RW17-A1

Caltrans EXPLORATION BORING FIELD LOG

Date 6/11/08 | Boring No. A1

Location Parking Lot behind 1169 Garages Ave | Lab No. | EA No. 163701 | Page 1 of 3

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

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

Ground Water Data	Date / Time	Water Level	Bot. of Boring
	6/11/08		65.5

Logged By: R Nashed / Matt Gaffney | Drill Crew: Larry / Mike / Steve

Drill rig: CS 2000 | Hammer Type and Weight: Automatic

Drilling Method: Rotary Wash | Casing: 2" Sch 40 PVC

Hole Completion: 65.5' 20' screen

Depth	Sample Interval	Total Blows	RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Remarks
1								well box 1.0' conc.	
2									wet drilling
3									
4									
5								(ML)	
6	1	1 1 1						Sandy Silt: Dark Greenish Gray very soft low plasticity fine Grain <15%	
7									
8									
9									
10								silty sand (SP-SM), medium grained, v. soft, non plastic silt 50% & sand 50%	
11	2	2 1 1							
12									
13									
14									
15								sand (SP), medium grained loose, moist, non-plastic	
16	3	4 4 2							
17									
18									
19									
20									
21	4	3 2 7						Same as above increasing fines	
22									
23									
24									
25									
26	5	9 13 13						Sand Same as above medium dense Yellowish green	
27									
28									
29									
30									

Bentonite

Blank 2"

RW17-A1

Caltrans EXPLORATION BORING FIELD LOG

Date 6/11/08 | Boring No. A1

Location | Lab No. | EA No. | Page 2 of 3

Dist. | Co. | Rt. | 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			Remarks
		6						Same as above			
31	6	10									
		13									
32											
33											
34								Sand (SP) Coloma Formation,			
35								v. dense, coarse grained,			
		15						yellow, non plastic			
36	7	25									
		27									
37											
38											
39											
40											
		15						Same as above			
41	8	15						medium dense			
		14									
42											
43											
44											
45											
		15						Same as above			
46	9	22									
		24									
47											
48											
49											
50											
		15						as above			
51	10	20						red bands (oxidation)			
		29									
52											
53											
54											
55											
		9						Same			
56	11	16						No red banding			
		22									
57											
58											

Bentonite

2" Slot

Natural Sand to 35

Screen 020

RW17-A3

Caltrans EXPLORATION BORING FIELD LOG

Date 6/11/08 | Boring No. A1

Location | Lab No. | EA No. | Page 3 of 3

Dist. Co. Rt. 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	Remarks
59							screen 0.02		
60									
		14						Same as above	
61	12	20							
		27							
62									
63									
64									
65								Trace sand	
		3						Clay (CL) fine grained olive black mottles (spot	
66	13	2						soft highly plastic, ok	
		2							
								q_u = 1.5-2.0 ~~tsf~~	
									65.5 bottom of boring
								P-1	
								0-45 blank 2" PVC	
								45-65 screen 0.02 PVC	
								0-0.5 Well box cone	
								0.5-2.0 Grout	
								2.0-35' Bentonite 3/8 Coarse Grade	
								35-65 Natural Sand flowed into Annular space	
								A-2	
								screen - 35-15	
								A-3 screen 10-5	

RW17-A2

Caltrans EXPLORATION BORING FIELD LOG

Date 6/11/8 | Boring No. A2

Location Parking Lot behind 1169 Gorges Ave | Lab No. | EA No. 163701 | Page 1 of 1

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

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

Ground Water Data	Date/Time	Water Level	Bot. of Boring
	6/11/08		35'

Logged By: M Gaffney | Drill Crew: Larry Steve Mike

Drill rig: CS2000 | Hammer Type and Weight: NA

Drilling Method: Rotary Wash | Casing: 2" PVC Sch 40

Hole Completion: 35' screen 35-15' .020

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description			Remarks
1	N/A									Wet Drilling
2							Referred To RW17-A1 P1			Start Drilling 12:45
3										4" Auger
4										
5										
10										
15										
20										
25										
30										
35										Total Depth 35'

Graphic Log: Bentonite; Blank 2" Sch 40 PVC; Sand; screen .020

Total Depth 35'
Screen 35'-15'
Blank 15'-0
Flush Finish well box

Sand 35'-13'
Bentonite -1'
Well box 1'-0 Concrete

RW 17-A3

Caltrans EXPLORATION BORING FIELD LOG

Date 6/11/08 | Boring No. A3

Location Parking Lot behind 1169 Gorges Ave | Lab No. | EA No. 163701 | Page 1 of 1

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

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

Ground Water Data	Date / Time	Water Level	Bot. of Boring
	6/11/08		10

Logged By: M Graffey | Drill Crew: Larry Steve Mike

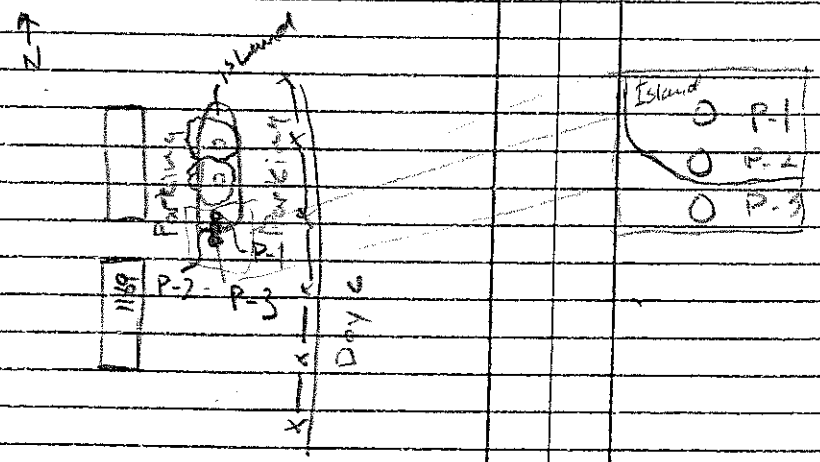
Drill rig: CS 2000 | Hammer Type and Weight:

Drilling Method: Rotary Wash | Casing:

Hole Completion: 10'

Depth	Sample Interval	Tool	Blows	RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Remarks
1									Refer To P1	
2								Blank 2'		
3										
4										
5										
								Sand		
								Screen 2"		
10										

Total Depth 10'
Screen 5-10'
Blank 0-5'
Sand 4-10'
Bentonite 1-4'
Well box 0-1'



ENB-R1

Caltrans | EXPLORATION BORING FIELD LOG | Date 12/7/07 | Boring No.

Location Doyle Drive - Dance studio | Lab No. | EA No. 163701 | 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 :

Drill Crew : Gregg

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			Remarks
1										4" AC
							Concrete			7" AB
2										
		4	C				Fill (organic), sandy			
3	1	4	B							modified Cal
		4	A							
4		4	D			D	Fill (7") sand and			SPT 3½" - 5"
	2	3	C			C	13" clay Q = 2.0			
5		3	B			B	10" sand, black, (SW),			
			A				fine grained, loose			shelby Tube
6							7" Baymud			from 5½ - 8"
7	3						Baymud			
8										
9										
10										
11	4						sandy Baymud			Shelby Tube
12										Sample from 10 - 12½
13										
14										
15										
16	5	5					sand, loose, gray			modified Cal
		13								
		19								SPT
17		6								
	6	9					The same as above			
18		10								
19										
20										
	7	6								Shelby Tube

Caltrans EXPLORATION BORING FIELD LOG

Date 12/17/90 | Boring No.

Location | Lab No. | EA No. | Page 2 of

Dist. | Co. | Rt. | 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			Remarks
21		6					Gray sand, fine ~~medium~~ wet dense			
		14								
22		8								
	B	4								
23		11								
24										
25		5		100%			Gray fine sand, wet, loose			
	MC	2								
		2								
27		1		100%						
	SPT	5								
28		6								
29										
30		6		100%			Gray fine sand, ~~wet~~, medium dense w/ shells. Marine sands			
	MC	11								
		15								
32		3		100%						
	SPT	6								
33		~~8~~								
		~~15~~								
34		~~28~~					w/ Yellowbrown			
		~~42~~					Gray fine sand, wet, very dense			
35	MC	15		100			(SP) coarse sand/formation			
		28								
36		42								
	SPT	16		100%						
37		24								
38		28								
39										
37							Yellowish Brown, Reddish Brown and gray			
							Dark Brown +			
40		23					~~Dark yellowish Brown~~, Sand (SP),			
	MC	35					~~fine, wet, very dense~~			
		41								
42	SPT	16								
		41								

I-NB-P1

Caltrans EXPLORATION BORING FIELD LOG

Date 12/7/07 | Boring No.

Location | Lab No. | EA No. 163701 | Page 3 of

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

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

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

Logged By D. Nesbitt | Drill Crew:

Drill rig: | Hammer Type and Weight: Automatic

Drilling Method: Rotary wash | Casing: none

Hole Completion:

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description			Remarks
43	SPT	50								
44										
45		30		100%			Dark Yellowish Brown w/ Reddish brown bands, ~~SP~~ fine Sand (SP), loose/dense wet.			
	MC	39								
46		45								
47	SPT	13		100%						
		44								
48		50/4½"								
49										
50	MC	40		50			Same as above			
	SPT	50								
51										
52										
53										
54										
55		8		100%			Dark Brown, Sand (SP), wet, medium dense,			
	SPT	12								
56		16								
52										
53										
54										
55		~~36~~		~~75%~~			~~Dc Brown to Gray weathered Mudstone, Very dense~~			
	MC	~~50/5"~~								
56										
57										
58										

12/7/07 FNB-R

Caltrans | EXPLORATION BORING FIELD LOG | Date | Boring No.

Location: Doyle Drive Replacement | Lab No. | EA No. 163701 | Page 4 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: D. Nesbitt | Drill Crew: Gregg Drilling

Drill rig: Fraste Multidrill XL | Hammer Type and Weight: 150 lb Automatic

Drilling Method: Rotary wash | Casing:

Hole Completion:

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description			Remarks
59										
60	ML SPT	50/3"	36 50/5"	25%			Dark Brown to Gray weathered shale.			
61										
62										
63										
64										
65	SPT	50/3" 73"		25 40%			Dark Brown weathered shale.			At 13:00, Gregg installing 65 ft of a casing.
66	core						Core: Dark Brown weathered shale recovered 2' of 5' run.			
67										At 13:58, coring begins at 65 ft finish core at 14:32.
68	core						Dark Brown fractured shale healed fractures.			
69										
70										Stopped drilling 15:15 at depth of 72 ft
71	core									
72										
73										
74										
75										
76										
77										

Caltrans

EXPLORATION BORING FIELD LOG

Date 12-10-07 | Boring No. ENB-R

Location Doyle Drive Replacement | Lab No. | EA No. 163701 | Page of

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

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

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

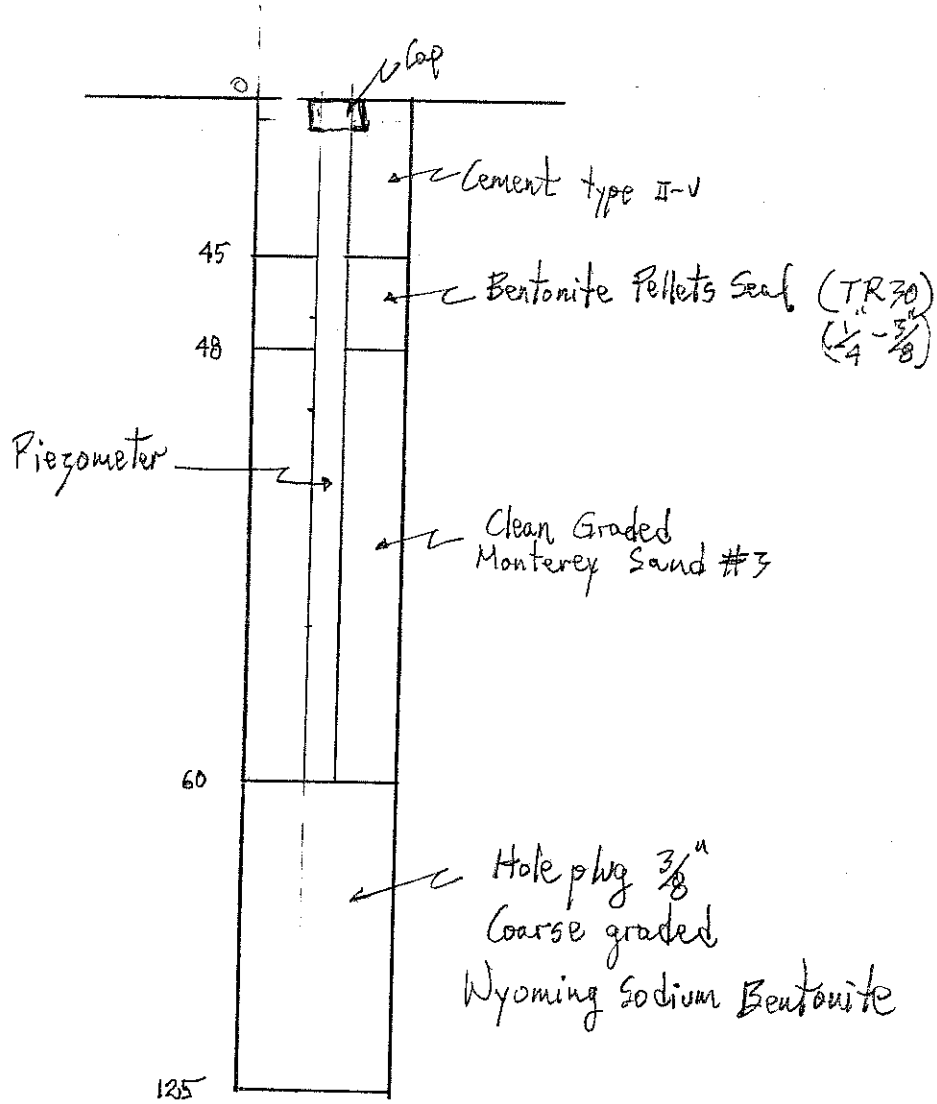
Logged By: E. Ortega | Drill Crew:

Drill rig: | Hammer Type and Weight:

Drilling Method: Wet rotatory | Casing:

Hole Completion: 12-11-07

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description	Remarks
71							SEDIMENTARY ROCK (SHALE)	
72							Dark Brown to Gray, moderatly	
73							fractured, soft, not healed	
74							RQD = 9+7.5+5+7.5+5/36 = 94.4%	
75							Same	
76							RQD = 7+4+7+11+11.5+6.25/60 = 77.9%	
77								
78								
79								
80							Same but very intensely fractured	Between 79' and 80'
81							RQD = 4/60 = 6.6%	gravel material zone
82								
83								
84								
85							Same	
86							RQD = 0	12-11-07
87								
88								
89								
90								
91								
92								
93								
94								
95							Same but very intensely	
96							fracture to decomposed	
97							(Lean Clay (CL), low plasticity)	
98								
99								
100							Same	
101								
102								
103								
104								
105							Same	
106								
107								Performed suspended
108								velocity test
109								
110							Bottom of Boring @ 125' on 12-11-07	


0
Cap
Cement type II-V
45
Bentonite Pellets Seal (TR30)
(1/4" - 3/8")
48
Piezometer
Clean Graded
Monterey Sand #3
60
Hole plug 3/8"
Coarse graded
Wyoming Sodium Bentonite
125

ENB-R1

N

ENB-R1

0-12 Cement	0-45 Cement	0-1 Cement
12-14 Bentonite Seal	45-48 Bentonite Seal	1-2 Bentonite Seal
14-25 #3 Sand (Screen)	48-60 #3 Sand (Screen)	2-7 #3 Sand (Screen)
	60-125 Hole plug 3/8	

Piezometers

12/2/07 RW17-A1

Caltrans EXPLORATION BORING FIELD LOG

Date | Boring No.

Location: Doyle Drive Replacement | Lab No. | EA No. 163701 | Page 1 of 2

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

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

Ground Water Data

Date / Time	Water Level	Bot. of Boring

Logged By: D. Nesbitt | Drill Crew: Jared

Drill rig: CME 75 | Hammer Type and Weight: 150# automatic

Drilling Method: Auger / Rotary wash | Casing: none

Hole Completion:

Depth	Sample Interval Tool	Blows RQD	Sample I.D.	% Rec.	Strength	Graphic Log	Description			Remarks
0							AC payment 1" AC layer			Auger 0'-5'
1							6" concrete			~~payment~~
							7" – 3ft gray sand			
2							3ft – 4½ft Gray clay			Rotary wash
										5ft → 30ft
3										
4										
5			A	100			Gray sandy clay			
							~~Gray clay~~, wet, very soft			PP = 0 tsf
6			B							
										Push sample 5-6½
7										
8										
9										
10			C	20			Gray clay w/ trace medium sand, wet			
11							stiff			PP = 1.0 tsf
										push sample
12										
13										
14										
15		2	D	100			Gray sand, medium clean, wet			
16		6					medium dense			SPT
		9								
17										
18										
19										

RW17-A1

Caltrans EXPLORATION BORING FIELD LOG

Date 12/20/07 Boring No.

Location Doyle Drive Replacement Lab No. EA No. 163701 Page 2 of 2

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

Rt. Lt. Ft.. 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	Remarks
20	2 4 2		E	100			Gray medium sand, clean, wet, loose with shell fragment	SPT
21								
22								
23								
24								
25	1 2 1		F	100			Same as above	SPT
26								
27								
28								
29								At 28' change in drilling
30	3 4 11		G				Yellow Brown medium sand, clean, medium dense,	SPT
31								
32								
33								
34								
35	18 31 31		H				~~SPT~~ Same as above	SPT
36								
37								

Hole complete 12/20/07

Grouted 12/20/07