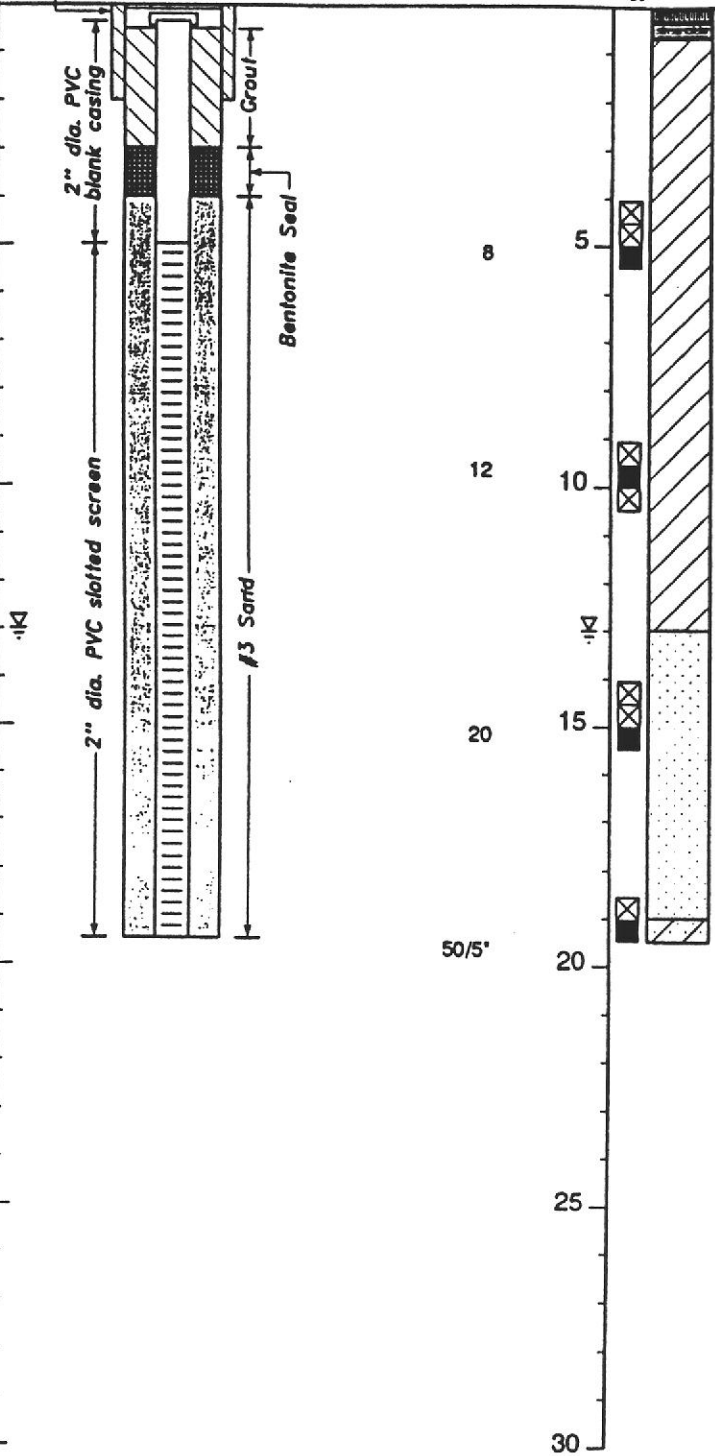
Christy Box

BLOWS/FT.

DEPTH (FT)

SYMBOLS

MATERIALS DESCRIPTION



WOOD - 4 inches
 CONCRETE - 4 inches

SILTY CLAY (CL)
 olive gray (5Y 5/2), medium stiff, moist.

SILTY CLAY (CL)
 black (5Y 2.5/1), medium stiff, moist.

SANDY CLAY (CL)
 olive gray (5Y 4/2), medium stiff to stiff, moist to wet,
 fine-grained sand, petroleum odor at 7 feet.

300 ppm TPHd at 9.5 feet.

Color change to greenish gray (5GY 6/1).

GRAVELLY SAND (SP)
 dark gray (5Y 4/1), medium dense, saturated,
 rounded gravels, free product at 13 feet.

130 ppm TPHd at 15.5 feet.

SILTY CLAYEY SAND (SC)
 dark grayish brown (2.5Y 4/2), very dense, saturated.

Bottom of Borehole at 19.5 feet below ground surface.

DRILL RIG 8" Hollow Stem Auger/2" Mod. CA Sampler
 DATE STARTED 9/23/94
 DATE COMPLETED 9/23/94

DIAMETER OF HOLE 8 inches
 TOTAL DEPTH OF HOLE 19.5 feet
 TOP OF CASING ELEVATION 10.76 feet MSL

W. A. CRAIG, INC.
 INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

Log of Boring MW-1 and
 Well Completion Detail
 2901 Glascock Street
 Oakland, California

PLATE

3A

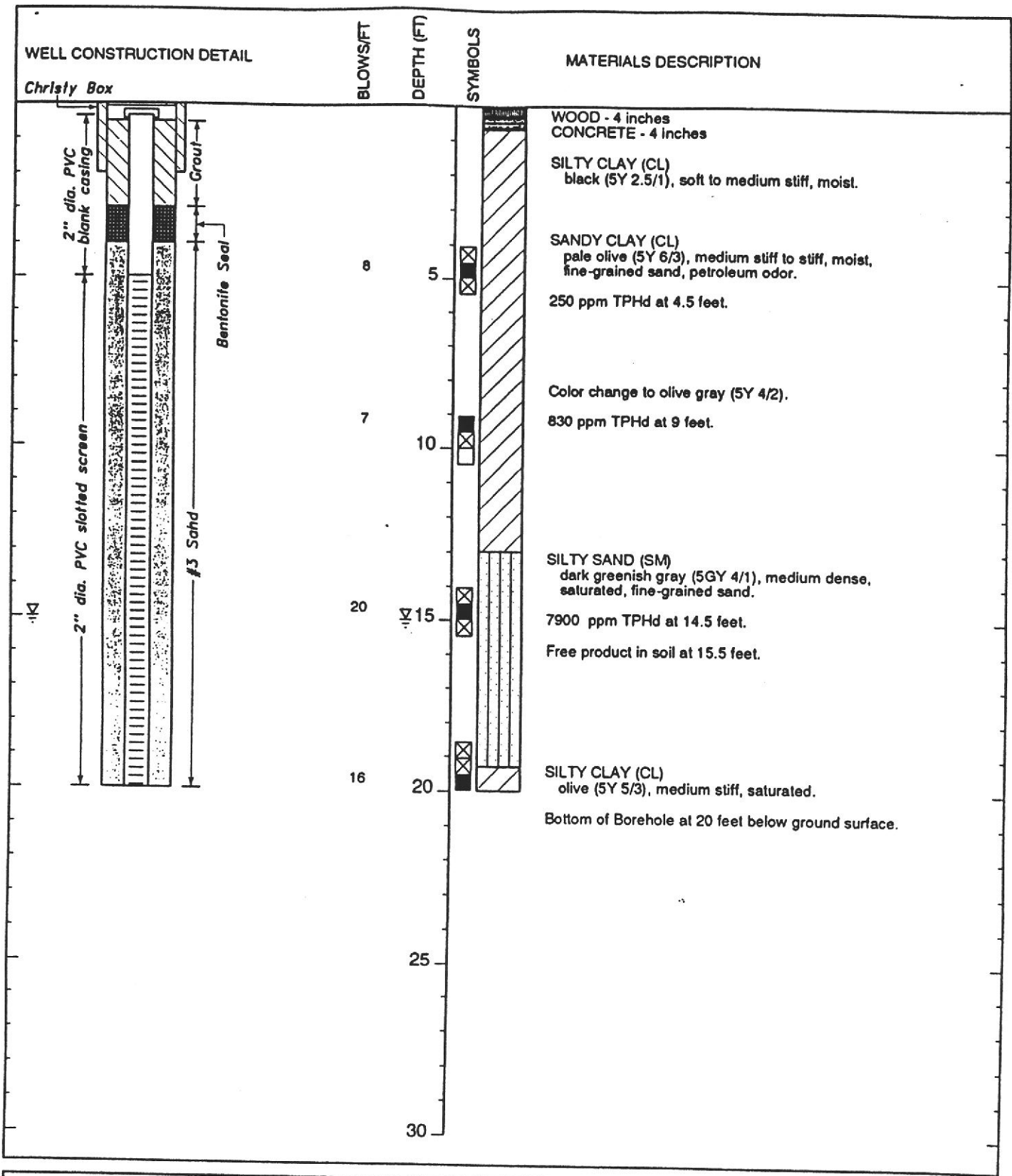
JOB NUMBER
 3406

REVIEWED BY

DATE
 11/94

REVISED DATE

B001606



DRILL RIG	8" Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	9/23/94	TOTAL DEPTH OF HOLE	20 feet
DATE COMPLETED	9/23/94	TOP OF CASING ELEVATION	10.62 feet MSL

W. A. CRAIG, INC.
 INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

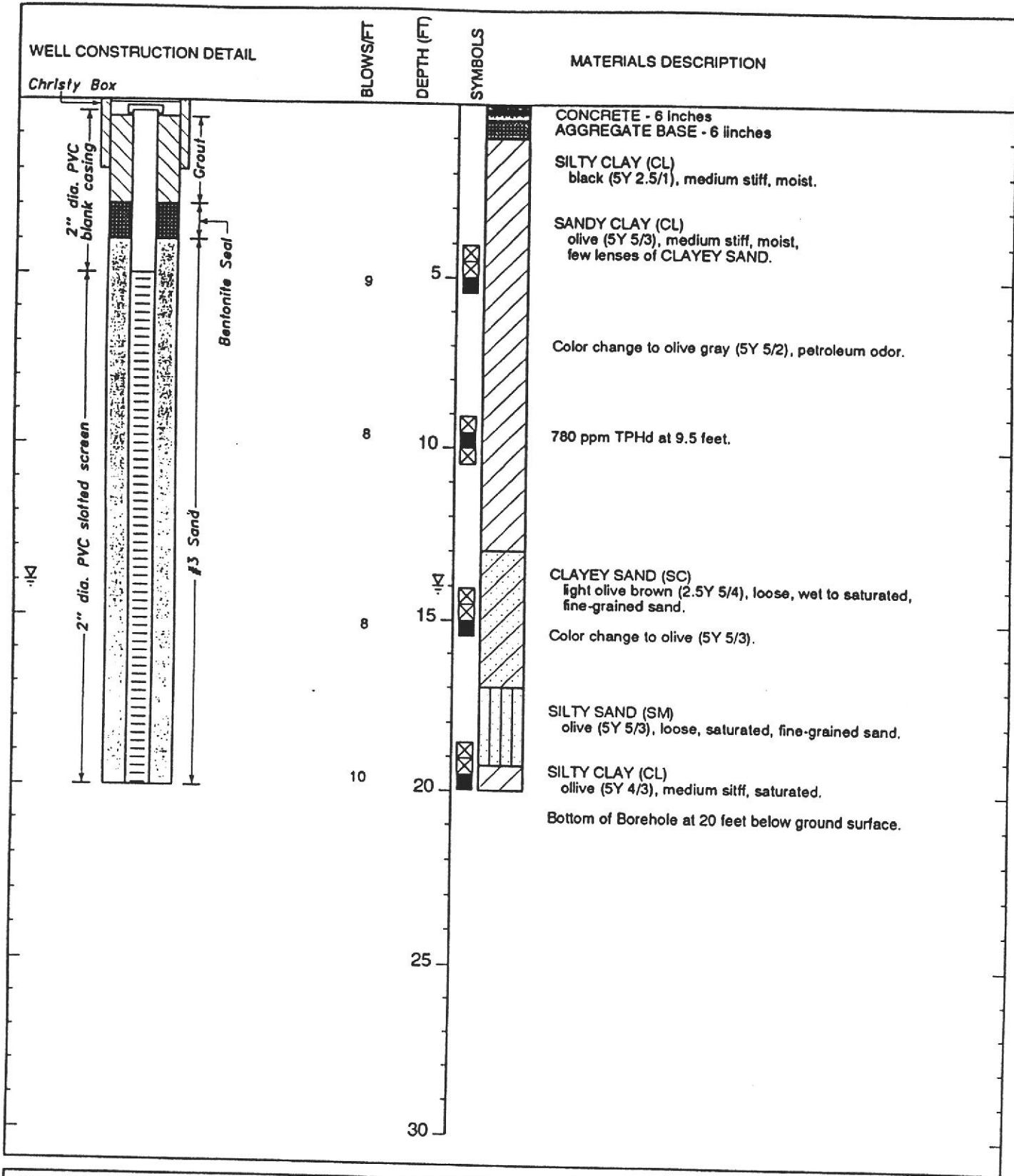
Log of Boring MW-2 and
 Well Completion Detail
 2901 Glascock Street
 Oakland, California

PLATE

3B

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
3406	<i>[Signature]</i>	11/94	

B001607



DRILL RIG	8' Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	9/23/94	TOTAL DEPTH OF HOLE	20 feet
DATE COMPLETED	9/23/94	TOP OF CASING ELEVATION	9.87 feet MSL

W. A. CRAIG, INC.
INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

Log of Boring MW-3 and
Well Completion Detail
2901 Glascock Street
Oakland, California

PLATE
3C

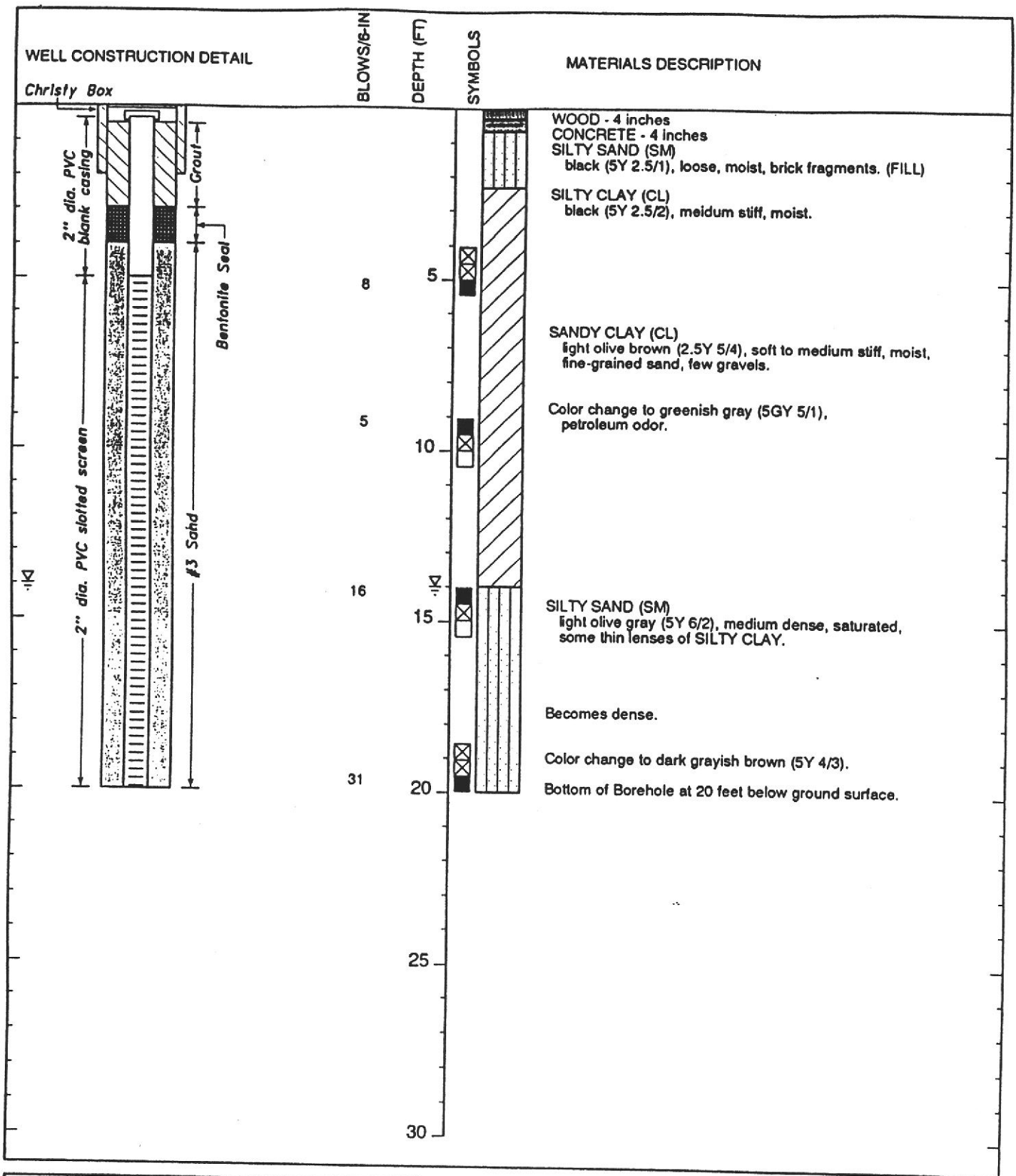
JOB NUMBER
3406

REVIEWED BY
[Signature]

DATE
11/94

REVISED (

B001608



DRILL RIG	8" Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	9/23/94	TOTAL DEPTH OF HOLE	20 feet
DATE COMPLETED	9/23/94	TOP OF CASING ELEVATION	10.64 feet MSL

W. A. CRAIG, INC.
INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

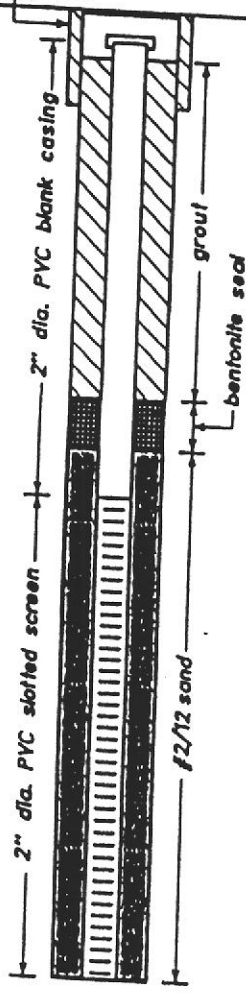
Log of Boring MW-4 and
Well Completion Detail
2901 Glascock Street
Oakland, California

PLATE
3D

JOB NUMBER	3406	REVISION		DATE	11/94	REVISED DATE	
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WELL CONSTRUCTION DETAIL

Christy Box



BLOWS/FT
DEPTH (FT)
SYMBOLS

MATERIALS DESCRIPTION

		Concrete - 14 inches
		CLAYEY SAND (SC) very dark grayish brown (2.5Y 3/2), medium dense, moist, metal shavings.
		1200 ppm TPHd at 3 feet.
11	5	SILTY CLAY (CL) black (5Y 2.5/1), medium stiff, moist.
9		SANDY CLAYEY SILT (ML) olive (5Y 5/3), medium stiff, moist.
		Color change to greenish gray (5G 5/1) at 8.5 feet.
10		SANDY CLAY (CL) olive gray (5Y 4/2), medium stiff, wet.
11		Petroleum odor at 11 feet.
		Free product at 12 feet.
14		SILTY SAND (SM) dark brown (10YR 4/3), dense, saturated.
15		SAND (SP) olive (5Y 5/3) / olive brown (2.5Y 4/4), dense, saturated, medium-grained.
20		Bottom of borehole at 20 feet below ground surface.

29

30

B001499

DRILL RIG 8" Hollow Stem Auger/2" Mod. CA Sampler
 DATE STARTED 4/27/95
 DATE COMPLETED 4/27/95

DIAMETER OF HOLE 8 inches
 TOTAL DEPTH OF HOLE 20 feet
 TOP OF CASING ELEVATION 10.61 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTORS

Log of Boring MW-5 and
 Well Completion Detail
 2901 Glascock Street
 Oakland, California

PLATE

3A

JOB NUMBER
3406

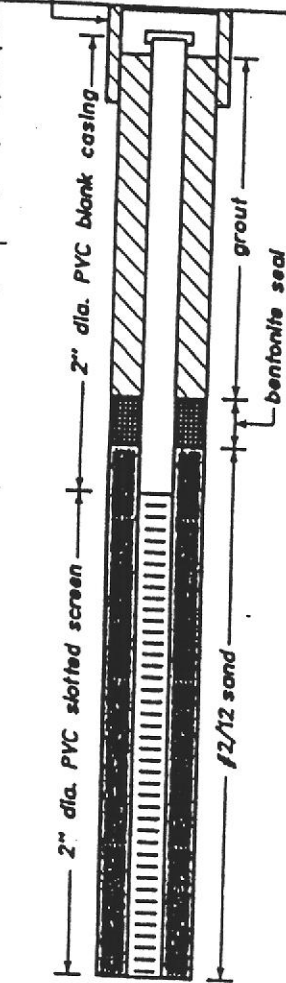
REVIEWED BY

DATE
6/95

REVISED DATE

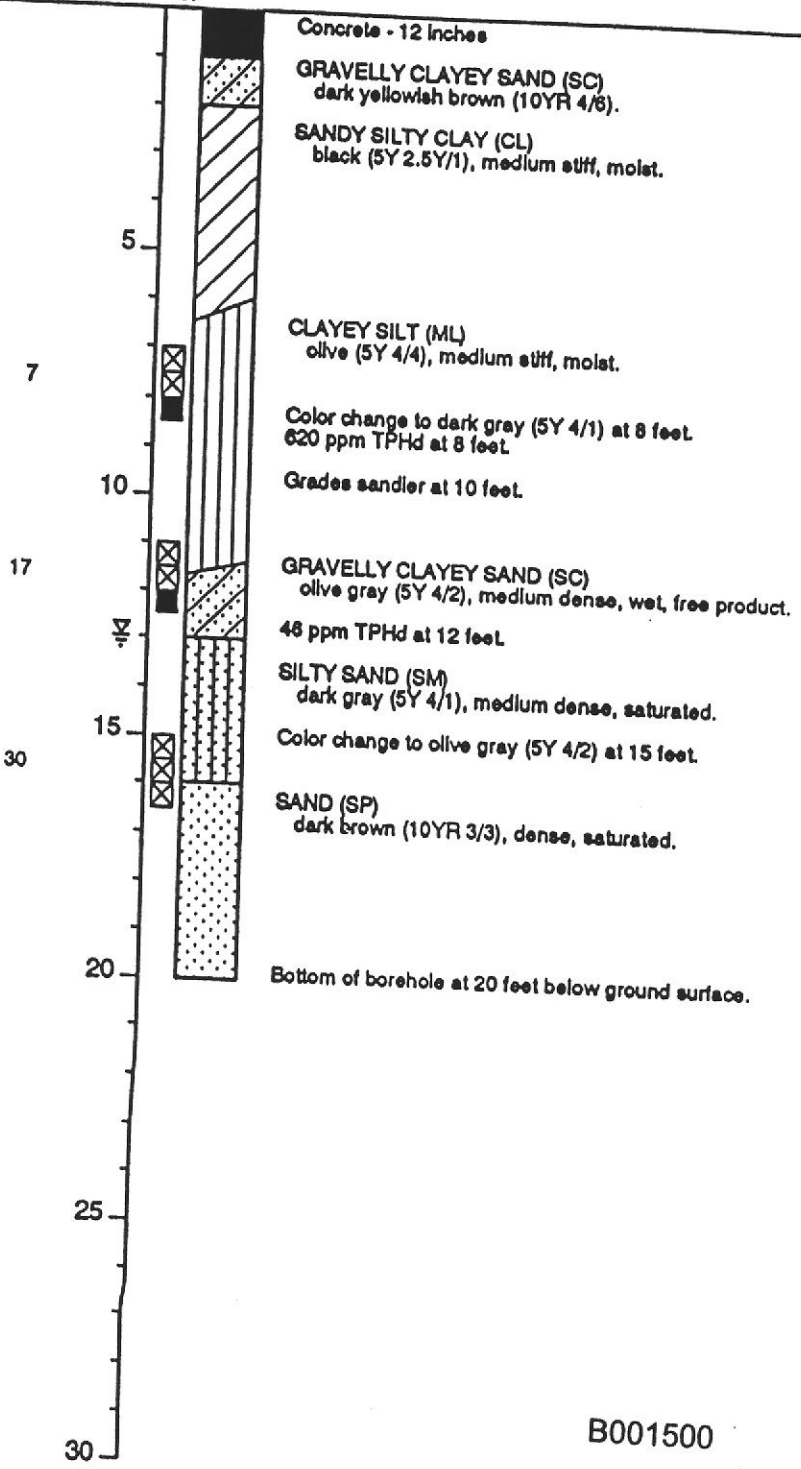
WELL CONSTRUCTION DETAIL

Christy Box



BLOWS/FT
DEPTH (FT)
SYMBOLS

MATERIALS DESCRIPTION



B001500

DRILL RIG	8" Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	4/27/95	TOTAL DEPTH OF HOLE	20 feet
DATE COMPLETED	4/27/95	TOP OF CASING ELEVATION	10.27 feet MSL

W.A. CRAIG, INC
INDUSTRIAL AND ENVIRONMENTAL CONTRACTORS

Log of Boring MW-6 and
Well Completion Detail
2901 Glascock Street
Oakland, California

PLATE

3B

JOB NUMBER
3406

REVIEWED BY
[Signature]

DATE
6/95
REVISED DATE

WELL CONSTRUCTION DETAIL

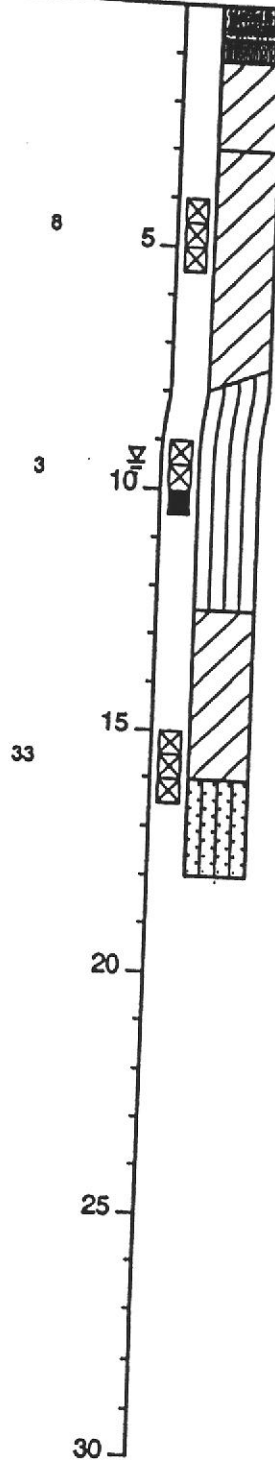
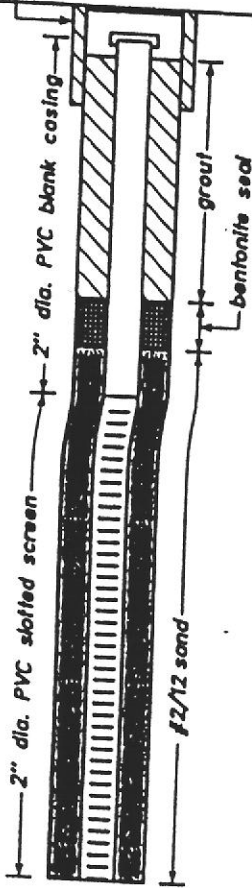
Christy Box

BLOWS/FT

DEPTH (FT)

SYMBOLS

MATERIALS DESCRIPTION



Asphalt - 8 inches.
Class II AB - 6 inches.

SANDY SILTY CLAY (CL)
very dark grayish brown (2.5Y 3/2), medium stiff, moist.

SANDY CLAY (CL)
light olive brown (2.5Y 5/4), medium stiff, moist.

CLAYEY SILT (ML)
grayish brown (2.5Y 5/2), soft, saturated.

SILTY CLAY (CL)
dark grayish brown (2.5Y 4/2), stiff, wet.

Color change to olive brown (2.5Y 4/4) at 15 feet.

SAND (SP)
dark brown (10YR 3/3), dense, saturated.

Bottom of borehole at 18 feet below ground surface.

B001501

DRILL RIG 8" Hollow Stem Auger/2" Mod. CA Sampler
 DATE STARTED 4/27/95
 DATE COMPLETED 4/27/95

DIAMETER OF HOLE 8 inches
 TOTAL DEPTH OF HOLE 18 feet
 TOP OF CASING ELEVATION 9.85 feet MSL

W.A. CRAIG, INC
 INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

Log of Boring MW-7 and
 Well Completion Detail
 2901 Glascock Street
 Oakland, California

PLATE

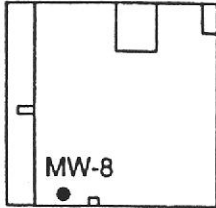
3C

JOB NUMBER
3406

REMOVED BY
[Signature]

DATE 6/95
REVISED DATE

LOCATION MAP
 Glascock Street



PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-8
 PAGE 1 OF 1

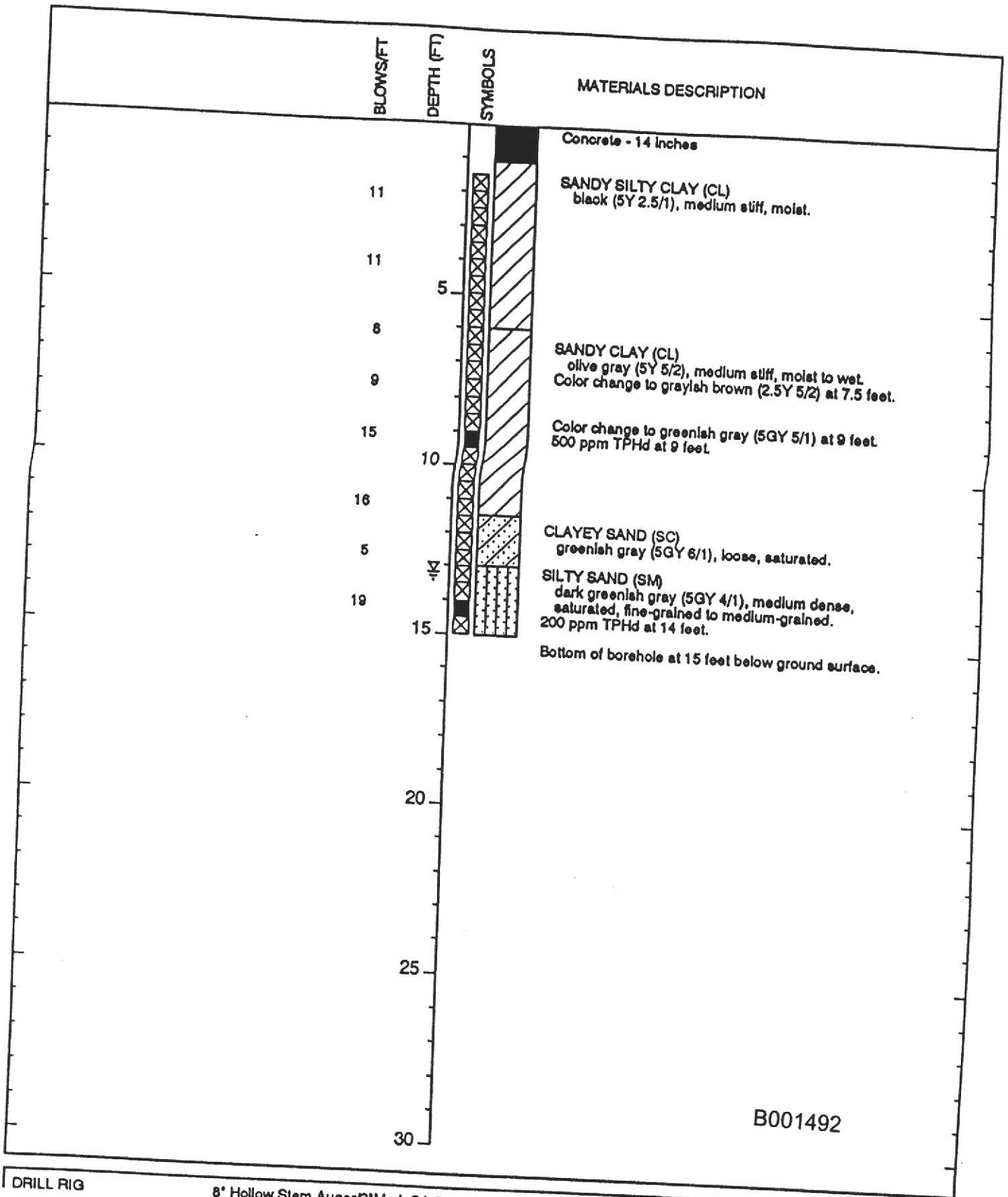
PROJECT NO. 360-014.1A
 LOGGED BY: DA
 DRILLER: MDE
 DRILLING METHOD: HSA
 SAMPLING METHOD: SCH 40 PVC
 CASING TYPE: SCH 40 PVC
 SLOT SIZE: 0.020"
 SAND PACK: 10 X 20 SAND

CLIENT: DORR-OLIVER
 DATE DRILLED: 11-16-95
 LOCATION: 2901 Glascock Street
 HOLE DIAMETER: 8"
 HOLE DEPTH: 20'
 WELL DIAMETER: 2"
 WELL DEPTH: 20'
 CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				2				CONCRETE; BASEROCK
	Mst	0		4			CL	SILTY CLAY: dark brown; moderate plasticity; 85% clay; 15% silt; trace fine to medium sand; rootlets; subangular blocky fracturing; no product odor.
	Mst	0		10			ML	@9.5': as above; no product odor. SANDY SILT: light yellowish brown; low plasticity; 10% clay; 65% silt; 25% fine to very fine sand; blocky structure; no product odor.
	Sat	0		14			CL	SILTY CLAY: black; low plasticity; abundant organics; 75% clay; 20% silt; 5% fine sand; no product odor.
	Sat	0		16			SC	CLAYEY SAND: yellowish brown; iron oxide staining; 25% clay; 5% silt; 30% fine sand; trace medium to coarse sand; no product odor.
	Sat	0		18			SP	SAND: yellowish brown; 10% fines; 90% fine sand; heaving ; dense; no product odor.
				20				
				22				
				24				
				26				
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				

BOTTOM OF BORING AT 19'

B001010



B001492

DRILL RIG	8" Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/29/95	TOTAL DEPTH OF HOLE	15 feet
DATE COMPLETED	3/29/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC
INDUSTRIAL AND ENVIRONMENTAL CONTRACTORS

Log of Boring SB-1
2901 Glascock Street
Oakland, California

PLATE

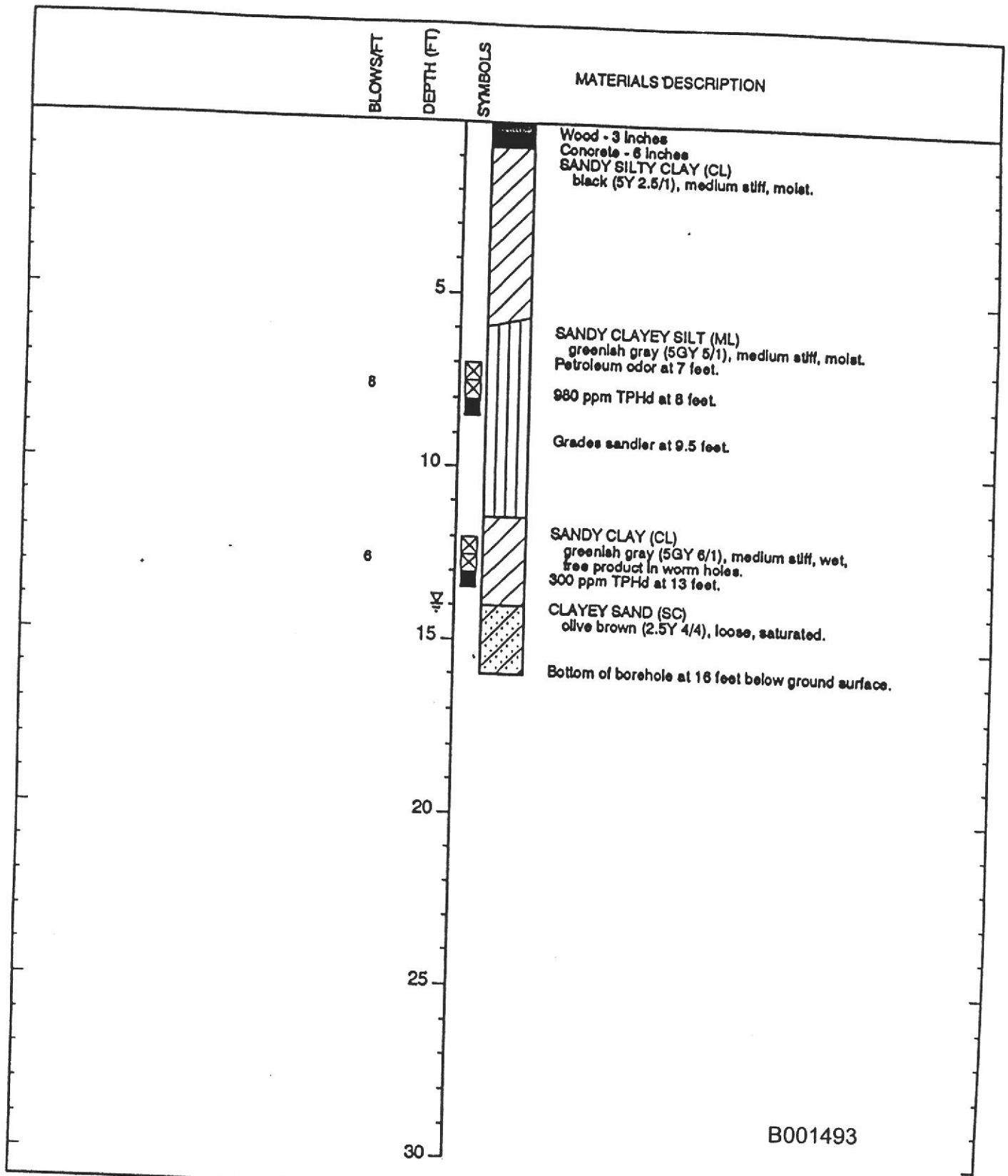
2A

LOG NUMBER
3406

REVIEWED BY
[Signature]

DATE
6/95

REVISED DATE



B001493

DRILL RIG	8" Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/29/95	TOTAL DEPTH OF HOLE	16 feet
DATE COMPLETED	3/29/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTORS

Log of Boring SB-2
2901 Glascock Street
Oakland, California

PLATE

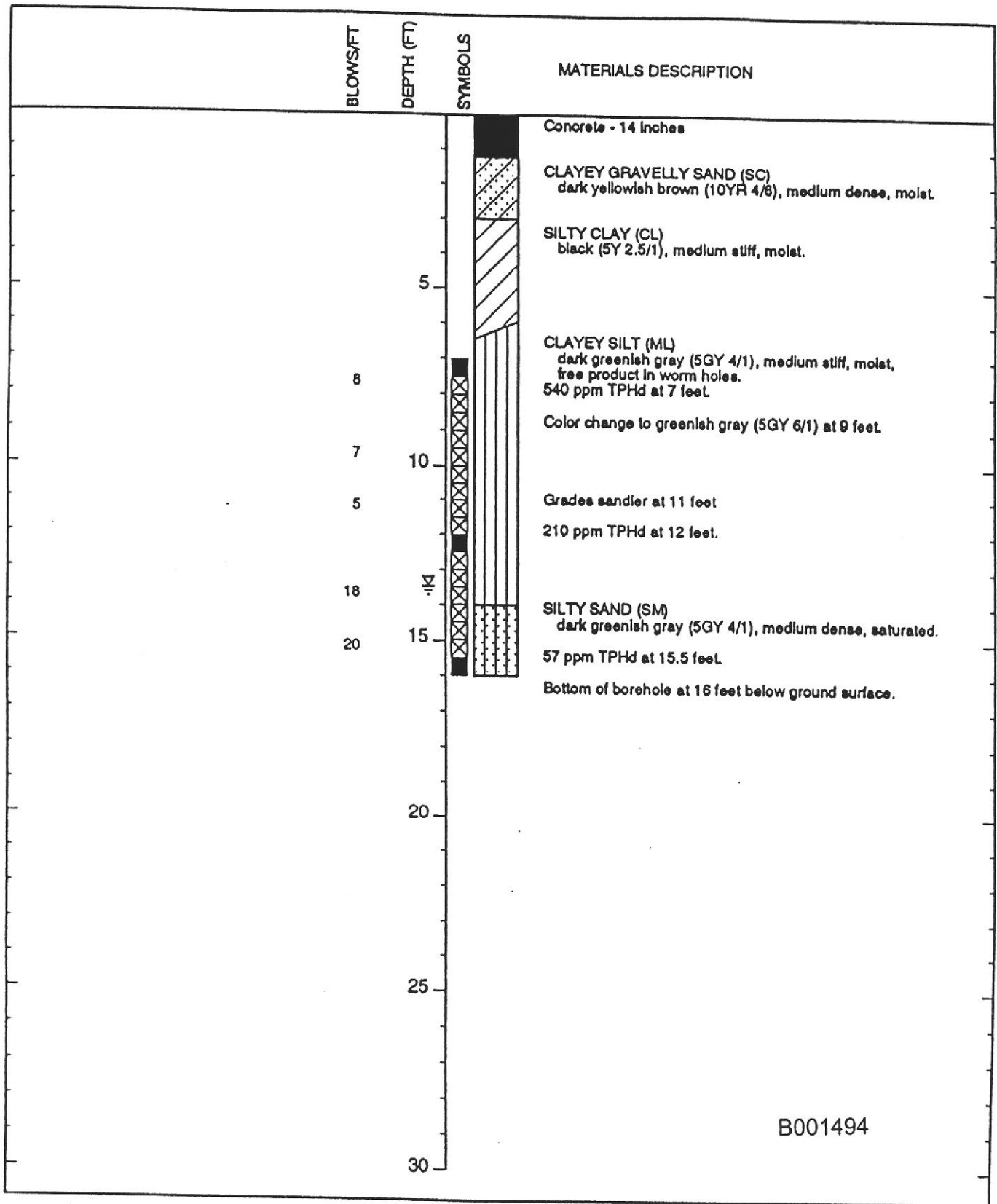
2B

JOB NUMBER
3406

REVIEWED BY
[Signature]

DATE
6/95

REVISED DATE



B001494

DRILL RIG	8" Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/30/95	TOTAL DEPTH OF HOLE	16 feet
DATE COMPLETED	3/30/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC
INDUSTRIAL AND ENVIRONMENTAL CONTRACTORS

Log of Boring SB-3
2901 Glascock Street
Oakland, California

PLATE

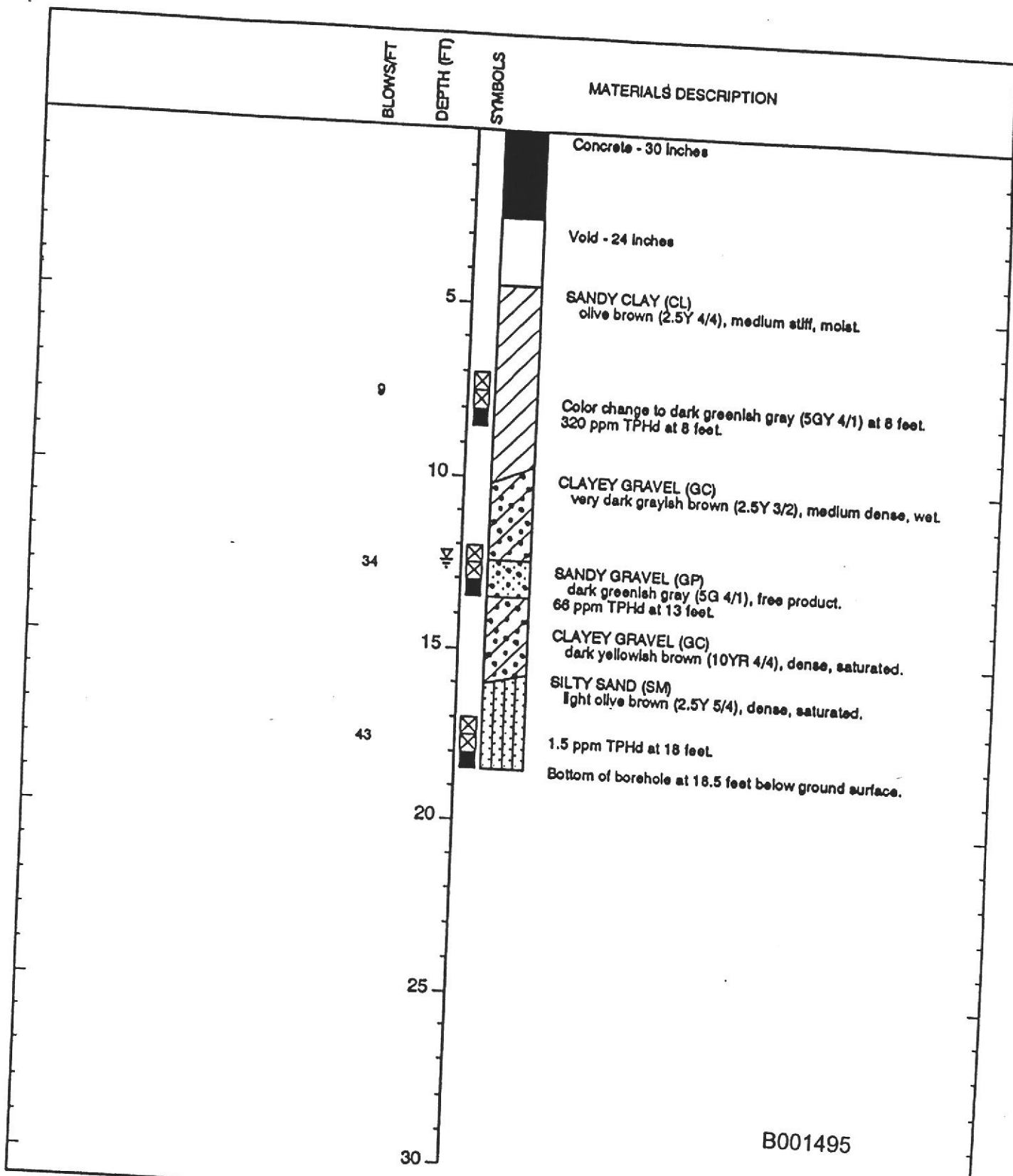
20

JOB NUMBER

REVIEWED BY

DATE

REVISED DATE



B001495

DRILL RIG	8" Hollow Stem Auger/2' Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/29/95	TOTAL DEPTH OF HOLE	18.5 feet
DATE COMPLETED	3/29/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC
INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

Log of Boring SB-4
2901 Glascock Street
Oakland, California

PLATE

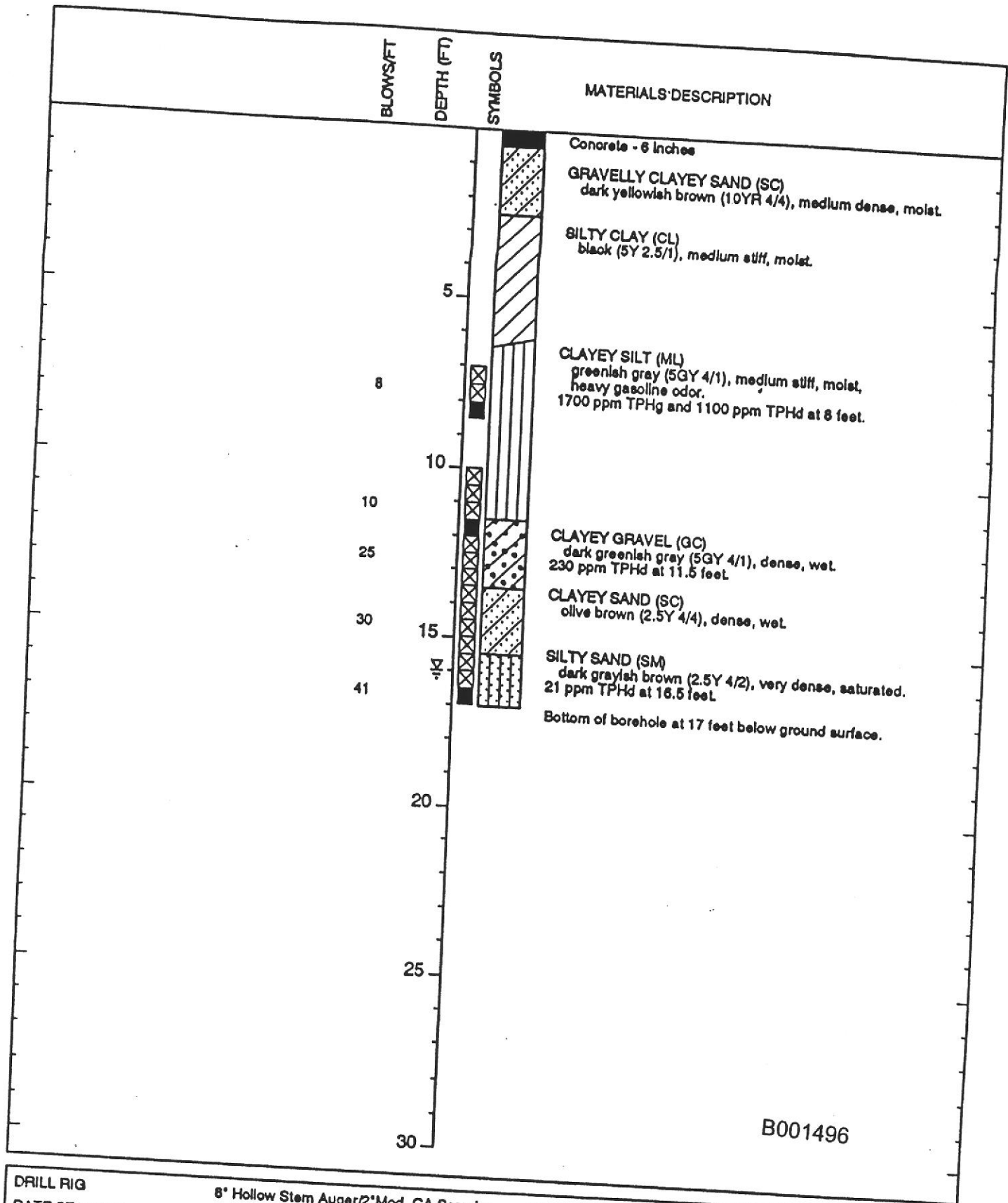
2D

JOB NUMBER
3406

REVIEWED BY
[Signature]

DATE
6/95

REVISED DATE



B001496

DRILL RIG	8" Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/30/95	TOTAL DEPTH OF HOLE	17 feet
DATE COMPLETED	3/30/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

Log of Boring SB-7
2901 Glascock Street
Oakland, California

PLATE

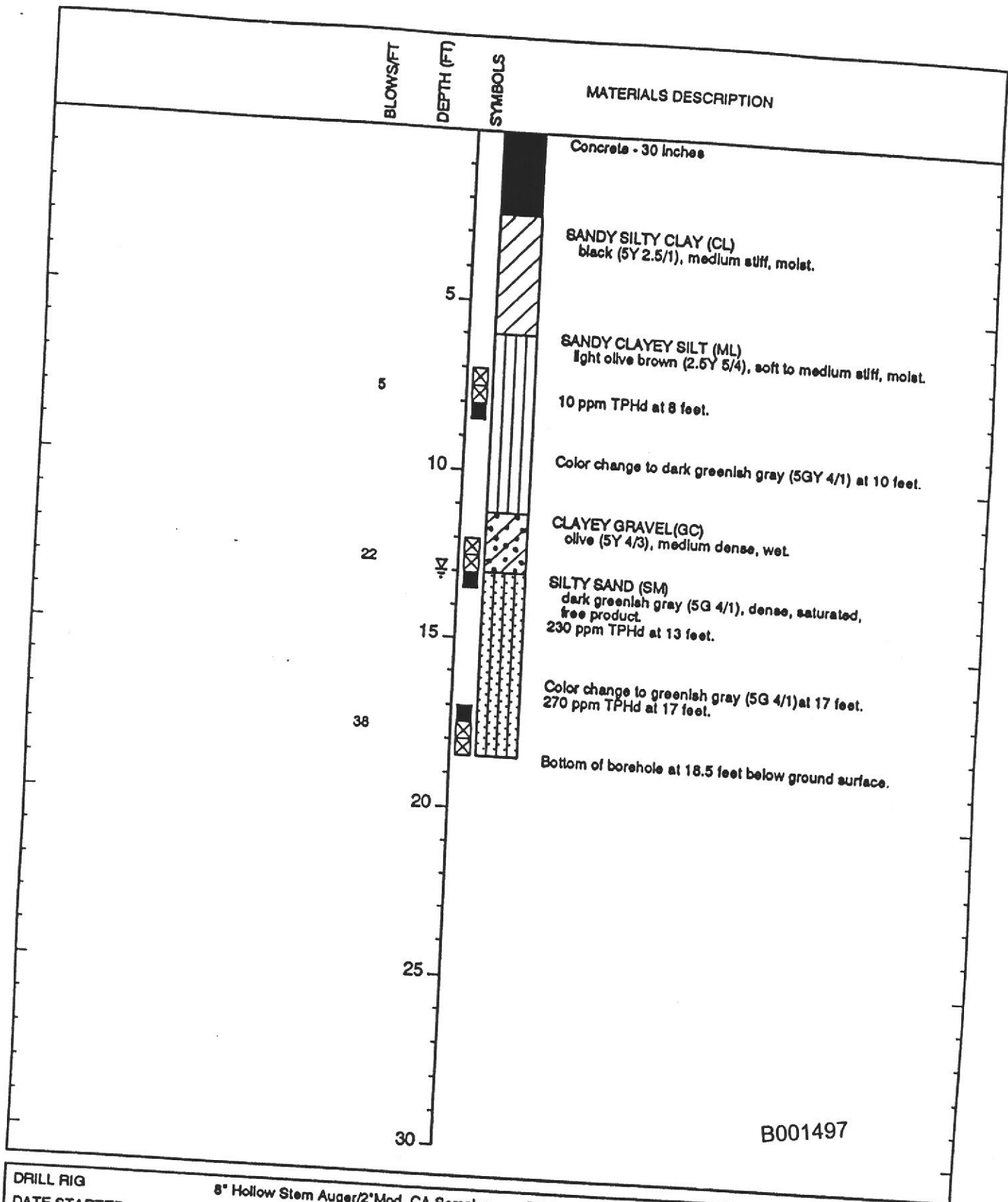
2E

JOB NUMBER
3406

REVIEWED BY
[Signature]

DATE
6/95

REVISED DATE



B001497

DRILL RIG	8" Hollow Stem Auger/2" Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/29/95	TOTAL DEPTH OF HOLE	18.5 feet
DATE COMPLETED	3/29/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTORS

Log of Boring SB-8
2901 Glascock Street
Oakland, California

PLATE

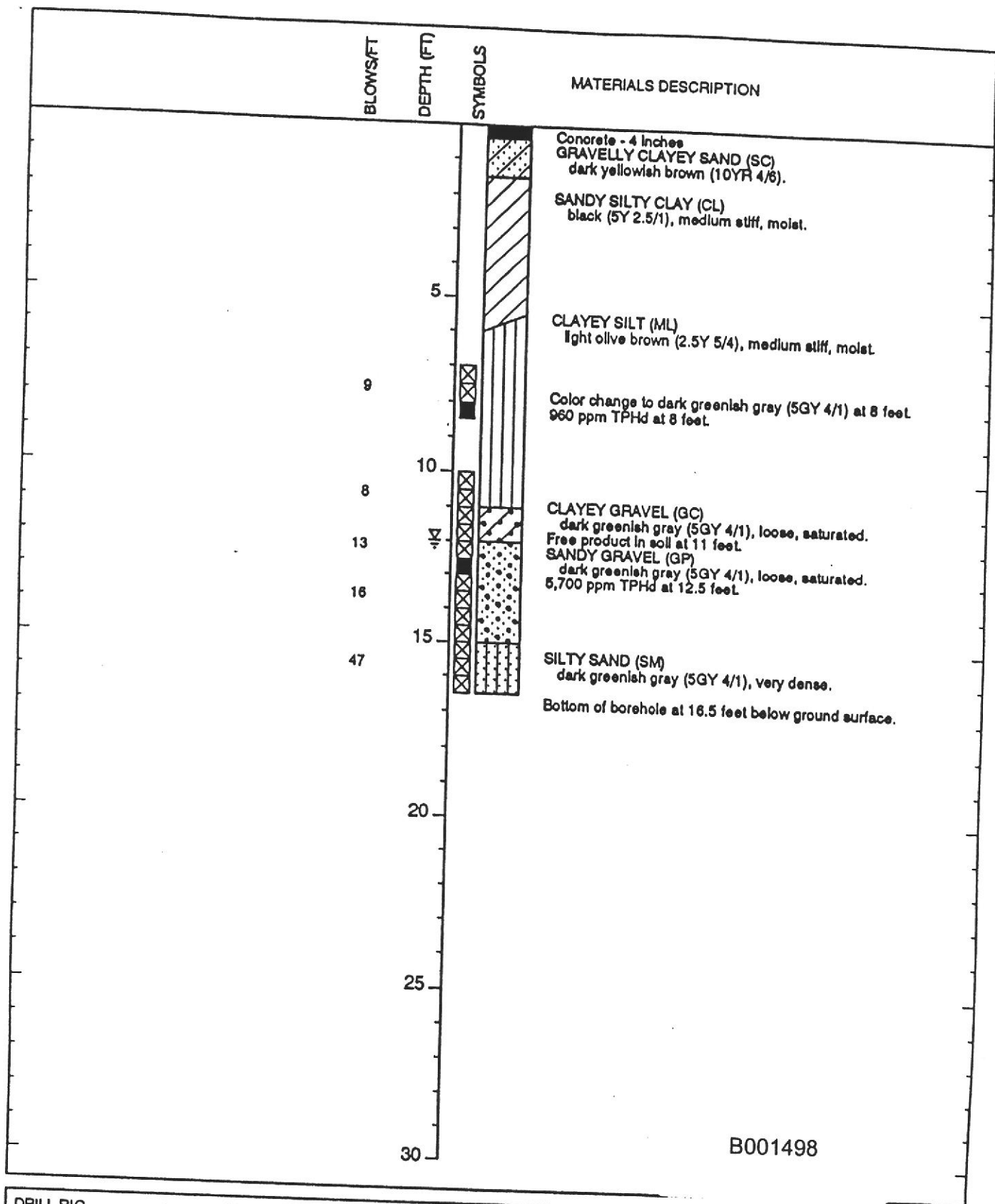
2F

JOB NUMBER
3406

REVIEWED BY
[Signature]

DATE
6/95

REVISED DATE



B001498

DRILL RIG	8' Hollow Stem Auger/2' Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/30/95	TOTAL DEPTH OF HOLE	16.5 feet
DATE COMPLETED	3/30/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTORS

Log of Boring SB-9
2901 Glascock Street
Oakland, California

PLATE

2G

JOB NUMBER
3406

REVIEWED BY
JMO

DATE
6/95

REVISED DATE

EXPLORATORY BORING: EB-9

Sheet 1 of 1

DRILL RIG: VIRONEX

PROJECT NO: 1731-2A

BORING TYPE: DIRECT PUSH

PROJECT: GLASCOCK STREET

LOGGED BY: CM

LOCATION: OAKLAND, CA

START DATE: 10-2-01

FINISH DATE: 10-2-01

COMPLETION DEPTH: 4.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
	0		SURFACE ELEVATION:							
	0	[Cross-hatch pattern]	4 inches wood floor							
	0	[Diagonal lines pattern]	8 inches concrete							
	0		SILTY CLAY (CL) black, debris, rock-gravel, brick, minor sand	CL		[Sampler icon]				
	0		SILTY CLAY (CL) medium stiff, black, 15% silt	CL		[Sampler icon]				
	5		Bottom of Boring at 4 feet							
	10									
	15									
	20									
	25									
	30									

- Undrained Shear Strength (ksf)
- Pocket Penetrometer
 - △ Torvane
 - Unconfined Compression
 - ▲ U-U Triaxial Compression
- 1.0 2.0 3.0 4.0

LA CORP GDT 10/23/01 MV* EB

GROUND WATER OBSERVATIONS:







EXPLORATORY BORING: EB-10

Sheet 1 of 1

DRILL RIG: VIRONEX
 BORING TYPE: DIRECT PUSH
 LOGGED BY: CM
 START DATE: 10-2-01 FINISH DATE: 10-2-01

PROJECT NO: 1731-2A
 PROJECT: GLASCOCK STREET
 LOCATION: OAKLAND, CA
 COMPLETION DEPTH: 8.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
	0		SURFACE ELEVATION: 6 inches concrete slab							
			GRAVEL (GP) [Baserock] loose, orange brown, 30% coarse sand	GP						
			SILTY CLAY (CL) medium stiff, moist, black, no debris transitional contact	CL						
	5		SILTY CLAY (CL) white, minor rock fragments, minor sand, friable	CL						
			SILTY CLAY (CL) stiff, moist, grayish, 20-30% silt, 10-15% sand	CL						
	10		Bottom of Boring at 8 feet							
	15									
	20									
	25									
	30									

Undrained Shear Strength (ksf)
 ○ Pocket Penetrometer
 △ Torvane
 ● Unconfined Compression
 ▲ U-U Triaxial Compression

1.0 2.0 3.0 4.0

GROUND WATER OBSERVATIONS:
 NO FREE GROUND WATER ENCOUNTERED

LA CORP. GDT 10/23/01 MV* EB

EXPLORATORY BORING: EB-11

Sheet 1 of 1

DRILL RIG: VIRONEX

PROJECT NO: 1731-2A

BORING TYPE: DIRECT PUSH

PROJECT: GLASCOCK STREET

LOGGED BY: CM

LOCATION: OAKLAND, CA

START DATE: 10-2-01

FINISH DATE: 10-2-01

COMPLETION DEPTH: 8.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

Undrained Shear Strength (ksf)

- Pocket Penetrometer
 - △ Torvane
 - Unconfined Compression
 - ▲ U-U Triaxial Compression
- 1.0 2.0 3.0 4.0

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
	0		SURFACE ELEVATION:						
	0 - 3		3 foot concrete slab						
	3 - 4		SILTY CLAY (CL) medium stiff, moist, black, at bottom of interval 3-4 inch layer of black ash-like substance and red brick fragments, fill	CL		□			
	4 - 8		SILTY CLAY (CL) dense, moist, gray-green, silt 25-30%, 10-15% fine grained sand, native	CL		□			
	8		Bottom of Boring at 8 feet						

GROUND WATER OBSERVATIONS:
NO FREE GROUND WATER ENCOUNTERED

LA CORP.GDT 10/23/01 MW*EB

EXPLORATORY BORING: EB-12

Sheet 1 of 1

DRILL RIG: VIRONEX

PROJECT NO: 1731-2A

BORING TYPE: DIRECT PUSH

PROJECT: GLASCOCK STREET

LOGGED BY: CM

LOCATION: OAKLAND, CA

START DATE: 10-2-01

FINISH DATE: 10-2-01

COMPLETION DEPTH: 8.0 FT.

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Undrained Shear Strength (ksf)

- Pocket Penetrometer
 - △ Torvane
 - Unconfined Compression
 - ▲ U-U Triaxial Compression
- 1.0 2.0 3.0 4.0

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
	0		SURFACE ELEVATION:							
	0		6 inch concrete slab							
	0		6 inches gravel, orange brown, rusty baserock							
	0		SILTY CLAY (CL) black, lots of brown-rust spots, minor gravel rock fragments, poor recovery	CL		□				
	5		SILTY CLAY (CL) medium stiff, moist, black, minor rusty spots, minor fine sand intervals, silt 15-20%	CL		□				
	5		SILTY CLAY (CL) white, light gray	CL		□				
	5		SILTY CLAY (CL) medium stiff, moist, gray-green	CL		□				
	8		Bottom of Boring at 8 feet							
	10									
	15									
	20									
	25									
	30									

GROUND WATER OBSERVATIONS:
NO FREE GROUND WATER ENCOUNTERED

LA CORP.GDT 10/23/01 MV*EB

EXPLORATORY BORING: EB-13

Sheet 1 of 1

DRILL RIG: VIRONEX
 BORING TYPE: DIRECT PUSH
 LOGGED BY: CM
 START DATE: 10-2-01 FINISH DATE: 10-2-01

PROJECT NO: 1731-2A
 PROJECT: GLASCOCK STREET
 LOCATION: OAKLAND, CA
 COMPLETION DEPTH: 8.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
			SURFACE ELEVATION:							○ Pocket Penetrometer △ Torvane ● Unconfined Compression ▲ U-U Triaxial Compression 1.0 2.0 3.0 4.0
	0	[Stippled Pattern]	2 1/2 feet concrete slab							
		[Diagonal Hatching]	SILTY CLAY (CL) [FILL]	CL		[Sampler Icon]				
		[Diagonal Hatching]	SILTY CLAY (CL) medium stiff, moist, black, some sand, minor rust spots, 10-15%	CL		[Sampler Icon]				
	5	[Diagonal Hatching]	SILTY CLAY (CL) stiff, moist, light brown/gray-green, some rust, black mottles	CL						
	10		Bottom of Boring at 8 feet							
	15									
	20									
	25									
	30									

GROUND WATER OBSERVATIONS:
 NO FREE GROUND WATER ENCOUNTERED

LA. CORP. GDT 10/23/01 MV* EB

EXPLORATORY BORING: EB-14

Sheet 1 of 1

DRILL RIG: VIRONEX

PROJECT NO: 1731-2A

BORING TYPE: DIRECT PUSH

PROJECT: GLASCOCK STREET

LOGGED BY: CM

LOCATION: OAKLAND, CA

START DATE: 10-2-01 FINISH DATE: 10-2-01

COMPLETION DEPTH: 4.5 FT.

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Undrained Shear Strength (ksf)

- Pocket Penetrometer
- △ Torvane
- Unconfined Compression
- ▲ U-U Triaxial Compression

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
	0	SURFACE ELEVATION:								
	0		4 foot concrete slab, looks fairly homogenous, possible two to three pours							
	5		Rusty/hematitic material, very hard, could not penetrate (metal filings?) with drill Bottom of Boring at 4½ feet							
	10									
	15									
	20									
	25									
	30									

GROUND WATER OBSERVATIONS:
NO FREE GROUND WATER ENCOUNTERED

LA CORP.GDT 10/23/01 MV-EB

EXPLORATORY BORING: EB-15

Sheet 1 of 1

DRILL RIG: VIRONEX

PROJECT NO: 1731-2A

BORING TYPE: DIRECT PUSH

PROJECT: GLASCOCK STREET

LOGGED BY: CM

LOCATION: OAKLAND, CA

START DATE: 10-2-01

FINISH DATE: 10-2-01

COMPLETION DEPTH: 7.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
	0		SURFACE ELEVATION:							
	0		2 1/2 feet concrete slab							
	5		SILTY CLAY (CL) medium stiff, moist, black, brick fragments and rock fragments, minor sand	CL						
	5		SILTY CLAY (CL) medium stiff, moist, black, 15% silt, native	CL						
	5		Transition zone, gray-black mottled silty clay	CL						
	5		SILTY CLAY (CL) stiff, moist, light gray-green, 25-30% silt, 15% sand	CL						
	7.0		Bottom of Boring at 7 1/2 feet							
	10									
	15									
	20									
	25									
	30									

- Undrained Shear Strength (ksf)
- Pocket Penetrometer
 - △ Torvane
 - Unconfined Compression
 - ▲ U-U Triaxial Compression
- 1.0 2.0 3.0 4.0

GROUND WATER OBSERVATIONS:
NO FREE GROUND WATER ENCOUNTERED

LA CORP.GDT 10/23/01 MV-EB

EXPLORATORY BORING: EB-16

Sheet 1 of 1

DRILL RIG: VIRONEX
 BORING TYPE: DIRECT PUSH
 LOGGED BY: CM
 START DATE: 10-2-01 FINISH DATE: 10-2-01

PROJECT NO: 1731-2A
 PROJECT: GLASCOCK STREET
 LOCATION: OAKLAND, CA
 COMPLETION DEPTH: 8.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
			SURFACE ELEVATION:							
	0	GRAVEL (GC)	loose, dry, rusty orange, 55% coarse sand, baserock	GC						
	5	SILTY CLAY (CL)	medium stiff, moist, black, sand, minor gravel, brick fragments, rusty spots	CL		□				
		SILTY CLAY (CL)	medium stiff, moist, black, minor brown rusty mottles, 10-15% silt	CL		□				
		Transition, light-gray mottled		CL		□				
		SILTY CLAY (CL)	gray, 20-25% silt, 10% fine grained sand, minor rock fragments	CL		□				
	10		Bottom of Boring at 8 feet							
	15									
	20									
	25									
	30									

- Undrained Shear Strength (ksf)
- Pocket Penetrometer
 - △ Torvane
 - Unconfined Compression
 - ▲ U-U Triaxial Compression
- 1.0 2.0 3.0 4.0

GROUND WATER OBSERVATIONS:
 NO FREE GROUND WATER ENCOUNTERED

LA CORP. GDT. 10/23/01 MV* EB

EXPLORATORY BORING: EB-17

Sheet 1 of 1

DRILL RIG: VIRONEX
 BORING TYPE: DIRECT PUSH
 LOGGED BY: CM
 START DATE: 10-2-01 FINISH DATE: 10-2-01

PROJECT NO: 1731-2A
 PROJECT: GLASCOCK STREET
 LOCATION: OAKLAND, CA
 COMPLETION DEPTH: 8.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)							
			SURFACE ELEVATION:							○ Pocket Penetrometer	△ Torvane	● Unconfined Compression	▲ U-U Triaxial Compression				
										1.0	2.0	3.0	4.0				
	0	[Concrete]	1 foot concrete slab														
	0.67	[Gravel]	8 inches of rusty orange brown sandy gravel (baserock)	GP													
	1.33	[Clay]	SILTY CLAY (CL) medium stiff, moist, black, minor orange sand, red brick fragments	CL		[Sampler]											
	4.67	[Clay]	Black silty clay to light gray silty clay mottled	CL													
	5.33	[Clay]	Light gray silty clay, bleached?	CL													
	6.00	[Clay]	SILTY CLAY (CL) brown gray, silt 25%	CL													
	8.00		Bottom of Boring at 8 feet														

GROUND WATER OBSERVATIONS:
 NO FREE GROUND WATER ENCOUNTERED

LA CORP.GDT 10/23/01 MV* EB

EXPLORATORY BORING: EB-18

Sheet 1 of 1

DRILL RIG: VIRONEX
 BORING TYPE: DIRECT PUSH
 LOGGED BY: CM
 START DATE: 10-2-01 FINISH DATE: 10-2-01

PROJECT NO: 1731-2A
 PROJECT: GLASCOCK STREET
 LOCATION: OAKLAND, CA
 COMPLETION DEPTH: 8.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
	0		SURFACE ELEVATION:							
	0 - 1.5		GRAVELLY CLAY (GC) [Baserock] silty, gravel soil	GC		□				
	1.5 - 3.5		SILTY CLAY (CL) silt 10-15%, minor debris, red brick fragments, rusty spots	CL		□				
	3.5 - 8.0		SILTY CLAY (CL) stiff, moist, gray-green, 25-35% silt, 15% sand, mottled, minor rock fragments	CL		□				
	8.0		Bottom of Boring at 8 feet							
	10									
	15									
	20									
	25									
	30									

- Undrained Shear Strength (ksf)
- Pocket Penetrometer
 - △ Torvane
 - Unconfined Compression
 - ▲ U-U Triaxial Compression
- 1.0 2.0 3.0 4.0

GROUND WATER OBSERVATIONS:
 NO FREE GROUND WATER ENCOUNTERED

LA. CORP. GDT 10/23/01 MV* EB

EXPLORATORY BORING: EB-19

Sheet 1 of 1

DRILL RIG: VIRONEX
 BORING TYPE: DIRECT PUSH
 LOGGED BY: CM
 START DATE: 10-2-01 FINISH DATE: 10-2-01

PROJECT NO: 1731-2A
 PROJECT: GLASCOCK STREET
 LOCATION: OAKLAND, CA
 COMPLETION DEPTH: 8.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
	0		SURFACE ELEVATION:							
	0	GRAVELLY CLAY (GC)	silty, gravel soil	GC						○ Pocket Penetrometer △ Torvane ● Unconfined Compression ▲ U-U Triaxial Compression
	0		4-5 inches asphalt like material, black asphaltic matrix and rock fragments, gravel			■				
	0	SILTY CLAY (CL)	stiff, moist, black, with debris, fragments, rusty red brick	CL						
	5	SILTY CLAY (CL)	stiff, moist, gray-greenish, transition zone missing, some rock fragments, minor sandy intervals, silt 25-30%, 15% sand	CL						
	8		Bottom of Boring at 8 feet							
	10									
	15									
	20									
	25									
	30									

GROUND WATER OBSERVATIONS:
 NO FREE GROUND WATER ENCOUNTERED

LA CORP.GDT 10/23/01 MW*EB

EXPLORATORY BORING: EB-20

Sheet 1 of 1

DRILL RIG: VIRONEX
 BORING TYPE: DIRECT PUSH
 LOGGED BY: CM
 START DATE: 10-2-01 FINISH DATE: 10-2-01

PROJECT NO: 1731-2A
 PROJECT: GLASCOCK STREET
 LOCATION: OAKLAND, CA
 COMPLETION DEPTH: 8.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
			SURFACE ELEVATION:							
	0		GRAVEL (GP) loose, dry, baserock, 30-40% orange sand	GP		□				
	2		SILTY CLAY (CL) black, with two 2 inches layers of asphalt, minor debris, rock fragments, coarse sand, red brick fragments	CL		□				
	5		SILTY CLAY (CL) stiff, moist, green-gray, silt 25-30%, minor sand, minor rock fragments	CL		□				
	8		Bottom of Boring at 8 feet							
	10									
	15									
	20									
	25									
	30									

GROUND WATER OBSERVATIONS:
 NO FREE GROUND WATER ENCOUNTERED

LA CORP.GDT 10/23/01 MV-EB