Boring 34-0157NB-B2A

EXPLORATION BORING FIELD LOG

Caltrans

Date 3/12/09 Boring No.

Location NB High Viaduct | Lab No. | FA No. | Page 1 of 5

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: D. Nesbitt / R. Nashed | Drill Crew: Bob E.,

Drill rig: CS2000 track | Hammer Type and Weight: Automatic

Drilling Method: Rotary Wash/coring | Casing: none

Hole Completion: grouted

Depth	Sample Interval Feet	Blows per 6 inches	Sample I.D.	% Rec.	Strength	Graphic Log	Description			Remarks
1							Sand (SP), dark yellowish brown,			
2										
3										
4										
5										
		7	1				Poorly graded SAND (SP)			SPT
6		9					Medium dense, dark yellowish brown,			
		12					moist, fine sand.			
7										
8										
9										
10										
		8	2							SPT
11		9								
		10								
12										
13										
14										
15										
		10	3				dense,			SPT
16		13								
		16								
17										
18										
19										
20										
		21	4				very dense.			SPT
21		27								
		30								
22										
							→ See next page			

34-0157NB-32A

Caltrans

EXPLORATION BORING FIELD LOG

Date 3/16/09 | Boring No.

Location: High viaduct / Lincoln St. | Lab No. | EA No. | Page 2 of 5

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., Gerod

Drill rig: CS 2000 trac | Hammer Type and Weight: 3178 435 / TN17B43 Automatic

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

Hole Completion: 3/13/09

Depth	Sample Interval Total	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description			Remarks
20							Sand (SP), med grained, v. dense, dark yellowish brown, non plastic, no cementation			
21										
22										
23										
24										
25										
26	5	30 / 40 / refusal		17/18			Sand (SP), Colma F., med to coarse grained, dark grayish brown, some oxidation, non plastic, no cementation, v. dense			
27										
28										
29										
30										
31	6	20 / 29 / 43		18/19			The same as above, but change colour to brownish gray			
32							Sand (SP), Colma F., med grained, dark brownish yellow, v. dense, non plastic, no cementation			
33										
34										
35										
36	7	20 / 37 / 50		16/19			The same as above, but dark yellowish brown			
37							Sand (SP), Colma F., fine to med grained, dark olive brown, v. dense, non plastic, no cement			
38										
39										
40										
41	8	7 / 11 / 15		17/18			Sand (SP), coarse grained, dark olive brown with with iron oxide stains, med. dense, non plastic, no cementation			
42										
43										
44										
45							The same but dark olive brown			
46	9	29 / 35 / 41					Sand (SP), med grained, dark olive brown, v. dense, non-plastic, no cementation			

34-0517 NB-B2A

Caltrans | EXPLORATION BORING FIELD LOG | Date 3/16/09 | Boring No.

Location: Ligh viaduct / Lincoln St. | Lab No. | EA No. 1637 01 | Page 3 of 5

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 Nached | Drill Crew: Bob E, Garod, Cerek

Drill rig: CS 2000 (frac.) | Hammer Type and Weight: TN 7B435 Automatic

Drilling Method: Rotary wash / Coring | Casing: n/A

Hole Completion: 3/18/09

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Remarks
49							The same as above	
50								
		22		18/18				
51	10	27						
		Refusal						
52								
53							The same as above,	
54							same oxidation	
55								
	11	16		18/18			The same as above,	
56		23					oxidation	
		33					sand (SP), med grained	
57							dark olive brown, dense,	
58							non plastic, no cementation	
59								
60							Serpentinite, fine grained, dark greenish	Bedrock @ depth 58ft
	12	17		15/18			gray, soft, intensely weathered,	Grease size = 2.4
61		19					mod. fractured	
		39	0/30	18/30				Time = 21 min
62							Serpentinite (sandy), dark greenish	Continue on 3/17/08
		5/30		20/30			gray, soft, intensely weathered	Time = ???
64	2						slightly fractured	
65							shale, fine grained, dark	
66		21/30		30/30			gray & black, soft, intensely	Time = 15 min
67	3						weathered, intensely fractured	
68		12/30		24/30			The same as above	Time = 18 min
69	4						Shale (sandy), fine grained, gray	
70							soft, intensely weathered, fissile,	Time = 18 min
71	5	0/30		30/30			slightly fractured, sand inclusions	
72							The same as above	
73		12/30		28/30				Time = ??
74	6						Shale, fine grained, fissile to thinly	
75							bedded, black, soft, intensely weathered	
							intensely fractured	
							Shale, fine grained, fissile,	
							black, soft, intensely weathered	
							slightly fractured	

34-0157 NB B2A

Caltrans

EXPLORATION BORING FIELD LOG

Date 3/17/08 | Boring No.

Location High Viaduct - Lincoln | Lab No. | EA No. 163701 | Page 4 of 5

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 - Garod, Teret

Drill rig: CS 2000 (Trac.) | Hammer Type and Weight: TN 7B 43 Automatic

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

Hole Completion: 3/18/09

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Remarks
76		0/30		0/30			No recovery	Time = 10 min
77	7						Shale, fine grained, black,	drill stuck
78		0/30		23/30			mod. hard, intensely weathered,	from 77½ to
79	8						V. intensely fractured	Time = 15 min
80							(80 - 80½)	
81		7/30		21/30			Shale, fine grained, black, hard,	from 80 to 80½ ft
82	9						fresh, no fracture intact rock	Time = 12 min
83		6/30		25/30			(80½ - 82½) shale, fine grained	
84	10						soft, intensely weathered, intensely	from 82½ - 85
85							fractured	Time = 18 min
86		27/36		35/36			(82½ - 83) shale as above, fresh, hard	
87	11						intak rock	from 85 - 88 ft
88							(83 - 85) shale as above, soft,	Time = 16 min
89	12	21/24		24/24			intensely weath., intensely fractured	from 88 - 90 ft
90							Shale as above, soft, intensely	Time = 11 min
91		30/60		30/60			weathered, slightly fractured	from 90 to 99
92	13						shale, fine grained, black,	Time = 18 min
93							mod. hard to soft, mod. weathered,	
94							slightly fractured, slightly jointed	
95							(90 - 94) shale, fine grained, dark	Time = 14 min
96		11/30		33/30			gray, mod. hard, mod. weathered,	
97	14						slightly fractured	cont. on 3/18/09
98		10/30		21/30			(94 - 95) Serpentine, fine grained	Time = 7 min
99	15						dark greenish gray, hard, mod.	
100							weathered, mod. fractured	from 100 - 103
101		0/36		21/36			(97.0 - 97½)	Time = 16 min
102	16						Shale (sandy), fine grained, yellowish	
103							dark gray, mod. hard, intens. weath.,	from 103 - 105
104	17	9/24		24/24			intensely fractured and jointed	Time = 5 min
105							(97½ - 100) Sandstone (clayey) contact	
							med. grained, yellowish gray, hard	
							intens. weath., intens. fractured and	
							slightly jointed	
							(102½ - 103) shale, fine grained,	
							black, sheared, v. soft, intens. weath.	
							intensely fractured	
							(103 - 104.9') shale as above, soft,	
							mod. weath., slightly fract. joint (one joint)	
							(104.9' - 105) Sandstone, med. grained	
							yellowish gray, hard, mod. weath., jointed	

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Caltrans EXPLORATION BORING FIELD LOG

Date 3/18/09 | Boring No.

Location High viaduct - Lincoln | Lab No. | EA No. 1637 et | Page 5 of 5

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: | Drill Crew: Bob E, Garod, Cerete

Drill rig: CS 2000 (trac.) | Hammer Type and Weight: TN 7 B43.5 Automatic

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

Hole Completion: 3/18/09

Depth	Sample Interval	Total Blows	RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Remarks
106		4/30			28/30			Shale / Sandstone contact, fine to med grained, yellowish dark gray, med. hard, intens. weath, intens. fractured and intens. jointed	From 105 to 107½' Time = 9 min
107	18								
108		0/30			24/30				From 107½ to 110' Time = 5 min
109	19								
110								(107½ - 108) sandstone, med grained, hard, yellowish dark gray, mod. weath, intensely fractured and intens jointed	
111		0/60			56/60				
112									
113	20							(108 - 110) Shale (sandy), fine to med. grained, yellowish black, v. soft, intens. weath., intens. fractured	Time = 25 min
114									
115									
116									
117								Sandstone (shaley) yellowish dark gray, hard, intensely weathered, intensely fractured intensely jointed	
118									
119									
120									
121									
122									
123									
124									
125									