34-0157NR-B4A

Caltrans EXPLORATION BORING FIELD LOG

Date 3/17/09 | Boring No.

Location Doyle Dr. SF Presidio | Job No. | EA No. 163701 | Page 1 of

Dist. 04 Co. ~~tot~~ SF Rt. 101 P.M. | Br. No. | Purpose of Work GeoTech

Ft. Rt. Lt. Line. Sta. Northings. Eastings. Elev.

Ground Water Data: Date/Time	Water Level	Bot. of Boring

Logged By: M. Gaffney | Drill Crew: Bob, Mike, John

Drill rig: Acker #7001974 | Hammer Type and Weight: Automatic

Drilling Method: Rotary Wash | Casing: ~~Rec~~ NA

Hole Completion:

Depth	Sample Interval	Tool Blows	RQD	Sample I.D.	Recovery # Rec.	Strength	Graphic Log	Description	Pocket Pen		Remarks
1											
2								Sand w/: lt Gravel (F.H) 60% med			
3								Sand 20% s. lt 20% med sub Angular			
4								Gravel. wood Found in SPT			
5											
6	5 4 6	1		18				Sand (SP) Loose Dry 100% med			
7								Sand. dark Olive Gray			
8											
9											
10											
1	1 1	2		10/3				Sand. Very loose			
2								1" Shale Gravel weak cement			1" in length & CUT by SPT
3											
4											
5											
6	8 8 13	3		13/18				Sand. med Dense			
7											
8											
9											
20											
1	6 10 16	4		18				Same black (5Y 2.5/2) w/ olive yellow (5Y 6/6)			
2											
3											
4											
25											
6	7 4 4	5		18							
7								Peat OL/OH organic soil			
8											
9								@ 28 organic w/ sand (1/2 Tube)			
30											
1	7 11 13	6		16				Sand med → coarse dark Greenish Gray med dense			
2											
3											
4											
35											
6	7 10 6	NR						Same			Sample fell out
7											
8											
9											
40								Clay			

340157NB-D4A

Caltrans

EXPLORATION BORING FIELD LOG

Date 3/17/09 | Boring No.

Location Doyle Dr. SF Presidio | Lab No. | EA No. 163701 | Page 2 of

Dist. 04 Co. ~~101~~ SF Rt. 101 P.M. | Br. No. | Purpose of Work

Ft., Rt. Lt. | Line. Sta. | Northings. | Eastings. | Elev.

Ground Water Data

Date / Time	Water Level	Bot. of Boring

Logged By : | Drill Crew :

Drill rig : | Hammer Type and Weight :

Drilling Method : | Casing :

Hole Completion :

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	Inches % Rec.	Strength	Graphic Log	Description	Pock Pen	Core Time min:sec	Remarks
41	X	6 8 9	7	18			Clay (CH) Very Stiff to Hard 100%	3-4.5		
2							Clay · Highly Plastic Dark Greenish			
3							Gray (Gley1 3/1)			
4										
45										
6	X	3 7 9	8	18			Same ↓	3-4.5		
7							@46 Sandy Clay very Stiff 20% fine sand			
8							high Plastic olive brown (2.5Y 4/3)			
9										
50										
1	X	1 1 1	9	18			Silt · med stiff → Stiff 100% fines	.75-2.0		
2							No Plasticity · dark yellowish brown			
3							(10YR 3/4) Trace fine sand			
4										
5										
6	X	5 8 8	10	17						
7							Sandy Clay Very Stiff → hard 30%	3.25-4.5		
8							fine sand med Plasticity			
9										
60							↓ Increasing sands			
1	X	6 9 9	11	17			@61			
2							Gravelly Sand SW 10% fines 60% fine			
3							sand 30% fine to coarse angular			Hard drilling
4							elongated & flat Gravel · yellowish brown			
65										
6	X	15 31 50/4"	12	16			Sandy Gravel (GP) Dark yellowish brown (10YR 4/4)			
7							& Greenish black Gley1 (2.5/1) 80% Gravel			
8							2" Angular (Decompose shale)			
9										
70										
1	X	25 50/3¾"	13	9"			Sandstone · Intensly · Slightly → Mod weather			
2							Moderatly hard · Very Intensely Fracture			Box 1
3		0/60	1	60/60						Core #1
4										
75										
6		21 24 50/4	14	10						Switched to
7										Diamond Core @75'
8		4/60	2	47/60			Intensly to Very Intensely fractured	20:58		
9										
80	run									

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Caltrans EXPLORATION BORING FIELD LOG

Date 3/18/09 | Boring No.

Location Doyle Dr SF Presidio | Job No. | EA No. 163701 | Page 4 of

Dist. 04 Co. ~~tot~~ SF Rt. 101 P.M. Br. No. Purpose of Work

Ft. Rt. Lt. Line. Sta. Northings. Eastings. Elev.

Ground Water Data: Date/Time | Water Level | Bot. of Boring

Logged By: | Drill Crew:

Drill rig: | Hammer Type and Weight:

Drilling Method: | Casing:

Hole Completion:

Depth	Sample Interval	Tool Blows	RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Core Time M:S	Remarks
81									21:23	
2										
3		0/44	3		44/60			Same Very Intensly fractured		
4								clay filling Fractures		
85		run								
6										
7										
8		0/44	4		44/60			Same	24:07	Box 2
9										
90		run								
1										
2								Same		
3		10/53	5		53/60				21:53	
4										
95		run								
6										
7										
8		0/40	6		40/60			Same	28:50	
9										
100		run								
1										Box 3
2										
3		0/51	7		51/60			Same Less clay infilling	35:48	
4								coarse sand black white & red		
105		run						Grains		
6										
7								Trace clast of shale in SST		
8		0/55	8		55/60			Same	37:54	
9										
110		run								
1										
2										
3		0/60	9		60/60			Same old fracture Healed	43:34	
4										
115		run								Stop @ 115'
16										
8										
9										
120										

34-015-7SB-B4A

Caltrans EXPLORATION BORING FIELD LOG

Date 3/19/09 | Boring No.

Location High viaduct - Cowel st. | Lab No. | EA No. | Page 1 of

Dist. 04 Co. SF Rt. 101 P.M. | Br. No. | Purpose of Work

Ft. Rt. Lt. Line. Sta. Northings. Eastings. Elev.

Ground Water Data: Date/Time | Water Level | Bot. of Boring

Logged By: R Nashed | Drill Crew: Bob E, Jarred, Ronald

Drill rig: CS 2000 (trac.) | Hammer Type and Weight: 3178435 Automatic

Drilling Method: Rotary wash/coring | Casing: N/A

Hole Completion:

Depth	Sample Interval Total	Blows	RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Remarks
1								Sand (SP), fine grained, dark brown, loose, non plastic no cement.	
2									
3									
4									
5								The same as above	
	1	4			18/18				
6		5							
		5							
7								Same as above, organic	
8									
9									
10								Same as above	
		4			18/18				start hammer efficiency test
11	2	5							
		6							
12								Same as above	
13									
14									
15									
		6			19.5/18			Same as above, medium dense	
16	3	7							
		10							
17									
18								Same as above	
19									
20									
		8			12/18			Sand (SP), med. grained, dark brown, dense, non plastic no cementation (alluvial fan)	
21	4	15							
		20							
22									
23								The same as above	
24									
25									
		21			14/18			The same as above, but v. dense (alluvial fan)	
26	5	44							
		32							
27									
28									
29								The same as above, but reddish brown	
30									

94-0576B-24A

Caltrans EXPLORATION BORING FIELD LOG

Date 3/19/04 | Boring No.

Location High Viaduct - Cowel St. | Lab No. | EA No. 1637 | Page 2 of

Dist. 04 Co. SF Rt. 101 P.M. Br. No. Purpose of Work

Ft. Rt. Lt. Line. Sta. Northings. Eastings. Elev.

Ground Water Data: Date/Time | Water Level | Bot. of Boring

Logged By: R Nashed | Drill Crew: Bob E, Jarrod

Drill rig: CS 2000 | Hammer Type and Weight: 317 84 35 Automatic

Drilling Method: Rotary wash/coring | Casing: N/A

Hole Completion:

Depth	Sample Interval	Tool	Blows	RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description			Remarks
			4			16/18			Silty sand (SM), fine grained dark gray, med dense, non plastic, no cementation silt = (5%)			
31	6		8									
			13									
32												
33												
34									Sand (SP) (Lomita Form.), med grained, dark brown, dense, non-plastic, no cementation			
35												
			14			18/18						
36	7		18									
			20									
37												
38												
39												
40									The same as above			
			8			16/18						
41	8		26									
			48									
42									Silty sand (SM), fine to medium grained, dark brown interbedded with thin layers of silt, v. dense, non-plastic, no to weak cementation			
43												
44												
45												
			20			18/18						
46	9		37									
			Refusal						Sand (SP) (Lomita Form.), med grained, dark brown, v. dense, non-plastic, no cementation			
47												
48												
49												
50												
			7									
51	10		5			18/18			@51. gray			
			6						SIS clay (CH) black soft trace fine Gravel			
52												
53												
54												
55												
			3									
56	11		3			18/18			Same SIPA			
			5							1.5-2.0		
57												

34-015758 B4X

Caltrans EXPLORATION BORING FIELD LOG

Date | Boring No.

Location Doyle Dr SF Presidio | Lab No. | EA No. 163701 | Page 3 of 4

Dist. 04 Co. ~~101~~ SF Rt. 101 P.M. | Br. No. | Purpose of Work

Ft., Rt. Lt. | Line. Sta. | Northings. | Eastings. | Elev.

Ground Water Data: Date / Time | Water Level | Bot. of Boring

Logged By : | Drill Crew :

Drill rig : | Hammer Type and Weight :

Drilling Method : | Casing :

Hole Completion :

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Pock Pen	Core Time min:sec	Remarks
58										
59							Pockets of Green sand 1/2" in diameter			
60										
1		5 7 9	12	18			Same Very stiff Trace Sand	3.5		
2							Dark Greenish Gray (Gley 1 3/1)			
3										
4							Gravel ↓ 2" Angular SST Gravel			
65							(sw)			
6		12 13 19	13	16			Gravelly Sand Dark Greenish Gray			
7							Few Fines Little 2" Angular Gravel			
8							mostly med sand Not to			
9							weak cementation			
70										3/20/09
		50/4	14	3			Shale black mod soft to soft			Diamond core
			core				Intensely Weather Intensley			
3		0/32	1	32/54			fracture			
4							@ 72' sandstone Thickly bedded		24:24	
75		run					Fresh weathering Hard Intensley			
6							fracture Dark bluish Gray			
7										
8		0/22	2	22/60					40:42	
9							@ 78' Shale again as above			
80		run								
1										
2			3	/50					33:33	
3							Decomposed			
4		run					Grades to @			
85		0/24	4	24/24			85' Sandstone Again		18:14	
6		run								
7		0/24 run	5	24/32					23:15	Top 12" Sluff
8							same			
9		0/26	6	26/36			@ 88.5 Shale Decompose Very Soft			
90		run								
1										
2										
3									39:00	
4		0/31	7	31/60			Shale same			
95			8	10/10			stopped 3/23 10" Run to 95'.			See back →
6										3/23/09 Stop
7										0836-0849 13 min
										3-24

34-0157SB B4A

Caltrans

EXPLORATION BORING FIELD LOG

Date | Boring No.

Location Doyle Dr SF Presidio | Lab No. | EA No. 163701 | Page 4 of 4

Dist. 04 Co. ~~101~~ SF Rt. 101 P.M. | Br. No. | Purpose of Work

Ft., Rt. Lt. | Line. Sta. | Northings. | Eastings. | Elev.

Ground Water Data	Date / Time	Water Level	Bot. of Boring

Logged By :

Drill Crew : Bob Enox

Drill rig :

Hammer Type and Weight :

Drilling Method :

Casing :

Hole Completion :

Depth	Sample Interval (ft)	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description			Remarks
98		60/4	9	31/60	m		SHALE/Argillite - dark gray			9:50 contact sandstone
99							very slightly weathered moderately hard			abrasted to loose
100							intensely fractured. Occasional white			silty SAND grayish
1		0/36	10	36/36		40	quartz veinlets <1/8"			brown / 10:18
2							SHALE - Argillite half			Contact 40° w/ CA
3							decomposed to clayey SILT (fresh)			
4		0/24	11	24/24			dark gray v. soft to soft			10:38
105							v. intensely fractured - sheared	→		see - back →
6		0/30	12	26/30						11:00
7							→ 105-107.5 →			see back →
8							SANDSTONE dusky blue green 5BG 3/2			
9		0/30	13	30/30	w		to dark greenish gray 5G-4/1			
110							fresh, moderately hard-hard			
111		0/30	14	25/30	w		intensely fractured to crushed			v. fine-medium grained (17 mi)
112							same 110-112.5 sheared — fault 3" gouge Lean clayey SAND			
113										SP-ML greenish gray soft PP 3.0 TSF
4		0/30	15	2/30	w		SANDSTONE (graywacke) as above			v. fine-med. grained
115							dark greenish gray - gray m. soft fresh			
6		0/60	16	13/60	w/m		Same w/ erratic white			
7							quartz veinlets 1/8"			
8										
9										
120							TD 120'			
1										
2										
3										
4										
125										
6										
7										
8										
9										
130										
1										
2										
3										
4										
135										
6										
7										

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