Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-302

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/NQ	Boring Location: Nuclear Island		Total Depth: 175.75 feet
Drilling Contractor and Rig: Gregg/Burnett/311025 / CME 55	Elevation at Boring: 417.2 feet	Ground Water Depth: 45 feet	Depth to Bedrock: 53.5 feet
Sampling Method: Split Spoon	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 14	Date Started: 7/10/06
	Borehole Inclination: 0	Logged by: S. Woodham	Date Completed: 7/18/06

Reviewed by / Date: M. Cooke 7/24/06
Reviewed by / Date: Clay Sams 12/4/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-1	X	SS 1	4 6 4	10/18						SILT sandy, gravely (ML); strong brown (7.5 YR 4/6); damp; stiff; 30% sand and gravel; topsoil; FILL	Boring in dozer graded road
2	/	SPT 2	5 5 7	2/18							Rock blocked sampler
3-4	X	SS 3	4 5 5	13/18						SILT sandy (ML); yellowish brown (10 YR 5/6); with pink and white; damp; stiff; 20% sand; SAPROLITE	Fill to 3.5 ft, saprolite begins
5-7	X	SS 4	6 7 8	14/18						SAA with more white color	
8-9	X	SS 1	6 7 7	12/18							
10-12	X	SS 5	8 8 9	15/18					SM	SAND silty (SM); light olive brown with white (2.5 Y 5/6, 8/1); damp; medium dense; 50% sand; SAPROLITE	
13-14	X	SS 6	5 7 8	16/18							
15-19	X	SS 2	6 6 9	16/18						SAA; (10 YR 5/4); yellowish brown with pink and white; 40% sand	
20-24	X	SS 7	6 7 10	15/18						SAA less white/pink; some mica	
25-29	X	SS 3	7 8 10	14/18							
30-34	X	SS 8	7 8 10	14/18					SM	SAND silty (SM); dark yellowish brown with white (10 YR 4/4); damp; medium dense; micaceous	
35-39	X	SS 4	6 7 9	14/18						SAA; dark yellowish brown with white and black	

Project Name : Job Number

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SOIL LOG - Boring No. B-302

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40										SAND silty (SM); dark yellowish brown with white (10 YR 4/4); damp; medium dense; micaceous *(Continued from previous page)*	
41											
42											
43											
44	X	SS 9	8 10 15	12/18							
45									▽		
46											
47											
48											
49	X	SS 10	10 10 13	14/18							
50											
51											
52											
53											Tricone bit refusal, drill casing to 53.5 ft, see rock log
54											
55											
56											
57											
58											
59											
60											
61											
62											
63											
64											
65											
66											
67											
68											
69											
70											
71											
72											
73											
74											
75											
76											
77											
78											
79											
80											

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-302

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/NQ	Boring Location: Nuclear Island		Total Depth: 175.75 feet
Drilling Contractor and Rig: Gregg/Burnett/311025 / CME 55	Elevation at Boring: 417.2 feet	Ground Water Depth: 45 feet	Depth to Bedrock: 53.5 feet
Casing Size and Depth: 4.5	Length of Core Barrel and Bit	No. of Core Boxes: 9	Date Started: 7/10/06
	Borehole Inclination: 0	Logged by: S. Woodham	Date Completed: 7/18/06

Reviewed by / Date: M. Cooke 7/24/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
54	1	1.5/1.5	44	F to SW	R4			GRANODIORITE; white, gray, dark gray, dark greenish gray; quartz, biotite, hornblende gneiss, feldspar, epidote	
56	2	3.6/5.0	67	HW	R1			Hornblende gneiss layer 53.7 to 58 ft Highly weathered zone 55.4 to 56.8 ft	
58				MW to SW	R4				
60	3	5.0/5.0	100	F	R4			GRANODIORITE; with common amphibolite schist and hornblende gneiss xenolith	
66	4	5.0/5.0	100	F	R4				
70	5	5.0/5.0	100	F	R4			SAA, pyrite and epidote	
75	6	5.0/5.0	99	F	R4				End 7/11/06 Start 7/12/06
80	7	5.0/5.0	95	F	R4			SAA; amphibolite xenoliths becoming more common	
85	8	5.0/5.0	100	F	R4			SAA; fewer amphibolite xenoliths	
90	9	5.0/5.0	100	F	R4				
93									

Project Name : Job Number
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ROCK LOG - Boring No. B-302

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
94									
95									
96	10	5.0/5.0	100	F	R4			GRANODIORITE; with common amphibolite schist and hornblende gneiss xenolith; quartz, biotite, hornblende, biotite, feldspar, epidote, chalcopyrite	
97									
98									
99									
100									
101	11	5.0/5.0	100	F	R4			GRANODIORITE; with biotite gneiss and amphibolite schist; quartz, biotite, feldspar, epidote, amphibolite	
102									
103									
104									
105									
106	12	5.0/5.0	100	F	R4				
107									
108									
109									
110									
111	13	5.0/5.0	100	F	R4				
112									
113									
114									
115									End 7/12/06
116	14	5.0/5.0	100	F	R4			Finer grained zone with more epidote from 115.6 to 119.8 ft	Start 7/13/06; water level at 36 ft
117									
118									
119									
120									
121	15	5.0/5.0	100	F	R4				
122									
123									
124									
125									
126	16	5.0/5.0	100	F	R4				
127									
128									
129								QUARTZ DIORITE; gray; dark gray; light gray; fine grained; igneous; with some amphibolite xenoliths; quartz; biotite; feldspar	
130									
131									
132	17	5.0/5.0	100	F	R4				
133									

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ROCK LOG - Boring No. B-302

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
134									
135								SAA with limited quartz veins	
136									
137	18	5.0/5.0	100	F	R4				
138									
139									
140									
141									
142	19	5.0/5.0	100	F	R4				
143									
144									
145									
146									
147	20	5.0/5.0	100	F	R4				
148									
149									
150									
151								GRANODIORITE; white and black; medium to coarse grained; igneous texture; occasional xenoliths of quartz diorite; gradational contact with quartz diorite above; biotite, quartz, plagioclase, K-spar?	
152	21	5.0/5.0	100	F	R4				
153									
154								HORNBLENDE GNEISS xenolith from 154 to 154.8 ft	
155									
156								Large pyrite zone	
157	22	5.0/5.0	100	F	R4				
158									
159									
160									
161									
162	23	5.0/5.0	100	F	R4				
163									
164									
165								GRANODIORITE; with amphibolite schist xenoliths;	End on 7/13/06; water level at 0 ft
166									
167	24	5.0/5.0	100	F	R4				Start drilling 7/18/06; water level at 45 ft
168									
169									
170									
171									
172									
173	25	5.8/5.8	100	F	R4				

Project Name : Job Number

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ROCK LOG - Boring No. B-302

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
174								SAA; with a quartz pegmatite from 173.6 to 174 ft CORING TERMINATED AT 175.5 ft	
175									
176									Coring terminated on 175.5 ft
177									
178									
179									
180									
181									
182									
183									
184									
185									
186									
187									
188									
189									
190									
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204									
205									
206									
207									
208									
209									
210									
211									
212									
213									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-303

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Nuclear Island		Total Depth: 150.5 feet
Drilling Contractor and Rig: MACTEC/Banks/337153 / CME550	Elevation at Boring: 415.1 feet	Ground Water Depth: 37.2 feet	Depth to Bedrock: 51.5 feet
Sampling Method: Standard	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 14	Date Started: 7/24/06
	Borehole Inclination: 0	Logged by: J. Liles	Date Completed: 7/26/06

Reviewed by / Date: M. Cooke 8/4/06
Reviewed by / Date: Clay Sams 12/4/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0		SPT 1	2 2 3	16/18					ML	SILT sandy (ML); yellowish red (5 YR 4/6); damp; medium stiff; fine sand; non plastic; micaceous; RESIDUUM	Residuum
2		SPT 2	2 4 5	17/18						SAA; stiff	
4		SPT 3	2 3 4	12/18					ML	SILT sandy (ML); strong brown (7.5 YR 4/6); damp; medium stiff; fine sand; non plastic; micaceous; RESIDUUM	
6		SPT 4	2 5 5	13/18						SAA; stiff; fine to medium grained	
8		SPT 5	2 4 5	12/18							
10		SPT 6	2 4 6	15/18							
12		SPT 7	1 3 6	15/18					SM	SAND very silty (SM); dark brown (10 YR 3/3); damp; loose; fine to medium sand; non plastic; micaceous; RESIDUUM	
14									ML	SILT sandy (ML); dark brown (10 YR 3/3); damp; stiff; fine sand; non plastic; micaceous; RESIDUUM	
16		SPT 8	1 4 6	15/18							
18									SM	SAND silty (SM); dark yellowish brown (10 YR 4/4); damp; medium dense; fine to coarse sand; non plastic; micaceous; SAPROLITE	First saprolitic sample
20		SPT 9	3 6 8	13/18							
22										SAA; fine to medium sand	
24		SPT 10	2 6 8	12/18							
26		SPT 11	4 8 11	12/18					SM	SAND silty (SM); dark olive brown (2.5 Y 3/3); damp; fine to coarse sand; non plastic; medium dense; micaceous; SAPROLITE	
28										▽	
30		SPT 12	3 6 8	11/18							
32											
34											
36											
38											
40											

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-303

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40										SAND silty (SM); dark olive brown (2.5 Y 3/3); damp; fine to coarse sand; non plastic; medium dense; micaceous; SAPROLITE *(Continued from previous page)*	
44		SPT 13	3 6 9	14/18							
47										SAA; fine to coarse sand	
49		SPT 14	4 7 8	17/18						REFUSAL, BORING TERMINATED at 51.5 ft see rock log	

Project Name : Job Number	ROCK LOG - Boring No. B-303
MACTEC SCE&G COL : 6234-06-3534	

Type and Diameter of Boring Mud Rotary / 3 7/8 inch/HQ	Boring Location Nuclear Island		Total Depth 150.5 feet
Drilling Contractor and Rig MACTEC/Banks/337153 / CME550	Elevation at Boring 415.1 feet	Ground Water Depth 37.2 feet	Depth to Bedrock 51.5 feet
Casing Size and Depth 4 / 51.5 feet	Length of Core Barrel and Bit 13.5 feet	No. of Core Boxes 8	Date Started 7/24/06
	Borehole Inclination 0	Logged by J. Liles	Date Completed 7/26/06

Reviewed by / Date M. Cooke 8/4/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
52	1	0.9/2.0	17	MW	R2 to R3			QUARTZ DIORITE; bluish gray; fine to medium grained; intensely fractured; discolored trace of pyrite	Refusal at 51.5 ft on 7/24/06 see rock log Begin coring on 7/25/06; water level at 47.3 ft
53									
54									
55									
56	2	3.6/5.0	52	F	R3			QUARTZ DIORITE; bluish gray; fine to medium grained	Top of sound rock
57									
58									
59									
60									
61	3	5.0/5.0	100	F	R3				
62									
63									
64									
65									
66	4	5.0/5.0	100	F	R3				
67									
68									
69									
70									
71	5	5.0/5.0	100	F	R3				
72									
73									
74									
75									
76	6	5.0/5.0	100	F	R3				
77									
78									
79								GRANODIORITE; black and white; medium to coarse grained; transitional contact with quartz diorite above	
80					R3				
81	7	5.0/5.0	100	F					
82					R4				
83									
84									
85									
86	8	5.0/5.0	100	F	R4				
87									
88									
89								GRANODIORITE; SAA; contains feldspar, quartz, biotite, hornblende, and trace of pyrite	
90									
91	9	5.0	100	F	R4				

Project Name : Job Number
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ROCK LOG - Boring No. B-303

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
92		5.0							
93									
94									
95									
96	10	5.0/5.0	100	F	R4			SAA; contains smalll xenoliths of black amphibolite schist and trace of pyrite; transitions into quartz diorite	
97									
98									
99									
100									
101	11	5.0/5.0	100	F	R4				
102									
103									
104								QUARTZ DIORITE and GRANODIORITE; bluish gray, black, and white; fine to coarse grained	
105									
106	12	5.0/5.0	100	F	R4				
107									
108									
109								SAA; with small xenoliths of black amphibolite schist	End 7/25/06
110									Begin 7/26/06; water level at 37.2 ft
111	13	5.0/5.0	100	F	R4				
112									
113									
114									
115									
116	14	5.0/5.0	100	F	R4				
117								QUARTZ DIORITE; bluish gray; fine to coarse grained; trace of pyrite	
118									
119									
120									
121	15	5.0/5.0	100	F	R4			Granodiorite zone from 120.5 to 121.1 ft	
122									
123									
124									
125									
126	16	5.0/5.0	100	F	R4				
127									
128									
129									
130									
131	17	5.0	100	F	R4			QUARTZ DIORITE to GRANODIORITE transition	

Project Name : Job Number

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ROCK LOG - Boring No. B-303

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
132		5.0						zone	
133									
134									
135									
136	18	5.0/5.0	100	F	R4				
137									
138									
139									
140									
141	19	5.0/5.0	100	F	R4				
142									
143									
144									
145									
146									
147	20	7.0/7.0	100	F	R4			QUARTZ DIORITE	
148									
149								CORING TERMINATED at 150.5 ft	
150									
151									Borehole terminated at 150.5 ft on 7/26/06
152									
153									
154									
155									
156									
157									
158									
159									
160									
161									
162									
163									
164									
165									
166									
167									
168									
169									
170									
171									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-304

Type and Diameter of Boring: Mud Rotary / 4 inch/HQ	Boring Location: Nuclear Island		Total Depth: 150 feet
Drilling Contractor and Rig: MACTEC/White/331145 / CME 55 LC	Elevation at Boring: 415.3 feet	Ground Water Depth: 0 feet	Depth to Bedrock: 52.7 feet
Sampling Method: Standard	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 14	Date Started: 6/5/06
	Borehole Inclination: 0	Logged by: K. Miller/C. Gandy	Date Completed: 7/12/06

Reviewed by / Date: M. Cooke 7/24/06
Reviewed by / Date: Clay Lane 12/4/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-2		SPT 1	1 2 3	15/18						**SILT** sandy (ML); yellowish red (5 YR 5/8); damp; medium stiff; 65% silt, 35% sand; low plasticity; contains rock fragments; micaceous; RESIDUUM	Residuum
2-4		SPT 2	3 4 6	15/18						SAA; except red (2.5 YR 5/8); stiff	
4-6		SPT 3	4 4 6	17/18						SAA; except strong brown (7.5 YR 5/8); stiff	
6-8		SPT 4	3 5 7	13/18					ML	SILT sandy (ML); light olive brown (2.5 Y 5/4); damp; stiff; 60% silt, 40% sand; low to no plasticity; micaceous; RESIDUUM	
8-10		SPT 1	4 4 7	14/18					SM	SAND silty (SM); light olive brown (2.5 Y 5/4); damp; medium dense; 55% sand, 45% silt; non plastic; micaceous; RESIDUUM	
10-12		SPT 5	4 5 7	13/18							
12-14		SPT 6	4 6 8	13/18					ML	SILT sandy (ML); dark yellowish brown (10 YR 4/6); damp; stiff; 60% silt, 40% sand, non plastic; micaceous; SAPROLITE	Saprolite
14-16											
16-18									ML	SILT sandy (ML); dark yellowish brown (10 YR 4/6); moist; stiff; 70% silt; 30% sand; low plasticity; micaceous	
18-20		SPT 2	4 6 7	14/18							
20-22											
22-24		SPT 7	5 7 10	14/18					ML	SILT sandy (ML); dark yellowish brown (10 YR 4/4); damp; very stiff; 60% silt, 40% sand; low plasticity; micaceous	
24-26											
26-28											
28-30		SPT 3	5 7 7	13/18						SAA; except (10 YR 3/6); stiff	
30-32											
32-34									ML	SILT sandy (ML); dark yellowish brown (10 YR 3/6); moist; stiff; 60% silt, 40% sand; low plasticity; micaceous	
34-36		SPT 8	5 6 9	15/18							
36-38											
38-40		SPT 4	5 7 10	16/18							

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-304

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40										SILT sandy (ML); dark yellowish brown (10 YR 3/6); moist; stiff; 60% silt, 40% sand; low plasticity; micaceous *(Continued from previous page)*	
44		SPT 9	5 7 9	16/18							
49		SPT 10	3 4 7	14/18							
53										PARTIALLY WEATHERED ROCK drilled with casing	Tricone refusal on 6/5/06

Project Name : Job Number
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SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-304

Type and Diameter of Boring: Mud Rotary / 4 inch/HQ	Boring Location: Nuclear Island		Total Depth: 150 feet
Drilling Contractor and Rig: MACTEC/White/331145 / CME 55 LC	Elevation at Boring: 415.3 feet	Ground Water Depth: 0 feet	Depth to Bedrock: 52.7 feet
Casing Size and Depth: 4 / 52.7 feet	Length of Core Barrel and Bit: 10 feet / 3.75 feet	No. of Core Boxes: 7	Date Started: 6/5/06
	Borehole Inclination: 0	Logged by: K. Miller/C. Gandy	Date Completed: 7/12/06

Reviewed by / Date: M. Cooke 7/24/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
53	1	1.7 / 2.3	74	CW to SW	R1 to R3			GRANODIORITE; white to black; coarse grained; quartz, plagioclase; biotite; hornblende, pyrite ▽	Drill casing to 52.7 on 6/26/06
55									End of 6/26/06; water level at 0 ft
57	2	4.7 / 5.0	85	F to MW	R2 to R3				Begin day 6/27/06; water level at 37 ft
60								HORNBLENDE GNEISS; light to dark gray; fine grained; hornblende, biotite, feldspar, quartz	
61	3	4.8 / 4.8	100	F	R3			GRANODIORITE; white to black; coarse grained; quartz, feldspar, biotite, hornblende, and pyrite	
65	4	4.7 / 5.3	89	F to CW	R1 to R3				Top of sound rock
70	5	5.0 / 5.0	95	F	R3				
75	6	5.0 / 5.0	98	F	R3				
80	7	5.5 / 5.5	96	F	R3				End day 6/27/06; water level at 0 ft Begin day 7/5/06; water level at 37 ft
85	8	9.7 / 9.7	97	F	R3				
92									

Project Name : Job Number
MACTEC
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ROCK LOG - Boring No. B-304

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
93-95									
96-105	9	10.2 / 10.2	100	F	R3			QUARTZ DIORITE; medium to dark gray; coarse grained; quartz, hornblende; biotite; feldspar, and accessory pyrite	End day 7/5/06; water level at 0 ft Begin day 7/6/06
106-115	10	9.8 / 9.8	100	F	R3			SAA with abundant veins of granodiorite up to 0.3 ft in width, epidote? interstially	
116-119	11	4.6 / 4.6	100	F	R4			TRANSITION ZONE FROM QUARTZ DIORITE to GRANODIORITE	
120-124	12	4.5 / 4.5	100	F	R4			GRANODIORITE; white to black; coarse grained; quartz, feldspar, hornblende, biotite, pyrite, muscovite	End day 7/6/06; water level at 0 ft Begin day 7/10/06; water level at 55 ft End day 7/10/06; water level at 0 ft Begin day 7/11/06; water level at 55 ft End day 7/11/06; water level at 0 ft Begin day 7/12/06
125-129	13	4.5 / 5.0	100	F	R4				
130-132	14	5.0 / 5.0	100	F	R4			QUARTZ DIORITE	

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-304

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
133								GRANODIORITE; white and black; coarse grained; contains quartz, feldspar, hornblende, biotite	
134									
135									
136									
137	15	5.0/5.0	100	F	R4				
138									
139									
140									
141									
142	16	5.0/5.0	100	F	R4			Some zones of quartz diorite	
143									
144									
145									
146									
147	17	5.0/5.8	90	F	R4				
148									
149									
150								CORING TERMINATED at 150.0 ft	Boring terminated on 7/12/06
151									
152									
153									
154									
155									
156									
157									
158									
159									
160									
161									
162									
163									
164									
165									
166									
167									
168									
169									
170									
171									
172									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-305

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Nuclear Island		Total Depth: 175 feet
Drilling Contractor and Rig: TRIGON/Toothman/90117 / B 57	Elevation at Boring: 423.9 feet	Ground Water Depth: 94 feet	Depth to Bedrock: 57.5 feet
Sampling Method: Standard	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 14	Date Started: 4/28/06
	Borehole Inclination: 0	Logged by: J. Liles	Date Completed: 5/16/06

Reviewed by / Date: M. Cooke 5/17/06
Reviewed by / Date: Clay Sams 11/30/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-1		SPT 1	2 3 2	15/18					SM	SAND silty (SM); red (2.5 YR 4/6); loose; fine to medium grained; trace clay; low to medium plasticity; RESIDUUM	Residuum
2-3		SPT 2	3 5 11	15/18	●	●				SAA; medium dense; 32% fines	
4-5		SPT 3	5 10 11	16/18	●	●	●			SAND silty (SM); red (2.5 YR 4/6); medium dense; trace clay; contains mica; no plasticity 47% fines; RESIDUUM	
6-7		SPT 4	3 6 7	12/18						SAA	
8-9		SPT 5	3 5 7	16/18	●	●				SAND silty (SM); red (2.5 YR 4/8); medium dense; fine to medium grained; trace clay; very micaceous; low plasticity; 29% fines; RESIDUUM	
10-11		SPT 6	4 6 9	12/18						SAA; brown (7.5 YR 4/4); red and white	
12-13		SPT 7	3 6 8	15/18	●	●				SAA; 31% fines	
14-15		SPT 8	3 7 8	14/18	●	●				SAND silty (SM); brown (10 YR 4/3); red and white; medium dense; fine to medium grained; micaceous; 34% fines RESIDUUM	
16-17		SPT 9	3 6 9	16/18						SAND silty (SM); brown (10 YR 4/3); red and white; medium dense; fine to coarse grained; very micaceous; no plasticity; RESIDUUM	
18-19		SPT 10	4 6 8	14/18	●	●				SAA; 25% fines	
20-21											Top of saprolite
22-23		SPT 11	4 6 7	16/18							
24-25		SPT 12	3 4 8	15/18	●	●				SAA; 28% fines	

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-305

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40									SM		
41											
42											
43											
44		SPT 13	4 5 8	15/18						SAA, black and white	
45											
46											
47											
48											
49		SPT 14	3 6 8	16/18	●	●				SAA; 24% fines	
50											
51											
52										No recovery	
53									▼	PARTIALLY WEATHERED ROCK	
54		SPT 15	50/5	0/5						BORING TERMINATED AT 57.5 ft. see rock log	
55											
56											
57											
58											
59											
60											
61											
62											
63											
64											
65											
66											
67											
68											
69											
70											
71											
72											
73											
74											
75											
76											
77											
78											
79											
80											

Project Name : Job Number	ROCK LOG - Boring No. B-305
MACTEC SCE&G COL : 6234-06-3534	

Type and Diameter of Boring Mud Rotary / 3 7/8 inch/HQ	Boring Location Nuclear Island		Total Depth 175 feet
Drilling Contractor and Rig TRIGON/Toothman/90117 / B 57	Elevation at Boring 423.9 feet	Ground Water Depth 94 feet	Depth to Bedrock 57.5 feet
Casing Size and Depth 4 / 57.5 feet	Length of Core Barrel and Bit	No. of Core Boxes	Date Started 4/28/06
	Borehole Inclination 0	Logged by J. Liles	Date Completed 5/16/06

Reviewed by / Date M. Cooke 5/17/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
58								GRANODIORITE; black and white; weathered zone from 57.5 to 60.6 ft; 35 to 45° dipping joints; some pyrite mineralization along joint surfaces	Tricone bit refusal at 57.5 ft on 4/28/06
59	1	4.7/5.0	58	MW	R1			Fracture zone 57.5 to 60.6 ft	
60									
61				SW	R3				Top of sound rock
62								GRANODIORITE; black and white with xenoliths of black amphibolite schist.	
63									
64								Fracture zone 64 to 64.5 ft	
65	2	4.0/5.0	74	F	R3 to R4				
66									
67									
68									
69									
70	3	5.0/5.0	100	F	R3 to R4				
71									
72									
73								GRANODIORITE MIGMATITE; black and white with some scattered xenoliths of black amphibolite schist fine to coarse grained	
74									
75	4	5.0/5.0	100	F	R4				
76									
77									
78									
79								AMPHIBOLITE SCHIST; black; fine grained	
80	5	5.0/5.0	100	F	R4				5/1/06 5:30 pm at water at 52.5 ft 5/2/06 7:30 am at water at 45.5 ft.
81									
82									
83								HORNBLENDE GNEISS; black; fine grained; some quartz dikes	
84									
85	6	5.0/5.0	96	F	R4				End drilling on 5/2/06 Begin drilling 5/13/06 at 1:45 pm water at 53.5 ft
86									
87									
88								Some quartz dikes and zones of granodiorite with pyrite visible at 89.0 to 89.8 ft and 90.7 to 91.3 ft	
89									
90	7	5.0/5.0	100	F	R4				
91									
92									
93								Granodiorite intrusion from 93.0 to 93.3 ft.; moderately fractured ▽	
94									
95	8	5.0/5.0	100	F	R4				
96									
97									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-305

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
98									End drilling 5/13/06 at 5:15 pm
99									water at 28.0 ft.
100	9	4.0/4.0	100	F	R4				Begin day 5/14/06 at 7:30 am
101									water at 50.0 ft.
102								Some granodiorite intrusions	
103									End day 5/14/06
104	10	5.0/5.0	100	F	R4				Begin day 5/15/06 at 7:45 am
105								Granodiorite intrusion 0.2 ft with pyrite visible	water at 53.0 ft.
106								BIOTITE GNEISS MIGMATITE; black and white;	
107								fine to medium grained; some quartz dikes and	
108								small granodiorite intrusions; some small xenoliths	
109	11	5.0/5.0	100					of amphibolite schist at 30 to 60° foliation	
110									
111				F	R4				
112									
113									
114	12	5.0/5.0	100						
115									
116				F	R4				
117									
118									
119	13	5.0/5.0	100	F	R4				
120									
121									
122								AMPHIBOLITE SCHIST; black with zones of	
123								granodiorite; black and white; quartz dikes; fine to	
124	14	5.0/5.0	100	F	R4			medium grained	
125									
126									
127									
128									
129	15	5.0/5.0	96	F	R4				
130									
131									
132									
133									
134	16	5.0/5.0	100	F	R4			Granodiorite zone from 134.2 to 134.6 ft	
135								HORNBLENDE GNEISS; black; fine grained; some	
136								small xenoliths of black amphibolite schist	
137									

Project Name : Job Number

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SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-305

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
138									
139	17	5.0/5.0	88	F	R4			BIOTITE GNEISS and QUARTZ and PLAGIOCLASE GNEISS; black and white; fine to medium grained; 20 to 40° foliation; some small xenoliths of amphibolite schist. Totally healed vertical discontinuity	End day 5/15/06 Begin day 5/16/06 at 8:15 am water at 94 ft.
140									
141									
142									
143	18	5.0/5.0	96	F	R4			BIOTITE GNEISS; bluish black; fine grained; with zones of granodiorite migmatite; quartz dikes and scattered xenoliths of black amphibolite schist	
144									
145									
146									
147									
148	19	5.0/5.0	58	F	R4			GRANODIORITE; black and white; fine to medium grained with zones of fine grained; black amphibolite schist	
149									
150									
151									
152									
153	20	5.0/5.0	86	F	R4				
154									
155									
156									
157									
158	21	5.0/5.0	100	F	R4				
159									
160									
161									
162									
163	22	5.0/5.0	90	F	R4				
164									
165									
166									
167								Feldspar and quartz vein visible	
168	23	5.0/5.0	78	F	R4			CORING TERMINATED at 175.0 ft.	
169									
170									
171									
172									
173	24	3.5/3.5	91	F	R4				
174									
175									Boring terminated on 5/16/06
176									
177									

Project Name : Job Number MACTEC SCE&G COL : 6234-06-3534	**SOIL LOG - Boring No. B-305UDP**

Type and Diameter of Boring Mud Rotary / 6 inch	Boring Location Nuclear Island		Total Depth 55.5 feet
Drilling Contractor and Rig MACTEC/Oglesby/219907 / CME 75	Elevation at Boring 424 feet	Ground Water Depth	Depth to Bedrock
Sampling Method UD	Sample Driving Hammer/Drop Pitcher sampler / NA	No. of Samples 2	Date Started 8/16/06
	Borehole Inclination 0	Logged by C. Gandy	Date Completed 8/16/06

Reviewed by / Date M. Cooke 8/20/06

Reviewed by / Date Clay Sams 12/1/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0										Drilled without SPT sampling to obtain Pitcher barrel undisturbed samples	

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-305UDP

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40										Drilled without SPT sampling to obtain Pitcher barrel undisturbed samples *(Continued from previous page)*	
49		UDP 1		15/24						SILT sandy (ML); light brown (7.5 YR 6/4); moist; low plasticity; 90% silt; 10% sand; micaceous; SAPROLITE; top of Pitcher UD sample	Adjacent boring B-305 encountered SAND silty (SM) with 24% fines within this depth interval
51										SILT sandy (ML); light brown (7.5 YR 6/4); moist; low plasticity; 90% silt; 10% sand; micaceous; SAPROLITE; bottom of Pitcher UD sample	
54		UDP 2		16.5/24						SILT sandy (ML); brown (7.5 YR 6/4); moist; medium plasticity; 85% silt; 15% sand; micaceous; SAPROLITE; top of Pitcher UD sample	
56										SAND silty (SP-SM); black (7.5 YR 2.5/1) to white (10 R 8/1); damp; non plastic; sand 40%; silt 10% abundant gravel; SAPROLITE/PARTIALLY WEATHERED ROCK; bottom of Pitcher UD sample	

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-306

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Nuclear Island		Total Depth: 215 feet
Drilling Contractor and Rig: MACTEC/White/331145 / CME 55 LC	Elevation at Boring: 413.4 feet	Ground Water Depth: 38 feet	Depth to Bedrock: 44.5 feet
Sampling Method: Standard	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 13	Date Started: 5/29/06
	Borehole Inclination: 0	Logged by: K. Miller	Date Completed: 6/9/06

Reviewed by / Date: M. Cooke 6/19/06
Reviewed by / Date: Clay Sams 11/30/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-2		SPT 1	2 2 5	18/18					ML	SILT sandy (ML); red (10 Y 4/8); damp; medium stiff; 65% silt, 35% sand; low plasticity; contains small roots; RESIDUUM	Top of Residuum
2-3		SPT 2	4 9 10	18/18	●	●	●		ML	SILT sandy with clay (ML); except very stiff; no roots; 21% sand	
4-5		SPT 3	4 4 5	16/18	●	●			SM	SAND silty (SM); red (10 Y 4/8); damp; medium dense; 30% fines; low plasticity; RESIDUUM	
6-7		SPT 4	3 4 5	16/18	●	●			ML	SILT sandy (ML); 45% sand	
8-10		SPT 5	2 3 5	13/18							
11-12		SPT 6	2 3 4	12/18	●	●	●		SM	SAND silty (SM); red (2.5 YR 4/6); loose; 43% fines; no plasticity; RESIDUUM	
13-14		SPT 7	2 4 5	12/18					MH	SILT sandy (MH); yellowish red (5 YR 5/6); stiff; 35% sand; micaceous; low plasticity; schist texture; SAPROLITE	Top of Saprolite
19-20		SPT 8	3 5 6	12/18	●	●				SILT sandy (MH); medium dense; 31% sand	
24-25		SPT 9	2 2 3	16/18	●	●	●			SILT clayey with sand (MH); brownish yellow (10 Y 6/8); moist; medium stiff; 23% sand; low plasticity	
27-30		SPT 10	4 4 7	16/18						SILT sandy (ML); dark yellowish brown (10 Y 4/6); moist; stiff; 30% sand; low plasticity; with manganese stains	
34-35		SPT 11	5 6 7	18	●	●			SM	SAND silty (SM); light olive brown (2.5 Y 4/4); 30% fines; medium dense; moist; low plasticity; micaceous	
38										▽	
39-40		SPT 12	4 4 6	18	●	●				SAA except 40% fines	

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-306

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40									SM	SAND silty (SM); dark olive brown (2.5 Y 3/3); 60% sand, 40% silt; very dense; low to no plasticity; micaceous; PARTIALLY WEATHERED ROCK	
41											
42											
43											
44		SPT 13	50/5	5							Tricone refusal at 44.5 ft. 5/29/06, see rock log
45											
46											
47											
48											
49											
50											
51											
52											
53											
54											
55											
56											
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78											
79											
80											

Project Name : Job Number	ROCK LOG - Boring No. B-306
MACTEC SCE&G COL : 6234-06-3534	

Type and Diameter of Boring Mud Rotary / 3 7/8 inch/HQ	Boring Location Nuclear Island		Total Depth 215 feet
Drilling Contractor and Rig MACTEC/White/331145 / CME 55 LC	Elevation at Boring 413.4 feet	Ground Water Depth 38 feet	Depth to Bedrock 44.5 feet
Casing Size and Depth 4 / 44 feet	Length of Core Barrel and Bit 8 feet / 1 feet	No. of Core Boxes 14	Date Started 5/29/06
	Borehole Inclination 0	Logged by K. Miller	Date Completed 6/9/06

Reviewed by / Date M. Cooke 6/19/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
45	1	1.4/1.5	72	MW to SW	R2 to R3			GRANODIORITE; white to black (10 YR 8/1 to 2/1); medium to coarse grained; quartz, feldspar, hornblende, biotite.	
46									
47				F	R3				
48	2	4.2/5.0	50						
49				HW	R0 to R1				
50									
51								MIGMATITE; black to white (10 YR 2/1 to 8/1); medium to coarse grained; quartz, biotite, feldspar, hornblende.	~50% return on core water
52									
53	3	5.0/5.0	100	F	R3				
54									
55								GRANODIORITE; white to black (10 YR 8/1 to 2/1); medium to coarse grained; quartz, feldspar, hornblende, biotite	
56									
57									
58	4	5.0/5.0	100	F	R3				
59									
60									
61									
62								HORNBLENDE GNEISS; black (10 YR 2/1); fine to medium grained; hornblende, biotite, quartz, feldspar.	
63	5	5.0/5.0	100	F	R3				
64								GRANODIORITE; white to black (10 YR 8/1 to 2/1); medium to coarse grained; quartz, feldspar, hornblende, biotite	
65									
66								QUARTZ DIORITE; black (10 YR 2/1); fine to medium grained; biotite, quartz, feldspar	End drilling on 6/6/06. Water at 0 ft. (core water) 6/7/06 groundwater at 33.5 ft.
67									
68	6	5.0/5.0	100	F	R3				
69									
70									
71									
72									
73	7	5.0/5.0	90	F	R3				
74									
75								Pegmatitic dike; quartz, feldspar	
76									
77									
78	8	5.0/5.0	100	F	R3				
79									
80								GRANODIORITE, SAA	
81									
82								QUARTZ DIORITE, SAA	
83	9	5.0/5.0	100	F	R3				
84								Pegmatitic dike; quartz, feldspar	

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-306

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
85								GRANODIORITE, SAA	
86									
87								Transitional zone from granodiorite to quartz diorite	
88	10	5.0/5.0	100	F	R3				
89									
90								QUARTZ DIORITE; black (10 YR 2/1); fine to medium grained; biotite, quartz, feldspar	
91									
92									
93	11	5.0/5.0	100	F	R3				
94									
95									
96									
97									
98	12	5.0/5.0	100	F	R3				
99								~0.1 ft. thick pegmatite dike; quartz, feldspar	
100								GRANODIORITE; white to black (10 YR 8/1 to 2/1); medium grained	
101									
102									
103	13	5.0/5.0	100	F	R3			Transition zone from granodiorite to quartz diorite	
104									
105								QUARTZ DIORITE; black (10 YR 2/1); fine to medium grained; biotite, quartz, feldspar	
106									
107									
108	14	5.0/5.0	98	F	R3			Transition zone from quartz diorite to granodiorite; medium to large grained; quartz, feldspar, biotite	
109									
110									
111									
112									
113	15	5.0/5.0	100	F	R3				
114									
115									
116									
117								GRANODIORITE; ~2.7 ft. thick zone; white to black; (10 YR 8/1 to 2/1); medium to coarse grained	
118	16	5.0/5.0	98	F	R3				
119									
120									
121									
122								GRANODIORITE~1.4 ft thick zone; white to black (10 YR 8/1 to 2/1); medium to coarse grained	
123	17	5.0/5.0	100	F	R3			QUARTZ DIORITE; SAA	
124									

Project Name : Job Number
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ROCK LOG - Boring No. B-306

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
125									
126									End drilling on 6/7/06. Water at 0 ft. (core water) 6/8/06 groundwater at 40.0 ft.
127									
128	18	5.0/5.0	100	F	R3				
129									
130								GRANODIORITE; ~0.7 ft thick zone	
131									
132									
133	19	5.0/5.0	100	F	R3			QUARTZ DIORITE; black (10 YR 2/1); coarse grained	
134									
135									
136								GRANODIORITE; white to black (10 YR 8/1 to 2/1); medium to coarse grained	
137									
138	20	5.0/5.0	95	F	R3				
139									
140								~0.1 thick pegmatite dike; quartz, feldspar	
141								~0.8 ft thick pegmatite dike; quartz, feldspar	
142								GRANODIORITE ~1.0 ft. thick zone white to black (10 YR 8/1 to 2/1); medium grained	
143	21	5.0/5.0	100	F	R3			HORNBLENDE GNEISS; black (10 YR 2/1); fine grained	142.3 to 145.2 ft.Potential shear zone; evidence of nearly vertical partially healed fractures (incipient); 80 to 85°
144									
145									
146								3 ft zone of pegmatite dikes; quartz, feldspar, biotite	
147									
148	22	5.0/5.0	100	F	R3				
149									
150									
151									
152									
153	23	5.0/5.0	100	F	R3				
154									
155								3 ft zone of pegmatite dikes; quartz, feldspar, biotite	
156									
157									
158	24	5.0/5.0	100	F	R3				
159									
160									
161									
162									
163	25	5.0/5.0	100	F	R3				
164									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-306

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
165									
166									
167									
168	26	5.0/5.0	100	F	R3				
169									
170									
171									
172								GRANODIORITE ~0.5 ft thick zone; white to black (10 YR 8/1 to 2/1); medium grained	
173	27	5.0/5.0	100	F	R3				
174									
175									
176								~0.4 thick pegmatite dike; quartz, feldspar	
177									
178	28	5.0/5.0	100	F	R3				
179									
180									
181									
182									End drilling on 6/8/06. Water at 0 ft due to core water 6/9/06 at 9:00 am groundwater at 38.0 ft.
183	29	5.0/5.0	100	F	R3			GRANODIORITE ~2.0 ft thick zone; white to black (10 YR 8/1 to 2/1); medium grained	
184									
185									
186									
187								GRANODIORITE; white to black (10 YR 8/1 to 2/1); medium to coarse grained	
188	30	5.0/5.0	100	F	R3				
189									
190									
191									
192									
193	31	5.0/5.0	100	F	R3			QUARTZ DIORITE	
194									
195									
196									
197									
198	32	5.0/5.0	100	F	R3			Migmatitic zone of hornblende; gneiss; granodiorite	
199									
200									
201									
202									
203	33	5.0/5.0	100	F	R3				
204									

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-306

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
205									
206									
207									
208	34	5.0 / 5.0	100	F	R3				
209								QUARTZ DIORITE; black (10 YR 2/1); coarse grained	
210									
211									
212								GRANODIORITE ZONE; white to black (10 YR 8/1 to 2/1); medium to coarse grained	
213	35	4.0 / 4.0	100	F	R3				
214									
215									Finished planned depth on 6/9/06 at 215.0 ft. water at 0 ft drilling water)
216									
217									
218									
219									
220									
221									
222									
223									
224									
225									
226									
227									
228									
229									
230									
231									
232									
233									
234									
235									
236									
237									
238									
239									
240									
241									
242									
243									
244									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-307

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Power Block		Total Depth: 176 feet
Drilling Contractor and Rig: TRIGON/Wichard/190742 / CME 850	Elevation at Boring: 402.6 feet	Ground Water Depth: 40.4 feet	Depth to Bedrock: 40 feet
Sampling Method: Standard	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 12	Date Started: 6/8/06
	Borehole Inclination: 0	Logged by: J. Liles	Date Completed: 6/21/06

Reviewed by / Date: M. Cooke 7/6/06

Reviewed by / Date: Clay Sam 11/30/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-1		SPT 1	1 1 1	12/18			●		CL-ML	CLAY silty, sandy (CL-ML); dark red (2.5 YR 3/6); moist; very soft; fine to medium sand; low to medium plasticity; RESIDUUM	
2-3		SPT 2	2 6 6	14/18	●	●	●		MH	SILT clayey with sand (MH); dark red (2.5 YR 3/6); moist; stiff; fine to medium sand; no to low plasticity; 8% sand; RESIDUUM	
4-5		SPT 3	6 8 12	24/18	●	●				SAA; very stiff; 16% sand	
6-7		SPT 4	6 7 10	14/18						SILT clayey with sand (MH); dark red (2.5 YR 3/6); moist; medium dense; 17% sand; no plasticity; trace mica; RESIDUUM	
8-9		SPT 5	3 5 5	14/18	●	●			SM	SAND silty (SM); strong brown (7.5 YR 4/6); moist; loose; fine to medium sand; no plasticity; slightly micaceous; 33% fines; SAPROLITE	Saprolite
10-11		SPT 6	4 5 9	13/18	●	●				SAA; fine to coarse grained; 38% fines	
12-13		SPT 7	11 13 15	0/18						No recovery	Residuum No recovery from 13.5 to 15.0 ft
16-17		SPT 7A	6 6 7	6/18	●	●	●		ML	SILT sandy (ML); dark red (2.5 YR 3/6); moist;stiff; no plasticity; slightly micaceous; 44% fine to medium sands; RESIDUUM	
18-19		SPT 8	5 6 7	6/18					ML	SILT sandy, clayey (ML); strong brown (7.5 YR 4/6); moist; stiff; fine to coarse sand; low to no plasticity; slightly micaceous; SAPROLITE	Saprolite
24-25		SPT 9	4 6 14	15/18	●	●			ML	SILT sandy (ML); strong brown (7.5 YR 4/6); moist; very stiff; fine to coarse sand; no plasticity; 38% sand, 2% gravel; slightly micaceous; SAPROLITE	
27-28		SPT 10	5 5 7	15/18	●	●			SM	SAND silty (SM); dark yellowish brown (10 YR 4/6); moist; medium dense; fine to medium sand; no plasticity; 42% fines; SAPROLITE	
34-35		SPT 11	7 12 10	11/18	●	●				SAND silty, gravelly (SM); brown (7.5 YR 4/2); moist; medium dense; fine to medium sand; no plasticity; very micaceous; 24% fines, 10% gravel; SAPROLITE	
39-40		SPT 12	4 50/5	9/11	●	●				SAA; strong brown (7.5 YR 4/6); slightly micaceous; 46% fines. PARTIALLY WEATHERED	Partially weathered rock

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-307

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Power Block		Total Depth: 176 feet
Drilling Contractor and Rig: TRIGON/Wichard/190742 / CME 850	Elevation at Boring: 402.6 feet	Ground Water Depth: 40.4 feet	Depth to Bedrock: 40 feet
Casing Size and Depth: 4 / 39.5 feet	Length of Core Barrel and Bit: 8.5 feet	No. of Core Boxes: 10	Date Started: 6/8/06
	Borehole Inclination: 0	Logged by: J. Liles	Date Completed: 6/21/06

Reviewed by / Date M. Cooke 7/6/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
40	1	2.0 / 2.0	100	SW to F	R3				Top of sound rock
41									
42								K-spar and quartz dike	
43									
44	2	4.5 / 5.0	74	F	R3			Slicken sided surface dipping 45°, slightly fractured	100% water loss
45									
46									
47								GRANODIORITE; black and white; medium to coarse grained; contains quartz; K-spar; small xenoliths of black fine grained amphibolite schist; some pyrite visible	
48									
49	3	5.0 / 5.0	96	F	R4				
50								GRANODIORITE MIGMATITE; black and white; fine to medium grained; small xenoliths of black amphibolite schist; contains quartz and K-spar; also contains hornblende; pyrite visible	
51									
52									
53								HORNBLENDE GNEISS; black and white; with zones of granodiorite migmatite; fine grained; foliation at 45°	
54	4	5.0 / 5.0	100	F	R4				
55									
56									
57									
58									
59	5	5.0 / 5.0	94	F	R4				
60									
61									
62									
63									
64	6	5.0 / 5.0	100	F	R4				
65								GRANODIORITE; black and white; medium to coarse grained; zones of black, fine grained amphibolite schist; contains K-spar, hornblende, quartz, and traces of pyrite	
66									
67									
68	7	5.0 / 3.0	100	F	R4			Migmatic zone from 67.7 to 68.8 ft	
69									
70	8	5.0 / 2.0	100	F	R4				
71									
72								BIOTITE GNEISS; migmatite; black and white; fine to medium grained; contains quartz, feldspar, and a small xenolith of black amphibolite schist, pyrite visible	End drilling 6/11/06 groundwater at 36.6 ft Start drilling 6/12/06; groundwater at 41.1 ft
73									
74	9	5.0 / 5.0	100	F	R4			GRANODIORITE; black and white; medium to coarse grained; with zones of black fine grained amphibolite schist, and light green epidote dikes, contains hornblende, quartz, K-spar, and some pyrite is visible	
75									
76									
77									
78									
79	10	5.0 / 5.0	100	F	R4				
80									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-307

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
80									
81								SAA; with some xenoliths of amphibolite schist, along with some quartz dikes	
82									
83								Amphibolite schist zone from 82.6 to 85.1 ft	
84	11	5.0/5.0	100	F	R4				
85								SAA; closely spaced fractures	
86									
87								SAA; GRANODIORITE MIGMATITE	
88									
89	13	5.0/5.0	100	F	R4				
90									
91									
92									
93									
94	14	5.0/5.0	100	F	R4				
95									
96									
97								GRANODIORITE; black and white; medium to coarse grained; with a migmatitic hornblende zone and xenoliths of fine grained amphibolite schist; also contains quartz, feldspar, and some pyrite mineralization	
98									
99	15	5.0/5.0	100	F	R4				
100									
101									
102								MIGMATITE; bluish black and white; fine to medium grained; contains a zone of black amphibolite schist with pyrite mineralization; also contains a quartz and K-spar dike	
103									
104	16	5.0/5.0	100	F	R4				
105									
106									
107								GRANODIORITE MIGMATITE; black and white; fine to coarse grained; with scattered xenoliths of black, fine grained amphibolite schist	
108									
109	17	5.0/5.0	86	F	R4				
110									
111									
112									
113									
114	18	5.0/5.0	100	F	R4				
115									
116									
117									End drilling 6/12/06
118									Start drillling 6/13/06;
119	19	5.0/5.0	100	F	R4				groundwater at 41.0 ft
120									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-307

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
120								SAA with zones of black fine grained amphibolite schist	
121									
122									
123	20	2.5/2.5	100	F	R4				
124									
125	21	2.0/2.0	100	F	R4				
126									
127									End 6/13/06
128	22	5.0/5.0	100	F	R4				Start drilling 6/20/06; groundwater 42.5 ft
129									
130									
131								GRANODIORITE MIGMATITE; black and white; fine to medium grained; with xenoliths of black amphibolite schist, contains quartz, K-spar, and hornblende	End drilling 6/20/06
132									Start drilling 6/21/06
133	23	5.0/5.0	100	F	R4				groundwater at 40.7 ft
134									
135								SAA, with a zone of black, fine to medium grained amphibolite schist	
136									
137									
138	24	5.0/5.0	98	F	R4				
139									
140									
141								HORNBLENDE GNEISS; bluish black; fine to medium grained; with a granodiorite migmatic zone; trace of pyrite visible	
142									
143	25	5.0/5.0	100	F	R4				
144									
145								MIGMATITE, SAA	
146									
147									
148	26	5.0/5.0	100	F	R4				
149									
150									
151								GRANODIORITE MIGMATITE; black and white; fine to coarse grained; contains small xenoliths of black fine grained amphibolite schist, contains hornblende, K-spar, quartz, and biotite; trace of pyrite mineralization	
152									
153	27	5.0/5.0	100	F	R4				
154								CORING TERMINATED at 176.0 ft	
155									
156									
157									
158	28	5.0/5.0	100	F	R4				
159									
160									

Project Name : Job Number

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ROCK LOG - Boring No. B-307

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
160									
161									
162									
163	29	5.0/5.0	100	F	R4				
164									
165									
166									
167									
168	30	5.0/5.0	96	F	R4				
169									
170									
171									
172									
173	31	4.8/5.0	96	F	R4				
174									
175									
176									Boring terminated at 176.0 ft on 6/21/06 at 4:00 pm 6/22/06; groundwater 40.4 ft
177									
178									
179									
180									
181									
182									
183									
184									
185									
186									
187									
188									
189									
190									
191									
192									
193									
194									
195									
196									
197									
198									
199									
200									

SOIL LOG_MFC SCE&G-6-30-06.GPJ WLA.GDT 12/4/06

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-307A

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Power Block		Total Depth: 40 feet
Drilling Contractor and Rig: MACTEC/Banks/337153 / CME550	Elevation at Boring: 402.4 feet	Ground Water Depth	Depth to Bedrock: 40 feet
Sampling Method: No sampling	Sample Driving Hammer/Drop: NA / NA	No. of Samples: 0	Date Started: 7/8/06
	Borehole Inclination: 0	Logged by: J. Liles	Date Completed: 7/8/06

Reviewed by / Date: M. Cooke 7/13/06
Reviewed by / Date: Clay Sam 12/4/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0										Drilled in soil without sampling to 40.0 ft for P-S velocity log in soil offset south of B-307	
40										Top of rock	Drill bit refusal at 40 ft Boring drilled for P-S suspension logging in soil

Project Name : Job Number	SOIL LOG - Boring No. B-308
MACTEC SCE&G COL : 6234-06-3534	

Type and Diameter of Boring Mud Rotary / 3 7/8 inch/HQ	Boring Location Power Block		Total Depth 115 feet
Drilling Contractor and Rig MACTEC/Banks/337153 / CME550	Elevation at Boring 418.3 feet	Ground Water Depth 47.2 feet	Depth to Bedrock 39.5 feet
Sampling Method Standard/UD	Sample Driving Hammer/Drop 140 lbs / 30 inches	No. of Samples 8	Date Started 8/1/06
	Borehole Inclination 0	Logged by J. Liles	Date Completed 8/3/06

Reviewed by / Date M. Cooke 8/6/06

Reviewed by / Date Clay Sams 12/4/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-2		SPT 1	2 2 3	13/18					SM	SAND silty, clayey (SM); dark red (2.5 YR 3/6); damp; fine to medium grained; loose; no to low plasticity; slightly micaceous; RESIDUUM	Residuum
2-4		SPT 2	6 7 8	21/18							
4-6		SPT 3	2 4 5	15/18					SM	SAND silty (SM); dark red (2.5 YR 3/6); damp; loose; fine to medium grained; non plastic; micaceous; RESIDUUM	
6-8		SPT 4	2 4 5	15/18					SM	SAA; yellowish brown (10 YR 5/4); damp; loose to medium dense; fine to medium grained; non plastic; slightly micaceous; SAPROLITE	First saprolitic sample
8-10		UD 1		14/24							
10-12		SPT 5	3 4 6	13/18							
12-14		SPT 6	4 5 6	12/18							
14-16											
16-18											
18-20		UD 2		18/24							
20-22											
22-24										SAA; dark yellowish brown (10 YR 3/6)	
24-26		SPT 7	3 6 6	13/18							End day 8/1/06 Begin day 8/2/06; water level at 0 ft
26-28											
28-30		UD 3		14/24							
30-32											
32-34											
34-36		SPT 8	3 5 6	16/18							
36-38											
38-40		UD 4		4/12						PARTIALLY WEATHERED ROCK, refusal, see rock log	Partially weathered rock

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-308

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Power Block		Total Depth: 115 feet
Drilling Contractor and Rig: MACTEC/Banks/337153 / CME550	Elevation at Boring: 418.3 feet	Ground Water Depth: 47.2 feet	Depth to Bedrock: 39.5 feet
Casing Size and Depth: 4 / 39.5 feet	Length of Core Barrel and Bit: 13.5 feet	No. of Core Boxes	Date Started: 8/1/06
	Borehole Inclination: 0	Logged by: J. Liles	Date Completed: 8/3/06

Reviewed by / Date: M. Cooke 8/6/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
40	1	5.1 / 5.5	62	MW to SW	R2 to R3			GRANODIORITE; black and white; medium to coarse grained	Refusal at 39.5 ft, see rock log on 8/2/06
45								Fracture zone 39.5 to 46.5 ft	
45	2	4.5 / 5.0	76	F	R3			SAA; bluish gray and black with zones of quartz diorite; with small xenoliths of black fine grained amphibolite schist	Top of sound rock
50	3	5.0 / 5.0	100	F	R4				
55	4	5.0 / 5.0	100	F	R4				
60	5	5.0 / 5.0	100	F	R4				
65	6	5.0 / 5.0	100	F	R4			SAA; black and white; quartz, feldspar, biotite, hornblende, and trace of pyrite	End day 8/2/06 Begin day 8/3/06; water level at 47.2 ft
70	7	5.0 / 5.0	100	F	R4			SAA; medium to coarse grained with zones of quartz diorite and amphibolite schist; some epidote present	
75	8	5.0 / 5.0	100	F	R4				
80									

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-308

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
80									
81									
82	9	5.0/5.0	100	F	R4				
83									
84								GRANODIORITE to BIOTITE GNEISS MIGMATITE; bluish gray, and white; medium to coarse grained	
85									
86									
87	10	5.0/5.0	100	F	R4				
88									
89									
90								BIOTITE GNEISS; bluish gray; fine to medium grained; contains some hornblende and quartz dikes with a trace of pyrite	
91									
92	11	5.0/5.0	100	F	R4			Totally healed fractured with epidote present at 92 ft	
93									
94									
95									
96									
97	12	5.0/5.0	100	F	R4				
98									
99									
100									
101									
102	13	5.0/5.0	100	F	R4			Granodiorite zone from 102 to 103 ft	
103									
104									
105								Trace of pyrite	
106									
107	14	5.0/5.0	100	F	R4				
108									
109									
110									
111								BIOTITE GNEISS and GRANODIORITE MIGMATITE	
112									
113	15	5.0/5.0	100	F	R4			CORING TERMINATED at 115 ft	
114									
115									Borehole terminated on 8/3/06
116									
117									
118									
119									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-309

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Power Block		Total Depth: 150 feet
Drilling Contractor and Rig: MACTEC/Banks/337153 / CME550	Elevation at Boring: 422.6 feet	Ground Water Depth: 48 feet	Depth to Bedrock: 46.5 feet
Sampling Method: Standard	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 9	Date Started: 7/19/06
	Borehole Inclination: 0	Logged by: J. Liles	Date Completed: 7/21/06

Reviewed by / Date: M. Cooke 7/24/06
Reviewed by / Date: Clay Sama 11/30/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-3		SPT 1	2 2 3	16/18					ML	SILT sandy (ML); yellowish red (5 YR 4/6); damp; fine to medium grained; medium stiff to stiff; slightly micaceous; RESIDUUM	Residuum
		SPT 2	2 4 6	12/18							
4-8		SPT 3	2 4 6	15/18			●		ML	SILT sandy (ML); dark red (10 R 3/6); mottled with light brown and white; damp; stiff; fine to medium grained; micaceous; non plastic; RESIDUUM	
		SPT 4	2 5 5	16/18						SAA; strong brown (7.5 YR 5/6);	
9-18		UD 1		24/24	●	●	●			SAND very silty (SM); strong brown (7.5 YR 5/6); damp; fine to medium grained; loose to medium dense; slightly micaceous; non plastic; 35% fines; SAPROLITE	Saprolite
		SPT 5	2 3 5	10/18							
		SPT 6	3 5 7	13/18						SAA; brown (7.5 YR 4/4); micaceous	
19-23		UD 2		18/24							
24-28		SPT 7	2 5 6	16/18						SAA; strong brown (7.5 YR 4/6); mottled with red and white	
29-32		UD 3		24/24	●	●	●		ML	SILT sandy (ML); 30% sand, 70% fines	
32-39		SPT 8	2 8 9	13/18					SM	SAND silty (SM) very micaceous; medium to coarse grained	
		UD		14		●				SAA; 49% fines	
40											

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-309

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40		4		24					SM		
41										SAND silty (SM); dark olive brown (2.5 Y 3/3); moist; medium to coarse grained; very dense; non plastic; slightly micaceous; SAPROLITE	
42											
43											
44		SPT 9	14 24 29	16 18							
45											
46											
47		SPT 10	50/2	0 2						No recovery, PARTIALLY WEATHERED ROCK Refusal at 46.5 ft see rock log	
48											
49											
50											
51											
52											
53											
54											
55											
56											
57											
58											
59											
60											
61											
62											
63											
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74											
75											
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80											

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-309

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Power Block		Total Depth: 150 feet
Drilling Contractor and Rig: MACTEC/Banks/337153 / CME550	Elevation at Boring: 422.6 feet	Ground Water Depth: 48 feet	Depth to Bedrock: 46.5 feet
Casing Size and Depth: 4 / 47 feet	Length of Core Barrel and Bit: 13.5 feet	No. of Core Boxes: 8	Date Started: 7/19/06
	Borehole Inclination: 0	Logged by: J. Liles	Date Completed: 7/21/06

Reviewed by / Date: M. Cooke 7/24/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
47–51	1	2.3 / 5.5	0	HW to MW	R1 to R2			GRANODIORITE; black and white; medium to coarse grained ▽	SPT terminated, bit refusal
52–56	2	1.7 / 5.0	20	MW	R2 to R3			Fracture zone 46.5 to 58.5 ft	
57–61	3	4.6 / 5.0	72	MW / F	R2 to R3 / R3			SAA; quartz, feldspar, hornblende, and biotite	Top of sound rock
62–66	4	5.0 / 5.0	100	F	R4			QUARTZ DIORITE; bluish gray and black; fine to medium grained;contains a couple of quartz dikes	
67–71	5	5.0 / 5.0	100	F	R4			GRANODIORITE; black and white; medium to coarse grained; contains some small xenoliths of amphibolite schist and also contains quartz, feldspar, hornblende, and biotite	Begin day 7/20/06 water level at 46 ft
72–76	6	5.0 / 5.0	100	F	R4				
77–81	7	5.0 / 5.0	100	F	R4			GRANODIORITE; SAA, with xenoliths of black fine grained amphibolite schist	
82–86	8	5.0 / 5.0	100	F	R4				

Project Name : Job Number

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ROCK LOG - Boring No. B-309

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
87									
88								GRANODIORITE; transitioning into a fine to medium grained HORNBLENDE GNEISS; with some quartz dikes; foliation at 25°	
89	9	5.0/5.0	100	F	R4				
90									
91									
92								MIGMATITE - GRANODIORITE and HORNBLENDE GNEISS bluish gray, black, and white, fine to coarse grained; contains quartz dikes and trace of pyrite	
93									
94	10	5.0/5.0	100	F	R4				
95									
96									
97									
98									
99	11	5.0/5.0	100	F	R4				
100									
101									
102									
103									
104	12	5.0/5.0	100	F	R4				
105									
106									
107								MIGMATITE; bluish gray, black, and white, fine to coarse grained, trace of pyrite CORING TERMINATED at 150.0 ft	
108									
109	13	5.0/5.0	100	F	R4				
110									
111									
112									
113									
114	14	5.0/5.0	100	F	R4				
115									
116									
117									
118									
119	15	5.0/5.0	100	F	R4				
120									
121									
122									
123									
124	16	5.0/5.0	100	F	R4				
125									
126									

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

ROCK LOG - Boring No. B-309

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
127									
128									
129	17	5.0/5.0	100	F	R4				
130									
131									
132									
133									
134	18	5.0/5.0	100	F	R4				Begin day 7/21/06 water level at 48 ft
135									
136									
137									
138									
139	19	5.0/5.0	100	F	R4				
140									
141									
142									
143									
144	20	5.0/5.0	100	F	R4				
145									
146									
147									
148	21	3.0/3.0	100	F	R4				
149									
150									Boring terminated on 7/21/06
151									
152									
153									
154									
155									
156									
157									
158									
159									
160									
161									
162									
163									
164									
165									
166									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-310

Type and Diameter of Boring: Mud Rotary / 4 7/8 inch/HQ	Boring Location: Power Block		Total Depth: 105.8 feet
Drilling Contractor and Rig: Gregg/Burnett/311025 / CME 55	Elevation at Boring: 417 feet	Ground Water Depth: 35 feet	Depth to Bedrock: 53.3 feet
Sampling Method: Standard/UD	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 10	Date Started: 7/22/06
	Borehole Inclination: 0	Logged by: M. Cooke/S. Woodham	Date Completed: 8/2/06

Reviewed by / Date: M. Cooke 8/4/06
Reviewed by / Date: Clay Sano 12/4/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-1		SPT 1	4 5 7	14/18					ML	SILT sandy (ML); yellowish brown (10 YR 5/6); with reddish brown; stiff; 20% sand; micaceous; RESIDUUM	
2-3		SPT 2	2 4 5	12/18					ML	SAA; dark red (10 R 3/6); white wheathered feldspar stringers	
4-5		SPT 3	2 6 7	12/18					ML	SILT sandy (ML); yellowish brown (10 YR 5/8); damp; stiff; ~15% sand, ~85% fines; relict structure; micaceous; SAPROLITE	Saprolite
6-7		SPT 4	4 4 7	14/18						SAA; some thin layers with manganese staining	
8-10		UD 1		22/24							
11-12		SPT 5	4 6 10	18/18							
13-14		SPT 6	2 4 8	14/18						SAA; slightly higher sand content ~20%	
15-20		UD 2		18/24							
21-24		SPT 7	4 5 7	16/18						SAA; dark yellowish brown (10 YR 4/6); abundant mica; well pronounced relict structure	
25-30		UD 3		19/24							
31-34		SPT 8	4 8 12	15/18							
35									▽		
36-39		UD		18						SILT sandy (ML); dark yellowish brown (10 YR 4/4); damp; stiff; 15 to 20% sand; micaceous;	
40											

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-310

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40		4		24						SAPROLITE SILT sandy (ML); yellowish brown (10 YR 5/8); damp; stiff; ~15% sand, ~85% fines; relict structure; micaceous; SAPROLITE *(Continued from previous page)*	
44		SPT 9	4 6 12	17/18							
47									ML	SILT gravely (ML); multicolored very dark brown (10 YR 2/2); damp; very stiff; ~15% gravel and sand, ~85% fines; SAPROLITE BORING TERMINATED at 53 ft, see rock log	
49		SPT 10	4 6 11	16/18							
53										PARTIALLY WEATHERED ROCK drilled with casing	Casing refusal at 53.3 ft see rock log

Project Name : Job Number
MACTEC
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ROCK LOG - Boring No. B-310

Type and Diameter of Boring: Mud Rotary / 4 7/8 inch/HQ	Boring Location: Power Block		Total Depth: 105.8 feet
Drilling Contractor and Rig: Gregg/Burnett/311025 / CME 55	Elevation at Boring: 417 feet	Ground Water Depth: 35 feet	Depth to Bedrock: 53.3 feet
Casing Size and Depth: 4.5 / 53 feet	Length of Core Barrel and Bit: 5 feet	No. of Core Boxes	Date Started: 7/22/06
	Borehole Inclination: 0	Logged by: M. Cooke/S. Woodham	Date Completed: 8/2/06

Reviewed by / Date: M. Cooke 8/4/06

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
54	1	1.4/1.7	59	MW to SW	R4			GRANODIORITE; gray, white, dark gray; fine to medium grained; igneous; massive; biotite, quartz, feldspar; contains quartz veins	End day 7/23/06 Begin day 7/24/06; water level at 35 ft
55									
56									
57	2	5.0/5.0	100	SW to F	R4				
58								MIGMATITE; granodiorite and quartz diorite; gray, very dark gray; fine to coarse grained; flowing texture; quartz, biotite, feldspar, K-spar, epidote	
59									
60								MIGMATITE; consiting of granodiorite, amphibolite schist, quartz diorite	End day 7/24/06 Begin day 7/25/06
61	3	4.5/5.0	92	F to HW	R2			Highly weathered zone 61.1 to 61.8 ft	
62									
63				F	R4				
64									
65								MIGMATITE; consisting of granodiorite, amphibolite schist, fine to coarse grained, flowing texture; feldspar, biotite, amphibolite, quartz pyrite, K-spar	End day 7/25/06 Begin day 7/26/06
66									
67	4	5.0/5.0	100	F	R4				
68									
69									
70									
71									
72	5	5.0/5.0	98	F	R4				
73									
74									
75									
76									
77	6	5.0/5.0	98	F	R4				
78									
79									
80									
81								QUARTZ DIORITE to GRANODIORITE; with amphibolite schist xenolith; gray, dark gray, fine to coarse grained, igneous; massive; feldspar, quartz, biotite, amphibole pyrite	
82	7	5.0/5.0	97	F	R4				
83									
84									
85								QUARTZ DIORITE; very dark gray, white, gray; fine to medium grained; massive; quartz, biotite; contains quartz dikes	
86									
87	8	5.0/5.0	100	F	R4				
88									
89									
90									
91								BIOTITE GNEISS; light gray, gray, with some dark gray; fine grained; igneous; biotite, quartz, muscovite, K-spar, pyrite, feldspar	
92	9	5.0/5.0	100	F	R4				
93									

Project Name : Job Number

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ROCK LOG - Boring No. B-310

Depth (feet)	Run No.	Recovery / Cut	% RQD	Weathering	Strength	In-Situ Testing	Lithology	Lithology	Remarks
94									
95									
96									
97	10	5.0 / 5.0	94	F	R4				
98									
99									
100									
101									
102									
103	11	5.0 / 5.0	95	F	R4				
104								CORING TERMINATED at 105.8 ft	
105									
106	12	0.8 / 0.8	100						Borehole terminated at 105.8 on 7/26/06
107									
108									
109									
110									
111									
112									
113									
114									
115									
116									
117									
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128									
129									
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131									
132									
133									

Project Name : Job Number
MACTEC
SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-311

Type and Diameter of Boring: Mud Rotary / 3 7/8 inch/HQ	Boring Location: Adjacent to Power Block		Total Depth: 175 feet
Drilling Contractor and Rig: MACTEC/Christian/211797 / CME 75	Elevation at Boring: 419.5 feet	Ground Water Depth: 55.1 feet	Depth to Bedrock: 56.5 feet
Sampling Method: Standard	Sample Driving Hammer/Drop: 140 lbs / 30 inches	No. of Samples: 15	Date Started: 5/11/06
	Borehole Inclination: 0	Logged by: J. Liles/K.Miller	Date Completed: 5/26/06

Reviewed by / Date: M. Cooke 5/30/06
Reviewed by / Date: Clay Lamm 11/30/06

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
0-1		SPT 1	2 3 5	21/18	●	●	●		MH	SILT clayey (MH); red (2.5 YR 4/6); fine to medium grained; stiff; low plasticity; slightly micaceous; 11% sand; RESIDUUM	Residuum
2-3		SPT 2	4 10 13	21/18	●	●			MH	SILT clayey with sand (MH); very stiff; 26% sand	
4-5		SPT 3	5 8 10	18/18	●	●	●			SAA; 36% sand	
6-7		SPT 4	3 10 10	16/18	●	●			ML	SILT sandy,clay (ML); red (2.5 YR 4/6); very stiff; fine sand; no to low plasticity; slightly micaceous; 30% sand; RESIDUUM	
8-9		SPT 5	3 7 8	18/18	●	●	●			SAA; 49% sand	
10-12		SPT 6	4 8 11	15/18	●	●			SM	SAND silty (SM); yellowish red (5 YR 4/6); mottled with white; medium dense; fine to medium grained; no plasticity; slightly micaceous; 32% fines; RESIDUUM	
13-14		SPT 7	5 8 11	16/18	●	●				SAA; mottled with white and brown; 24% fines	
15-17									ML	SILT sandy (ML); yellowish red (5 YR 4/6); very stiff; fine sand; no plasticity; slightly micaceous; 10% sand; RESIDUUM	
18-19		SPT 8	4 8 9	20/18	●	●					
20-22									SM	SAND silty (SM); yellowish red (5 YR 4/6); medium dense; slightly micaceous; 44% fines; SAPROLITE	Saprolite
23-24		SPT 9	4 8 11	12/18	●	●					
25-28											
29-30		SPT 10	7 10 12	14/18	●	●			ML	SILT sandy (ML); 28% sand; very stiff	
31-34										SILT sandy (ML); reddish brown (5 YR 4/4); stiff to very stiff; fine sand; no plasticity; slightly micaceous; 40% sand; RESIDUUM	
35-36		SPT 11	3 5 8	14/18	●	●					
37-39										SAA; 34% sand	
40		SPT 12	3 8 11	16/18	●	●					

Project Name : Job Number

MACTEC

SCE&G COL : 6234-06-3534

SOIL LOG - Boring No. B-311

Depth (feet)	Sample	Sample Type & No.	Uncorrected Blows/6 inches	Recovery (inches)	Water Content	Grain Size	Atterberg Limits	Lithology	Soil Type (USCS)	Lithology	Remarks
40									ML	SAA; very stiff; slicken sided at 39.6 ft, 45°; SAPROLITE	
44		SPT 13	5 7 9	18/18	●	●			SM	SAND silty (SM); mottled with black and white; 45% fines; medium dense; SAPROLITE	
49		SPT 14	8 11 15	18/18	●	●				SAND silty (SM); dark yellowish brown (10 YR 3/4); mottled with black and white; dense; fine to medium sand; no plasticity; slightly micaceous; slicken sided at 48.8 ft; 25% fines SAPROLITE	
54		SPT 15	46 50/5	12/11	●	●			SM ▽	SAND silty with gravel (SM); light gray to dark brown; very dense; medium to coarse sand with rock fragments; 21% fines; 18% gravel PARTIALLY WEATHERED ROCK BORING TERMINATED at 56.5 ft., see rock log	