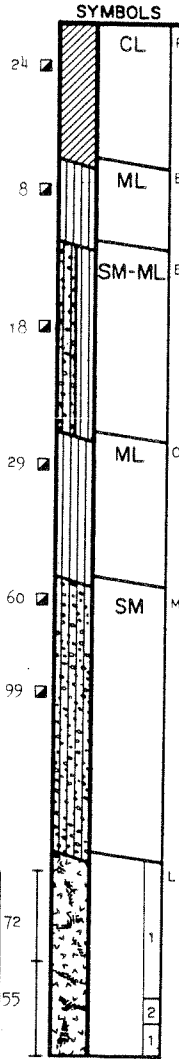
BORING C-21

SURFACE ELEVATION 432.9
CO-ORDINATES N 472,726.77
E 1,904,793.5

OTHER TESTS	DIRECT SHEAR TEST DATA		TRIAXIAL COMPRESSION TEST DATA		FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
	NORMAL PRESSURE (PSF)	SHEAR STRENGTH (PSF)	CONFINING PRESSURE (PSF)	DEVIATOR STRESS (PSF)		

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120



SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY. (VERY STIFF)
	GRADES SANDY WITH MICA.
ML	BROWN MICACEOUS CLAYEY SANDY SILT. (MEDIUM DENSE)
SM-ML	BROWN MICACEOUS SILTY SAND TO SANDY SILT. (MEDIUM DENSE)
ML	OLIVE MICACEOUS SANDY SILT. (DENSE)
SM	MULTI-COLORED MICACEOUS SILTY SAND. (VERY DENSE)
	LIGHT TO DARK GREY MODERATELY JOINTED TO MASSIVE FINE TO MEDIUM GRAINED CONTACT BRECCIA MIGMATITE. 95' TO 107' MASSIVE FRESH ROCK. 6" SLIGHTLY WEATHERED JOINT ZONE AT 96'. 6" SLIGHTLY WEATHERED JOINT ZONE AT 99'. 6" SLIGHTLY WEATHERED JOINT ZONE AT 100'. 6" MODERATELY WEATHERED JOINT ZONE AT 107½'. 3" JOINT ZONE AT 108¼'. 107' TO 110' MODERATELY JOINTED. 110' TO 113½' MASSIVE.

BORING TERMINATED 5-[illegible]-73.

NOTE:
BORING DRILLED WITH HOLLOW-STEM AUGER RIG.
WATER LEVEL NOT MEASURED.
■ INDICATES STANDARD PENETRATION TEST.

LOG OF BORING C-21

Amendment 0
August 1984

Figure 2E-1

BORING C-22

SURFACE ELEVATION 426.3
CO-ORDINATES N 4,727.77
E 1,904,855.5

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY. (VERY STIFF)
ML	REDDISH BROWN MICACEOUS CLAYEY SILT. (STIFF)
ML	OLIVE AND BROWN SANDY SILT. (MEDIUM DENSE)
SM	MOTTLED BROWN AND GREY SILTY SAND WITH SMALL GRAVEL (VERY DENSE)
	VERY HARD AUGER DRILLING FROM 70'.
	LIGHT TO DARK GREY HIGHLY JOINTED AND MASSIVE FINE TO MEDIUM GRAINED CONTACT BRECCIA MIGMATITE.
	83' TO 87' MODERATELY WEATHERED: HIGHLY JOINTED.
	87' TO 105' MASSIVE FRESH ROCK.
	SLIGHTLY WEATHERED JOINT AT 100½'.
	105' TO 105½' MODERATELY WEATHERED: HIGHLY JOINTED.
	105½' TO 106'8" FRESH ROCK; SLIGHTLY JOINTED.
	BORING TERMINATED 5-4-72.

18, 9, 11, 18, 29, 40, 111, 100/7"

92 | 45
100 | 100
97 | 64

3, 1, 3

NOTE:
BORING DRILLED WITH HOLLOW-STEM AUGER RIG.
WATER LEVEL NOT MEASURED.
◪ INDICATES STANDARD PENETRATION TEST.

LOG OF BORING C-22

Amendment 0
August 1984

Figure 2E-2

BORING C-23

SURFACE ELEVATION 478.8
CO-ORDINATES N 472,521.50
E 1,904,565.00

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY
SC-SM	REDDISH BROWN MICACEOUS SILTY CLAYEY SAND
ML	OLIVE MICACEOUS SANDY SILT
	DARK GREY HIGHLY JOINTED TO MASSIVE MEDIUM GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE - QUARTZ GNEISS COMPOSITION. 90' TO 92' SLIGHTLY WEATHERED: HIGHLY JOINTED. 92' TO 94½' SLIGHTLY WEATHERED: MASSIVE.
	LIGHT TO DARK GREY SLIGHTLY JOINTED TO MASSIVE FINE TO MEDIUM GRAINED CONTACT BRECCIA MIGMATITE. FRESH TO SLIGHTLY WEATHERED IN ZONES. 2" JOINT ZONE AT 96½' 2" JOINT ZONE AT 102'
	LIGHT GREY SLIGHTLY JOINTED TO MASSIVE FINE TO MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION.

81 | 33 | 2
100 | 68 | 1-2
1-2

BORING TERMINATED 5-15-73.

NOTE:
BORING DRILLED WITH HOLLOW-STEM AUGER RIG.
WATER LEVEL NOT MEASURED.

LOG OF BORING C-23

Amendment 0
August 1984

Figure 2E-3

BORING C-24

SURFACE ELEVATION 484.5
CO-ORDINATES N 472,454.25
E 1,994,545.00

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY.
SC-ML	REDDISH BROWN MICACEOUS SILTY CLAYEY SAND AND SANDY CLAYEY SILT.
	GRADES TO BROWN IN COLOR.
77◪	
56 18	LIGHT TAN, MODERATELY JOINTED, MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION, MODERATELY WEATHERED.
55 13	DARK GREY TO LIGHT BROWN, HIGHLY JOINTED TO MASSIVE, FINE GRAINED MIGMATITE OF BIOTITE - PLAGIOCLASE, QUARTZ GNEISS COMPOSITION. 89½' TO 96' MODERATELY WEATHERED. 96' TO 109' HIGHLY JOINTED. 96' TO 106' HIGHLY WEATHERED. 106' TO 107½' MODERATELY WEATHERED. 107½' TO 109' SLIGHTLY WEATHERED. 109' TO 113' MODERATELY WEATHERED.
70 46	
	BORING TERMINATED AT 113'.

NOTE:
BORING DRILLED WITH HOLLOW-STEM AUGER RIG.
WATER LEVEL NOT MEASURED.
◪ INDICATES STANDARD PENETRATION TEST.

LOG OF BORING C-24

Amendment 0
August 1984

Figure 2E-4

BORING C-25

SURFACE ELEVATION 471.1
CO-ORDINATES N 472,509.50
E 1,994,691.63

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							
120							
130							

93	44		
100	16		
100	69		
100	47		

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY.
SC-SM	BROWN FINE MICACEOUS CLAYEY SAND.
SM	BROWN SILTY MICACEOUS SAND.
	GRADING WITH ZONES OF HIGHLY WEATHERED AND DECOMPOSED ROCK.
3 2 3 3 1 2 3 3 3 1 3 3 1	LIGHT GREY TO BROWN JOINTED MEDIUM TO COARSE GRAINED GRANODIORITE. 90' TO 90½' HIGHLY WEATHERED. 90' TO 91½' HIGHLY JOINTED. 90½' TO 91½' MODERATELY WEATHERED. 91½' TO 93' SLIGHTLY TO MODERATELY WEATHERED; MODERATELY JOINTED. 93' TO 95' HIGHLY WEATHERED; HIGHLY JOINTED. 95½' TO 97½' FRESH ROCK; NOT JOINTED. 97½' TO 100' SLIGHTLY WEATHERED; MODERATELY JOINTED. 100' TO 105½' MODERATELY WEATHERED. 105½' TO 100' VERY HIGHLY WEATHERED. 100' TO 100' HIGHLY JOINTED. 10" HIGHLY WEATHERED ZONE AT 101'. 9" SLIGHTLY WEATHERED ZONE AT 102'. 14" SLIGHTLY WEATHERED AND SLIGHTLY JOINTED ZONE AT 104'.
3 1 3 3 1	LIGHT BROWN TO GREY HIGHLY JOINTED AND MASSIVE FINE TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. 109' TO 115' FRESH ROCK; SLIGHTLY JOINTED TO MASSIVE. CONTAINS GNEISSIC INCLUSIONS. 115' TO 117½' MODERATELY WEATHERED; HIGHLY JOINTED. 116½' TO 120½' MASSIVE FRESH ROCK. 6" HIGHLY WEATHERED AND HIGHLY JOINTED ZONE AT 119'. 10" FINE GRAINED ZONE AT 120'. 6" HIGHLY WEATHERED AND HIGHLY JOINTED ZONE AT 121'. 121' TO 127' MODERATELY WEATHERED; HIGHLY JOINTED. 6" HIGHLY WEATHERED ZONE AT 124'. 125' TO 125' MASSIVE FRESH ROCK. 125' TO 129' MODERATELY WEATHERED; HIGHLY JOINTED.
	BORING TERMINATED AT 129.5'.

NOTE:
BORING DRILLED WITH ROTARY WASH RIG.
WATER LEVEL NOT MEASURED.

LOG OF BORING C-25

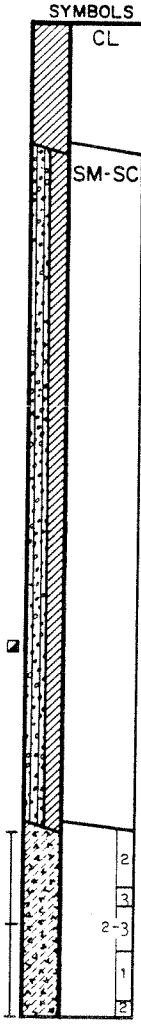
Amendment 0
August 1984

Figure 2E-5

BORING C-26

SURFACE ELEVATION 461.9
CO-ORDINATES N 472,509.25
E 1,904,799.25

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							



CL — REDDISH BROWN SILTY CLAY.

SM-SC — BROWN MICACEOUS SILTY TO CLAYEY SAND.

GRADING MULTI-COLORED.

HARD DRILLING.

LIGHT TAN AND LIGHT GREY HIGHLY JOINTED TO MASSIVE FINE TO VERY COARSE GRAINED (SOME PHENOCRYSTS) MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SOME INCLUSIONS AND OCCASIONAL FOLIATION.
90' TO 95' MODERATELY WEATHERED; SLIGHTLY JOINTED.
95' TO 97' HIGHLY WEATHERED; HIGHLY JOINTED.
97' TO 102' MODERATELY TO SLIGHTLY WEATHERED; MODERATELY TO HIGHLY JOINTED.
102' TO 104' MASSIVE FRESH ROCK.
104' TO 107½' SLIGHTLY WEATHERED; MASSIVE.
2" MODERATELY WEATHERED JOINTED ZONE AT 104½'.
107½' TO 109'3" SLIGHTLY WEATHERED; HIGHLY JOINTED.

BORING TERMINATED 5-10-73.

NOTE:
BORING DRILLED WITH HOLLOW-STEM AUGER RIG.
WATER LEVEL NOT MEASURED.
◪ INDICATES STANDARD PENETRATION TEST.

LOG OF BORING C-26

Amendment 0
August 1984

Figure 2E-6

BORING C-27

SURFACE ELEVATION 461.3
CO-ORDINATES N 472,482.50
E 1,904,873.75

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY.
ML	BROWN MICACEOUS SANDY SILT.
SM	BROWN MICACEOUS SILTY SAND.
ML	BROWN MICACEOUS SANDY SILT.
	GRADING GREENISH GREY.
	LIGHT TO DARK GREY SLIGHTLY TO MODERATELY JOINTED FINE TO MEDIUM GRAINED CONTACT BRECCIA MIGMATITE. SLIGHTLY WEATHERED.
	10" MODERATELY WEATHERED AND JOINTED ZONE AT 87'.
	LIGHT GREY MASSIVE MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SOME INCLUSIONS. FRESH ROCK.
	2" SLIGHTLY WEATHERED AND JOINTED ZONE AT 89½'.
	2" SLIGHTLY WEATHERED AND JOINTED ZONE AT 90'.
	2" SLIGHTLY WEATHERED AND JOINTED ZONE AT 91'.
	2" SLIGHTLY WEATHERED AND JOINTED ZONE AT 97'.
	2" SLIGHTLY WEATHERED AND JOINTED ZONE AT 97⅓'.
	2" SLIGHTLY WEATHERED AND JOINTED ZONE AT 100'.
	BORING TERMINATED 5-9-72.

28 ◪
58/5" ◪
63 29 2
100 76 1

NOTE:
BORING DRILLED WITH HOLLOW-STEM AUGER RIG.
WATER LEVEL NOT MEASURED.
◪ INDICATES STANDARD PENETRATION TEST.

LOG OF BORING C-27

Amendment 0
August 1984

Figure 2E-7

BORING C-28

SURFACE ELEVATION 447.2

CO-ORDINATES N 472,579.0
E 1,904,886.75

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							
120							

SYMBOLS	DESCRIPTIONS
CL (33)	REDDISH BROWN SILTY CLAY. (VERY STIFF)
ML (12)	BROWN MICACEOUS SANDY SILT. (MEDIUM DENSE)
SM (14)	MULTI-COLORED MICACEOUS SILTY SAND. (MEDIUM DENSE)
SM-SW (26)	OLIVE MICACEOUS SILTY SAND WITH SMALL GRAVEL. (VERY DENSE)
131/4"	
100/2"	
80 / 45	LIGHT TAN TO LIGHT GREY HIGHLY JOINTED TO MASSIVE COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONARY FOLIATION.
88 / 28	78' TO 80' HIGHLY WEATHERED; HIGHLY JOINTED.
68 / 27	80' TO 86' FRESH ROCK; SLIGHTLY JOINTED TO MASSIVE.
100 / 100	LARGE INCLUSION AT 85'.

3
1
3
2
1
3
1
3
1

86' TO 90½' MODERATELY WEATHERED; HIGHLY TO MODERATELY JOINTED.
8" HIGHLY WEATHERED JOINT ZONE AT 90'.
90½' TO 91½' SLIGHTLY JOINTED.
90½' TO 97½' SLIGHTLY WEATHERED.
91½' TO 93' HIGHLY JOINTED WITH HIGH ANGLE AND VERTICAL JOINTS.
93' TO 97½' MASSIVE.
5" HIGH ANGLE JOINT ZONE AT 94'.
97½' TO 102' MODERATELY WEATHERED; HIGHLY JOINTED.
102' TO 10[illegible]' MASSIVE FRESH ROCK.
106' TO 10[illegible]' HIGHLY WEATHERED; HIGHLY JOINTED.
108' TO 11[illegible]' MASSIVE FRESH ROCK.
LARGE INCLUSION AT 10[illegible]'.

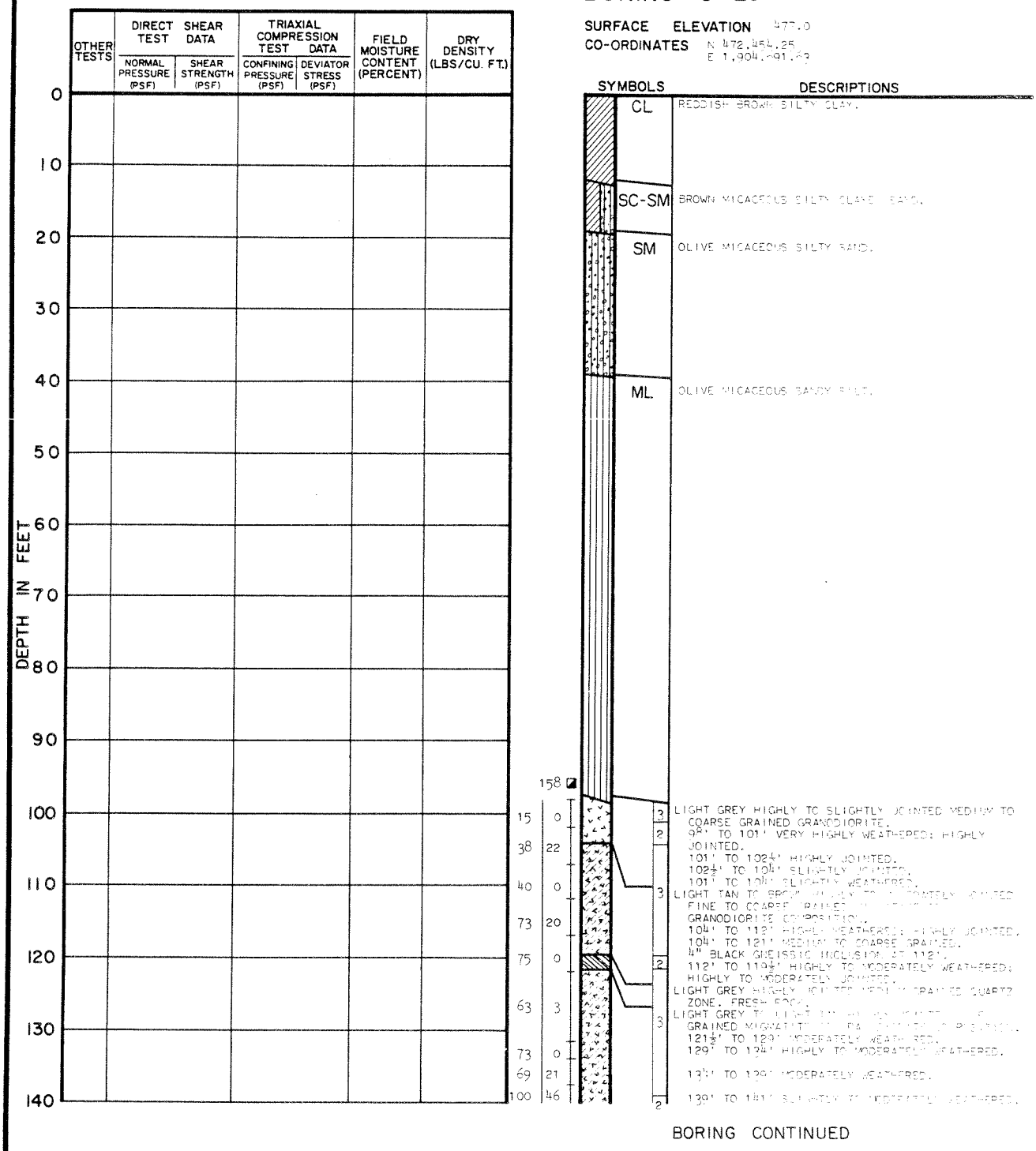
BORING TERMINATED E[illegible]-72.

NOTE:
BORING DRILLED WITH HOLLOW-STEM AUGER RIG.
WATER LEVEL NOT MEASURED.
◪ INDICATES STANDARD PENETRATION TEST.

LOG OF BORING C-28

Amendment 0
August 1984

Figure 2E-8



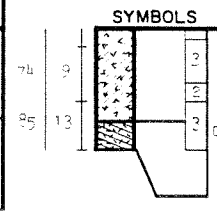
LOG OF BORING C-29

Amendment 0
August 1984

Figure 2E-9

BORING C-29 CONT'D

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
140							
150							
160							



SYMBOLS

DESCRIPTIONS

141' TO 144' MODERATELY WEATHERED.

144' TO 148' SLIGHTLY WEATHERED.
148' TO 150± MODERATELY WEATHERED.
4" QUARTZ ZONE.
DARK GREY HIGHLY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. MODERATELY WEATHERED.
4" HIGHLY WEATHERED ZONE AT 152'.

BORING TERMINATED 5-14-73.

NOTE:
BORING DRILLED WITH ROTARY WASH RIG.
WATER LEVEL NOT MEASURED.
◪ INDICATES STANDARD PENETRATION TEST.

LOG OF BORING C-29

Amendment 0
August 1984

Figure 2E-9a

BORING C-30

SURFACE ELEVATION [illegible]

CO-ORDINATES N 472,454.25
E 1,904,795.00

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY.
SC-SM	BROWN MICACEOUS SILTY CLAYEY [illegible].
SM	MULTI-COLORED MICACEOUS [illegible]
	LIGHT GREY MASSIVE MEDIUM TO COARSE GRAINED GRANODIORITE. 71' TO 80' MASSIVE FRESH ROCK. SLIGHTLY WEATHERED JOINT AT 79'.
	80' TO 94½' SLIGHTLY WEATHERED; MASSIVE. 3" MODERATELY WEATHERED JOINT ZONE AT 82½'. 94½' TO 96' HIGHLY WEATHERED; HIGHLY JOINTED. 96' TO 98½' MASSIVE FRESH ROCK. SLIGHTLY WEATHERED JOINT AT 97'.
	LIGHT GREY MASSIVE FINE TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS. SLIGHT FOLIATION. 98½' TO 98' MASSIVE FRESH ROCK.
	BORING TERMINATED [illegible].

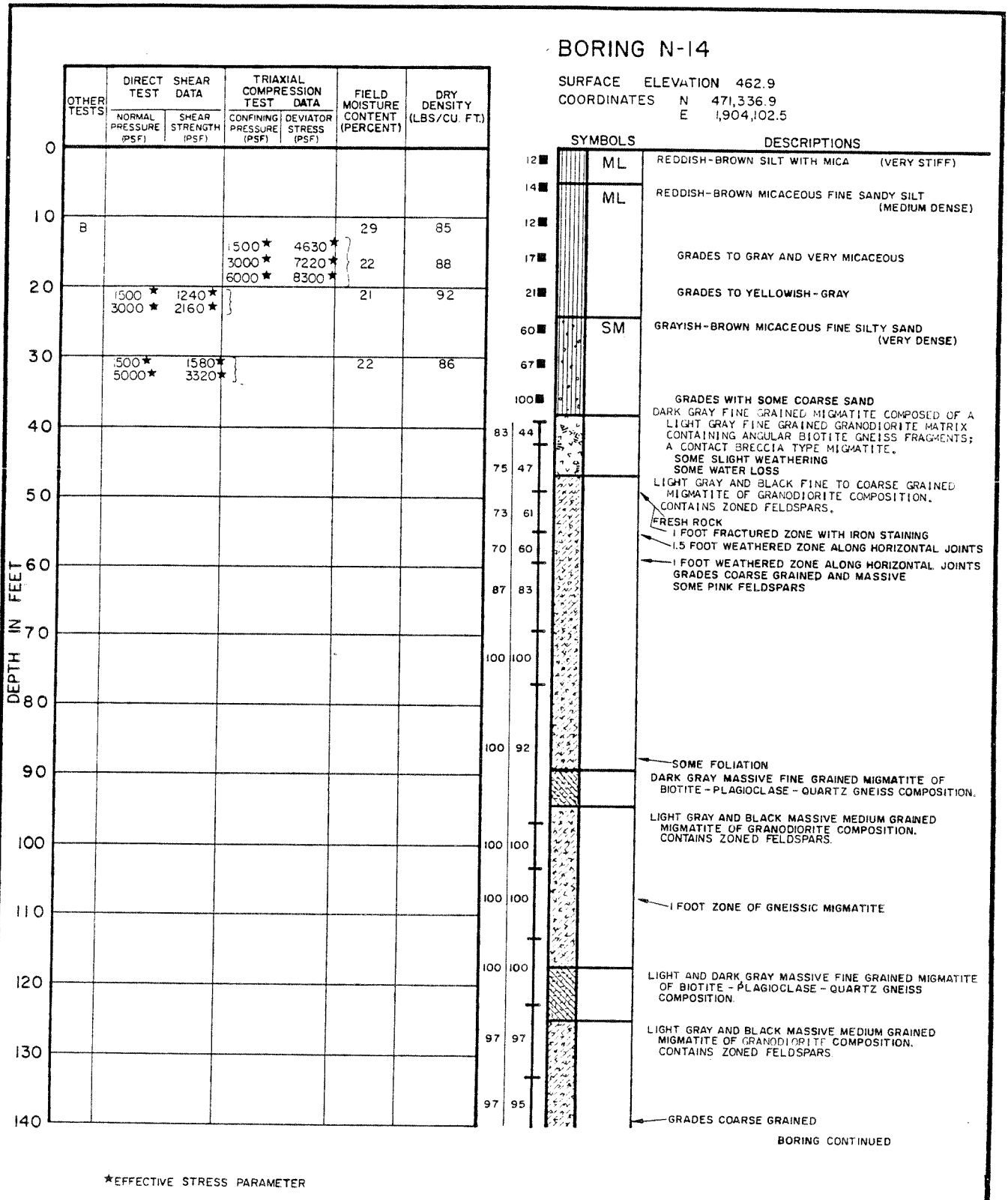
42	37	1	
100	69	3½	
91	88	1	

NOTE:
BORING DRILLED WITH ROTARY [illegible]
WATER LEVEL [illegible]

LOG OF BORING C-30

Amendment 0
August 1984

Figure 2E-10



LOG OF BORING N-14

Amendment 0
August 1984

Figure 2E-11

BORING N-14 (CONTD.)

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
140							
150							
160							
170							

100	100
100	100
100	96

SYMBOLS

DESCRIPTIONS

15 FOOT ZONE OF GNEISSIC MIGMATITE

BORING TERMINATED 2/16/71

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 26 INCHES.

GROUND WATER LEVEL AT DEPTH 43.7 FEET, ON 3-29-71.

NOTES:

1. ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.
2. CO-ORDINATES REFER TO SOUTH CAROLINA CO-ORDINATE SYSTEM.
3. LABORATORY TESTS ARE DISCUSSED IN THE TEXT.
4. FOR THE KEY OF SYMBOLS REFER TO FIGURE 2.5.1-89.
5. "A" INDICATES GRAIN SIZE TEST; RESULTS PRESENTED ON FIGURES 2.5.1-104 THROUGH 2.5.1-107.
6. "B" INDICATES CONSOLIDATION TEST; RESULTS PRESENTED IN FIGURES 2.5.1-95 THROUGH 2.5.1-103.
7. "C" INDICATES ATTERBERG LIMIT EVALUATIONS; RESULTS PRESENTED ON TABLE 2.5.1-5.
8. "D"** INDICATES PERMEABILITY EVALUATIONS; RESULTS PRESENTED ON TABLE 2.5.1-4.
9. STRENGTH PARAMETERS IDENTIFIED WITH *STARS, ARE EFFECTIVE STRESS; OTHERS REFLECT TOTAL STRESS.

** NOT USED TO IDENTIFY TESTS ON "N"-SERIES BORINGS.

LOG OF BORING N-14

BORING N-15

SURFACE ELEVATION 493.9
COORDINATES N 472,012.2
E 1,904,156.9

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10							
20							
30		500★	600★			15	95
		3000★	2320★			15	96
40		1000	1420			15	98
		5000	4550				
50	B					23	91
60							
70							
80							
90							
100							
110							
120							
130							
140							

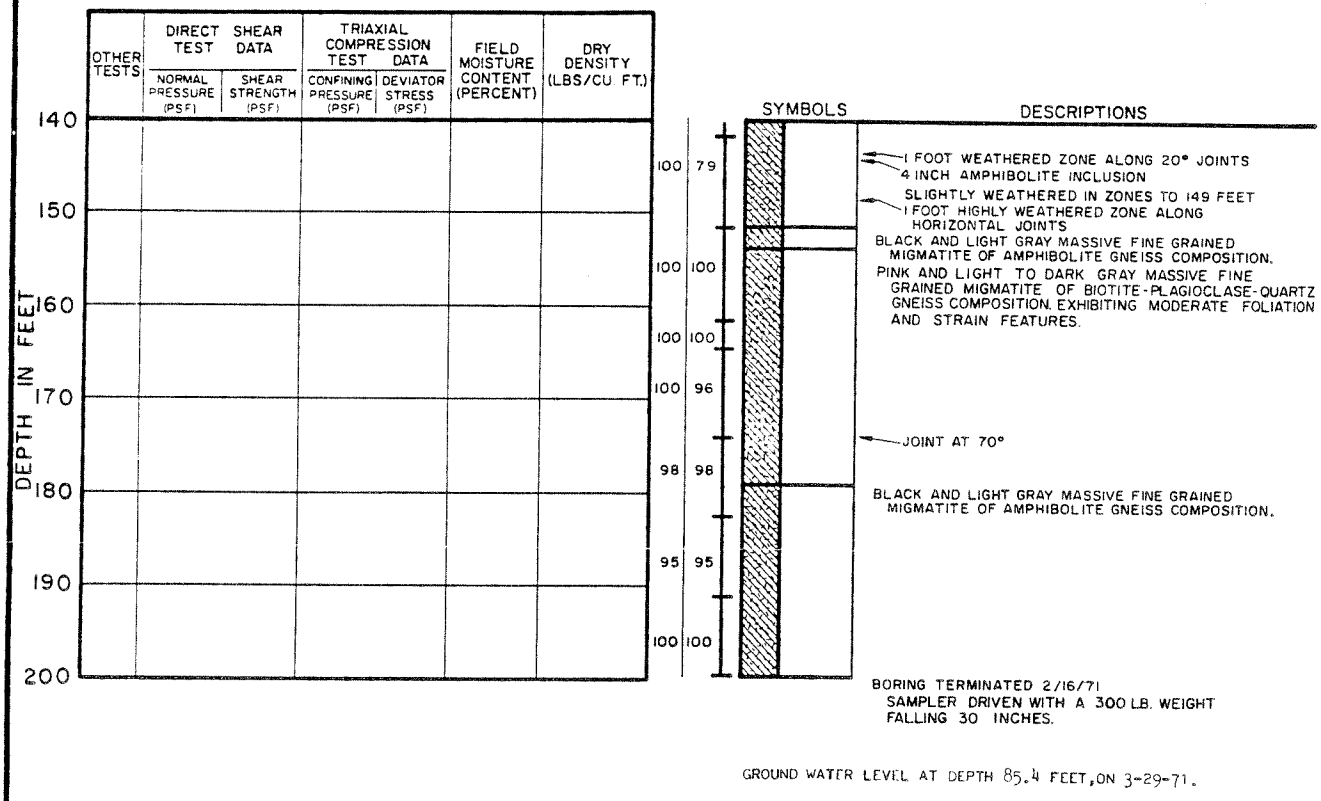
★EFFECTIVE STRESS PARAMETER

SYMBOLS		DESCRIPTIONS
30	CL	REDDISH-BROWN SANDY CLAY (VERY STIFF)
52		GRADES WITH YELLOWISH STREAKS OF CLAY
14	ML	LIGHT REDDISH-BROWN FINE SANDY SILT WITH MICA (MEDIUM DENSE)
12	SM	YELLOWISH AND LIGHT BROWN SILTY FINE TO MEDIUM SAND WITH MICA (MEDIUM DENSE)
15		GRADES SILTIER AND WITH LENSES OF MICACEOUS SILT
16		MICACEOUS LENSES GRADING OUT
13		GRADES WITH INCREASED MICA CONTENT
15		
18		
20	ML	LIGHT ORANGISH-BROWN FINE SANDY SILT WITH SOME MICA (MEDIUM DENSE)
22		
200/4"	SM	MOTTLED GRAY-LIGHT BROWN-WHITE-AND BLACK SILTY FINE TO MEDIUM SAND (VERY DENSE)
31 3		TAN PARTIALLY TO THOROUGHLY DECOMPOSED FINE TO MEDIUM GRAINED MIGMATITE OF GNEISS COMPOSITION. 60' TO 61' LESS DECOMPOSED ROCK. 61' TO 88' ALTERNATING GRADATIONAL ZONES OF MIGMATITE - VARYING FROM A MODERATELY WEATHERED ROCK TO A SOIL CONSISTENCY
50 0		
44 5		ABRUPT CHANGE TO MASSIVE FRESH ROCK
100 97		PINK AND LIGHT TO DARK GRAY MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. EXHIBITS MODERATE FOLIATION AND STRAIN FEATURES CONCORDANT WITH FOLIATION.
100 93		BLACK MASSIVE FINE GRAINED AMPHIBOLITE GNEISS.
100 92		
100 97		4 INCH WEATHERED ZONE, NEAR HORIZONTAL AND VERTICAL JOINTS
100 78		1 FOOT ZONE OF SLIGHT WEATHERING ALONG JOINTS
		PINK AND LIGHT TO DARK GRAY FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. EXHIBITS MODERATE FOLIATION AND STRAIN FEATURES. JOINTED AT 20° AND 70°. 6 INCH AMPHIBOLITE ZONE
98 91		
95 88		1 FOOT WEATHERED ZONE ALONG HORIZONTAL JOINTS
		BORING CONTINUED

LOG OF BORING N-15

Figure 2E-12

BORING N-15 (CONTD)



GROUND WATER LEVEL AT DEPTH 85.4 FEET, ON 3-29-71.

LOG OF BORING N-15

Figure 2E-12a

BORING N-16

SURFACE ELEVATION 439.4
COORDINATES N 471,438.8
E 1,905,353.3

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0	B					23	94
10							
20						18	98
30		2000	1950			22	88
		5000	3670			21	94
		2000	2000			25	89
40		5000	3700			23	94
						11	106
50							
60							
70							
80							
90							
100							
110							
120							
130							
140							

SYMBOLS	DESCRIPTIONS
ML	REDDISH-BROWN CLAYEY SILT (VERY STIFF) GRADES WITH MICA
ML-SM	REDDISH-BROWN MICACEOUS SANDY SILT (LOOSE)
SM	MOTTLED GRAY-WHITE-LIGHT BROWN AND BLACK MICACEOUS SILTY FINE TO MEDIUM SAND (LOOSE)
ML-SM	MOTTLED GRAY-LIGHT GRAY AND BROWN MICACEOUS FINE SANDY SILT (MEDIUM DENSE)
SM-ML	GRAY MICACEOUS SILTY FINE SAND (MEDIUM DENSE)
SM	MOTTLED GRAY-LIGHT GRAY-WHITE AND LIGHT BROWN MICACEOUS SILTY FINE TO COARSE SAND (VERY DENSE) CEMENTED FROM 55 FEET TO 58 FEET GRADES WITH FREQUENT CEMENTED LAYERS
	LIGHT TAN MASSIVE FINE GRAINED APLITE DIKE WITH ZONES OF SLIGHT FOLIATION. SOME SLIGHT WEATHERING 4 INCH WEATHERED ZONE AT 81 FEET LOST CIRCULATION 1 FOOT GNEISSIC MIGMATITE ZONE
	LIGHT TO DARK GRAY HIGHLY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. 92.3' TO 100.2': ZONES OF PARTIAL DECOMPOSITION ALONG JOINTING 97' TO 99': MIGMATITE OF GRANODIORITE COMPOSITION REGAIN CIRCULATION GRADES MASSIVE. FRESH ROCK 4 INCH EPIDOTE ZONE
	4 INCH EPIDOTE ZONE GRAY MASSIVE FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION.
	BLACK AND GRAY MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. 2 INCH QUARTZ-MUSCOVITE VEINS AT 121' AND 121.5' 126' TO 184.5': ORIGINAL FOLIATION HIGHLY CONTORTED BY PLASTIC DEFORMATION 1 INCH WEATHERED ZONE ALONG 30° JOINTS 2 INCH WEATHERED ZONE ALONG 30° JOINTS 1 INCH WEATHERED ZONE ALONG 30° JOINTS 1 INCH WEATHERED ZONE ALONG 30° JOINTS BORING CONTINUED

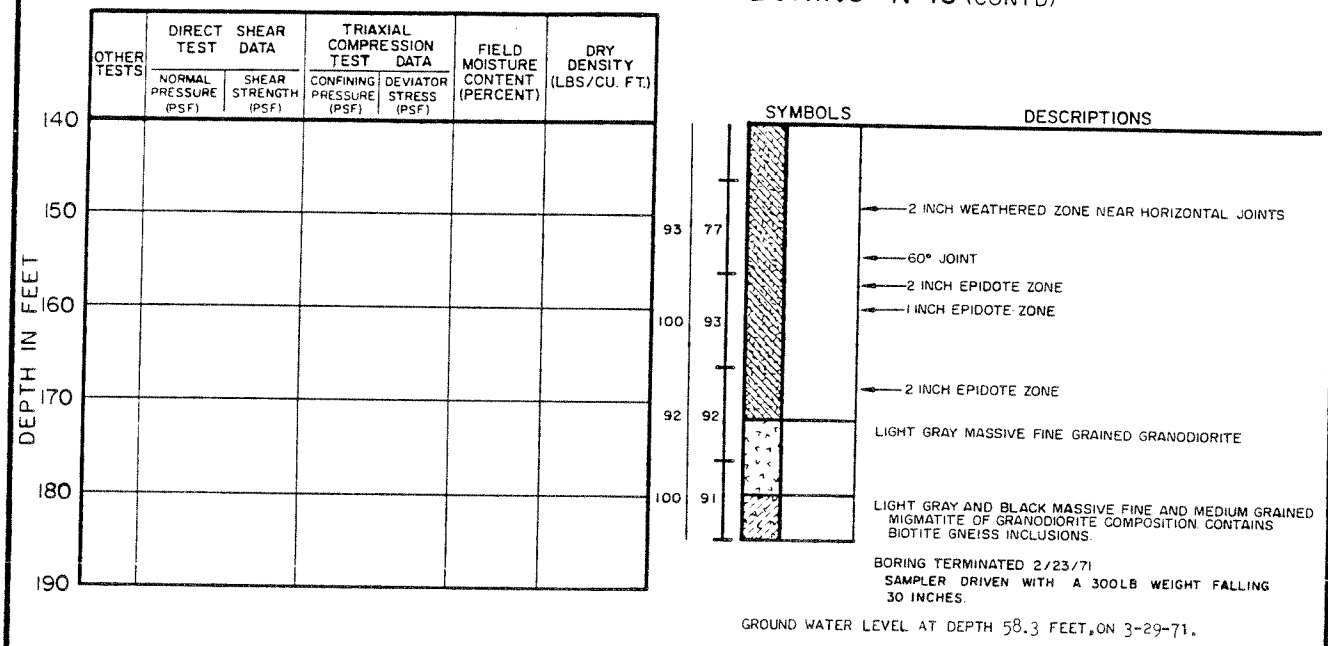
16	10	
10		
8		
9		
19		
17		
18		
20		
34		
22		
100/6"		
50/3"		
100/11"		
50/4"		
60/5"		
60/3"		
70	48	
64	19	
90	20	
98	60	
58	44	
100	63	
100	41	
100	86	

LOG OF BORING N-16

Amendment 0
August 1984

Figure 2E-13

BORING N-16 (CONTD)



GROUND WATER LEVEL AT DEPTH 58.3 FEET, ON 3-29-71.

LOG OF BORING N-16

Figure 2E-13a

BORING N-17

SURFACE ELEVATION 440.6
COORDINATES N 472,981.8
E 1,903,775.1

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0				0	4260	32	90
				0	4960	25	94
10	B					20	88
20						13	101
30							
40							
50							
60							
70							
80							
90							
100							
110							
120							
130							
140							

SYMBOLS	DESCRIPTIONS
25 / 33 — CL	REDDISH-BROWN SILTY CLAY WITH MICA (HARD)
39 / 23 — ML	REDDISH-BROWN MICACEOUS FINE SANDY SILT (DENSE)
	GRADES SANDIER
15 / 14 — SM	MOTTLED GRAY, LIGHT GRAY, WHITE AND LIGHT TAN MICACEOUS SILTY FINE TO MEDIUM SAND (MEDIUM DENSE)
	GRADES WITH COARSE SAND AND SMALL GRAVEL
17 / 39	GRADES TO DENSE
67	GRADES TO VERY DENSE
102	GRADES WITH LESS SILT
134/3"	LIGHT GRAY AND BLACK MASSIVE TO MEDIUM GRAINED GRANODIORITE, CONTAINS ZONED FELDSPARS AND INFREQUENT INCLUSIONS. 55' TO 67': WEATHERED ALONG HORIZONTAL JOINTS
60 / 26	
90 / 54	GRADES MASSIVE
97 / 90	
100 / 100	LARGE BIOTITE GNEISS INCLUSIONS AT 85' AND 87' GRADES COARSE GRAINED
100 / 96	LARGE BIOTITE GNEISS INCLUSION
100 / 93	SLIGHT WEATHERING ALONG JOINTS
	SMALL BIOTITE GNEISS INCLUSION
100 / 70	7 INCH ZONE OF HIGHLY STRAINED HEALED FRACTURES; 5 INCH ZONE OF HIGHLY STRAINED HEALED FRACTURES; 3 INCH WEATHERED ZONE OF HIGHLY STRAINED HEALED FRACTURES
100 / 91	
100 / 86	LIGHT GRAY TO GRAY MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION.
	BORING CONTINUED

LOG OF BORING N-17

Amendment 0
August 1984

Figure 2E-14

BORING N-17 (CONTD)

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
140							
150							
160							
170							
180							

		SYMBOLS	DESCRIPTIONS
95	88		LIGHT GRAY AND BLACK MASSIVE MEDIUM GRAINED GRANODIORITE.
			1 INCH WEATHERED ZONE ALONG HORIZONTAL JOINTS
100	91		SMALL BIOTITE GNEISS INCLUSION AND 1 INCH QUARTZ VEIN
93	90		LIGHT GRAY AND GRAY MASSIVE FINE GRAINED MIGMATITE OF BIOTITE - PLAGIOCLASE - QUARTZ GNEISS COMPOSITION. HIGHLY CONTORTED FOLIATION.
100	92		

BORING TERMINATED 2/23/71
SAMPLER DRIVEN WITH A 300LB. WEIGHT FALLING 26 INCHES.

GROUND WATER LEVEL AT DEPTH 61.8 FEET, ON 3-29-71.

LOG OF BORING N-17

Amendment 0
August 1984

Figure 2E-14a

BORING N-18

SURFACE ELEVATION 456.5 FEET
COORDINATES N 470,667.4
E 1,903,596.4

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0						25	95
				0	6230	25	100
10		1000	2,30			24	96
	A	6000	5830			24	94
20	B					20	89
30	A						
40							
50	A						
60						27	91
	B					28	95
70	A					29	96
80							
90							
100							
110							
120							
130							
140							

	SYMBOLS	DESCRIPTIONS
13	CL	REDDISH-BROWN SILTY CLAY (VERY STIFF)
23		
35	SM	LIGHT REDDISH BROWN SILTY SAND WITH MICA (DENSE)
15		
17	ML-SM	MOTTLED GREENISH-GRAY TO LIGHT BROWN MICACEOUS SANDY SILT AND SILTY SAND (MEDIUM DENSE)
16		GRADES GRAYISH-BROWN AND VERY MICACEOUS
16		
13		GRADES TO LIGHT BROWN
19		
15	SM	WHITE SILTY VERY FINE SAND (MEDIUM DENSE)
52		GRADES DENSE
100/5"		GRADES VERY DENSE
26	ML	GREENISH-GRAY MICACEOUS SANDY SILT (DENSE)
36		
126		
23		GRADES VERY DENSE
100/5"		WHITE TO LIGHT PINK AND BLACK BANDED HIGHLY JOINTED FINE GRAINED QUARTZ-FELDSPAR AND AMPHIBOLITE GNEISS. JOINTED PRIMARILY AT VERTICAL AND 45°
48 0		
59 16		
79 0		LESS JOINTING
73 32		
		CLOSE SPACED VERTICAL JOINTS, PROBABLY TENSIONAL
93 17		VERTICAL JOINTS, POORLY DEVELOPED
		1 FOOT HIGHLY JOINTED ZONE WITH SOME WEATHERING
		GRADES MASSIVE
		GRADES MIGMATITIC
100 81		BLACK AND GRAY MASSIVE FINE GRAINED MIGMATITE OF AMPHIBOLITE GNEISS COMPOSITION. FOLIATION HIGHLY DISTORTED.
100 99		CROSS JOINTED

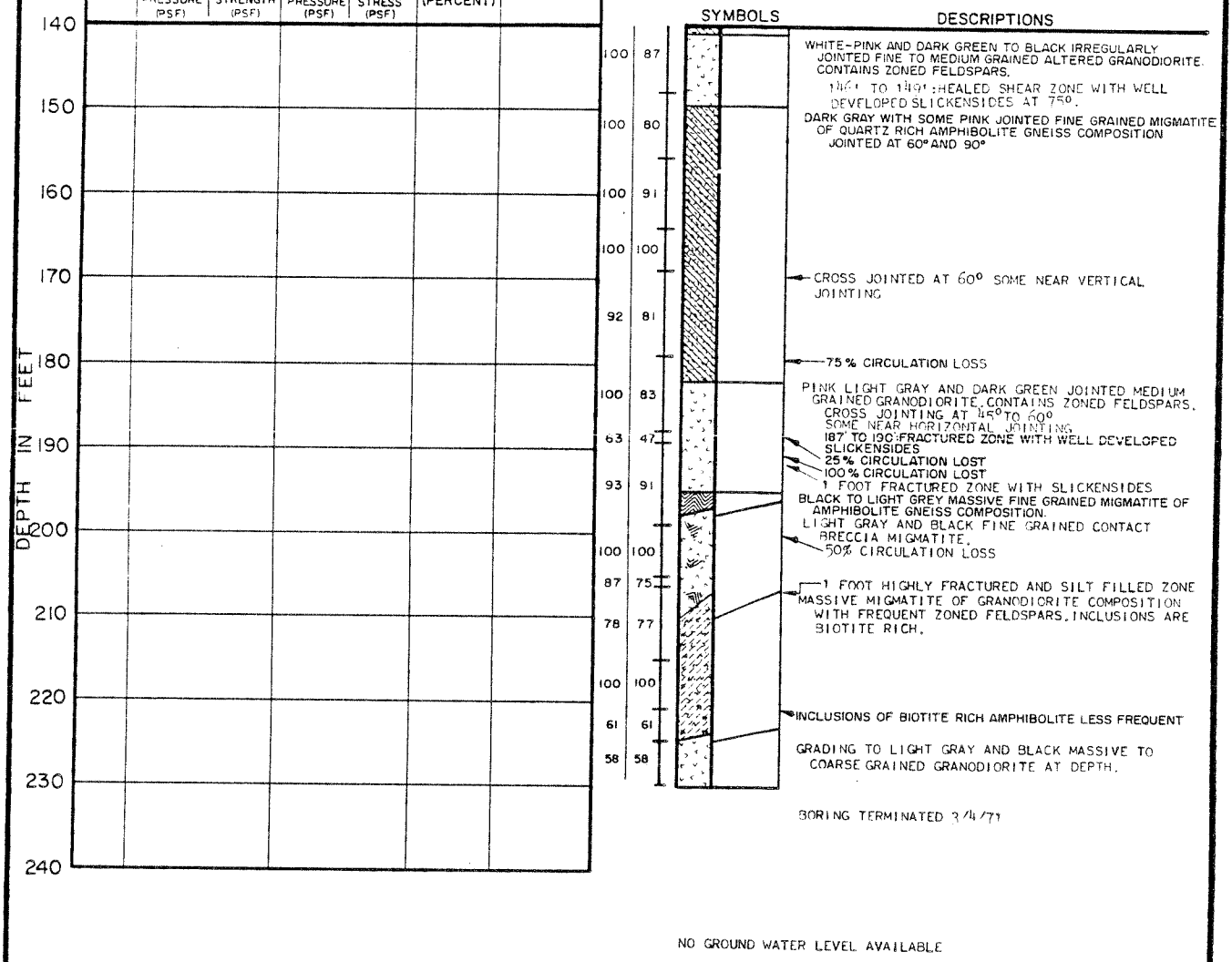
BORING CONTINUED

LOG OF BORING N-18

Amendment 0
August 1984

Figure 2E-15

BORING N-18 (CONTD.)



NO GROUND WATER LEVEL AVAILABLE

LOG OF BORING N-18

Amendment 0
August 1984

Figure 2E-15a

BORING N-19

SURFACE ELEVATION 4864
COORDINATES N 472,378.8
E 1,904,260.3

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0						28	93
10						20	93
20							
30		2000	2300			15	93
40	A					13	99
50		5000	4500			12	108
60	A B	4000	3400			31	93
70							
80							
90							
100							
110							
120							
130							
140							
150							

SYMBOLS	DESCRIPTIONS
CL	REDDISH-BROWN SANDY CLAY WITH SOME MICA (MEDIUM STIFF)
ML	REDDISH-BROWN AND GRAYISH-BROWN FINE SANDY SILT WITH MICA (MEDIUM DENSE)
SM-ML	MOTTLED LIGHT BROWN AND GRAY SILTY FINE SAND WITH MICA (MEDIUM DENSE)
	GRADES DENSE
SW-SM	MOTTLED LIGHT BROWN-GRAY-WHITE AND BLACK SILTY FINE TO MEDIUM SAND WITH SOME MICA (DENSE)
	GRADES TO VERY DENSE AND PARTLY CEMENTED
	GRADES LESS SILTY
ML	GRAYISH-BROWN MICACEOUS FINE SANDY SILT (VERY DENSE)
SM	MOTTLED LIGHT BROWN-GRAY-WHITE AND BLACK SILTY FINE TO MEDIUM SAND (VERY DENSE)
ML	GRAYISH BROWN MICACEOUS SANDY SILT (DENSE)
SM-GM	GRAY TO YELLOW SILTY SAND AND GRAVEL, PARTLY CEMENTED (DENSE)
	LIGHT TO DARK GRAY JOINTED FINE GRAINED BIOTITE-PLAGIOCLASE-QUARTZ GNEISS. SOME SLIGHT WEATHERING. JOINTED AT 10° TO 45°
	IRON STAINING ALONG JOINTS
	6 INCH HIGHLY WEATHERED ZONE
	MOTTLED WHITE TO LIGHT TAN JOINTED FINE GRAINED APLITE DIKE.
	LIGHT TO DARK GRAY MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ ALTERED GNEISS COMPOSITION CONTAINS SOME SMALL BIOTITE INCLUSIONS. FRESH ROCK.
	1 FOOT JOINTED AND HIGHLY WEATHERED
	6 INCH HIGHLY JOINTED ZONE WITH WEATHERING
	1 FOOT JOINTED ZONE WITH IRON STAINING
	SOME CIRCULATION LOSS
	1 FOOT HIGHLY JOINTED AT HORIZONTAL TO 30° WITH IRON STAINING
	JOINT AT 70° WITH IRON STAINING

25		
23		
26		
23		
27		
33		
43		
43		
57		
85		
200/9"		
172		
250/6"		
128		
45		
73		
84	42	
70	50	
100	100	
100	100	
100	70	
100	85	
60	56	
100	85	
90	74	

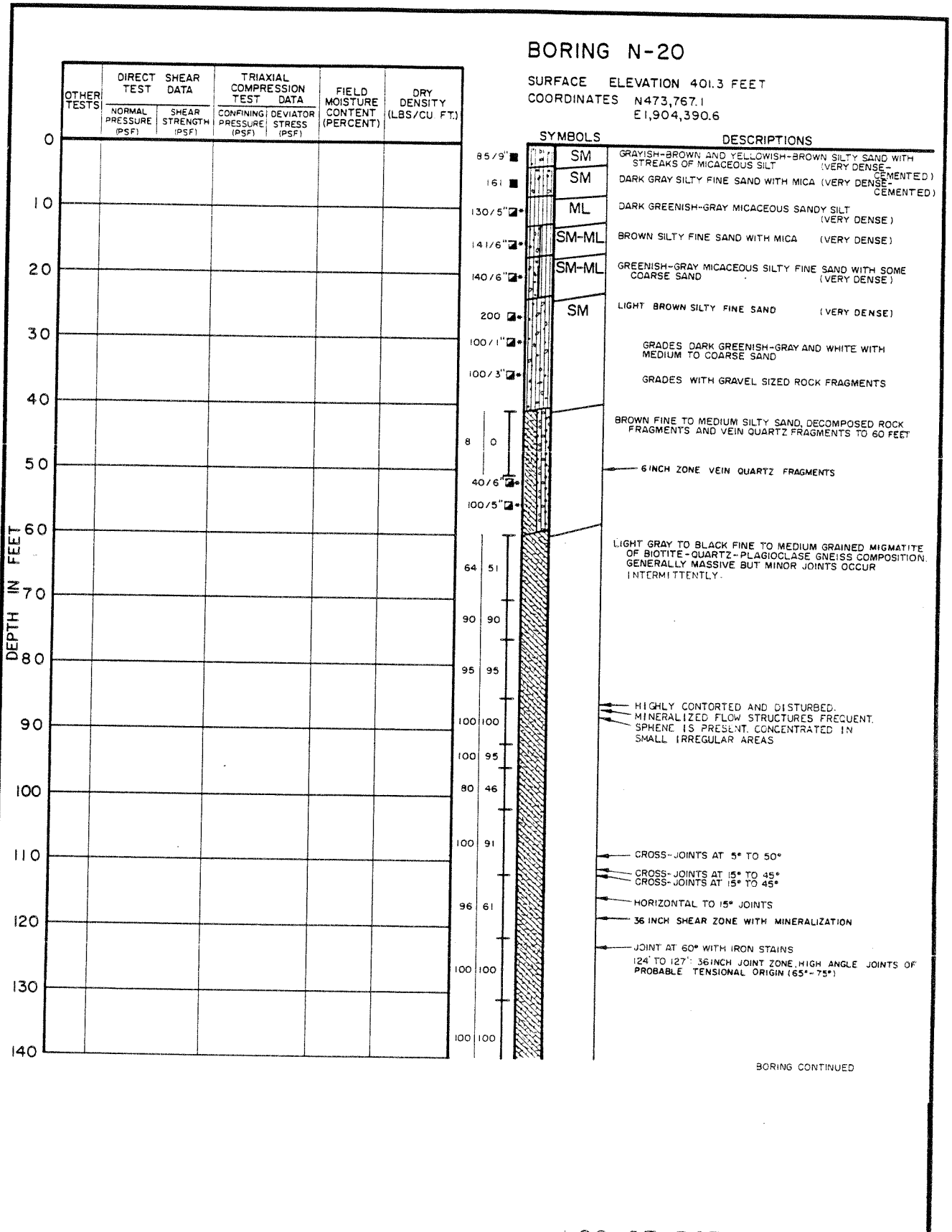
BORING TERMINATED 2/26/71
SAMPLER DRIVEN BY A 140 LB. WEIGHT FALLING 30 INCHES.

GROUND WATER LEVEL AT DEPTH 86.3 FEET, ON 3-29-71.

LOG OF BORING N-19

Amendment 0
August 1984

Figure 2E-16

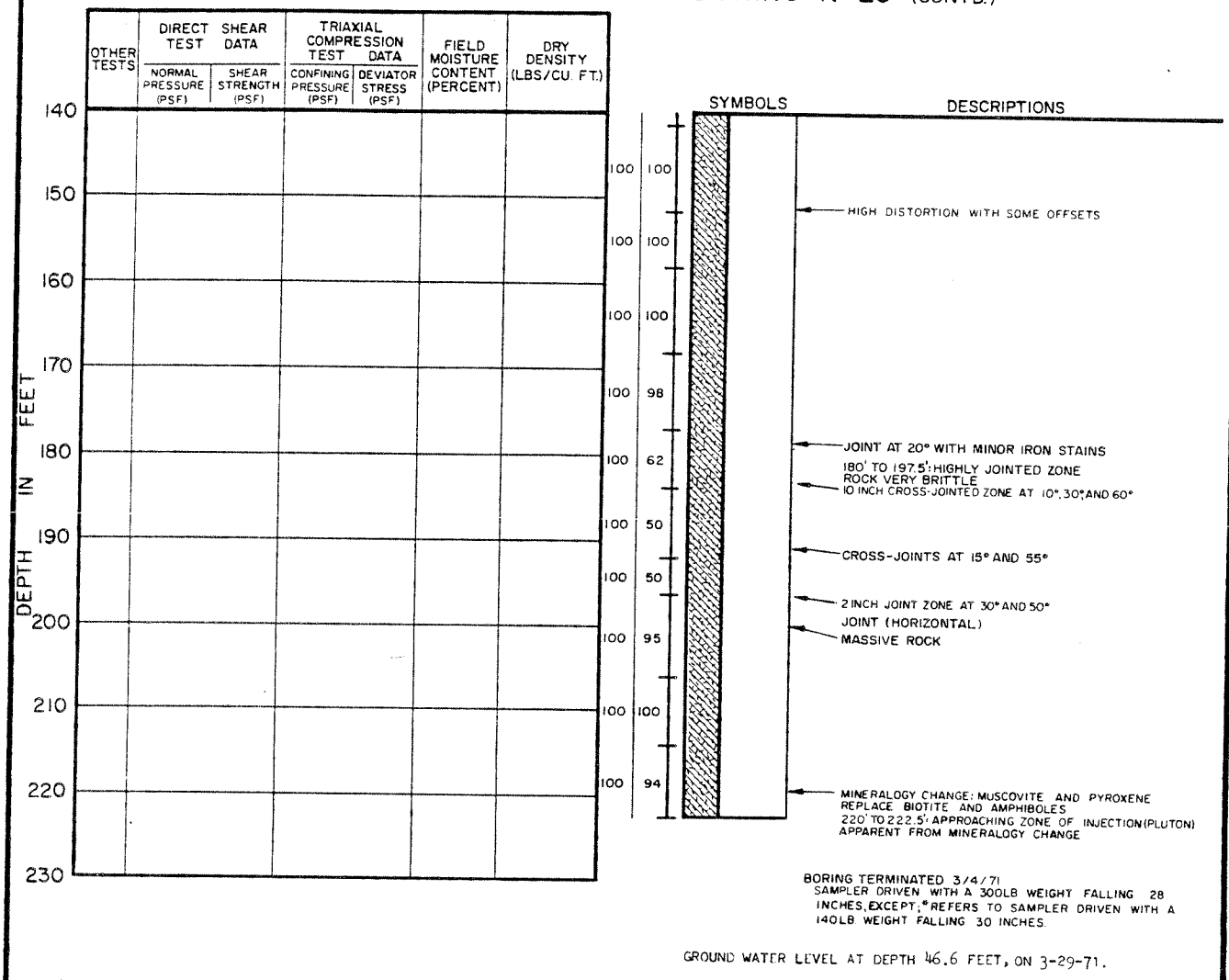


LOG OF BORING N-20

Amendment 0
August 1984

Figure 2E-17

BORING N-20 (CONTD.)

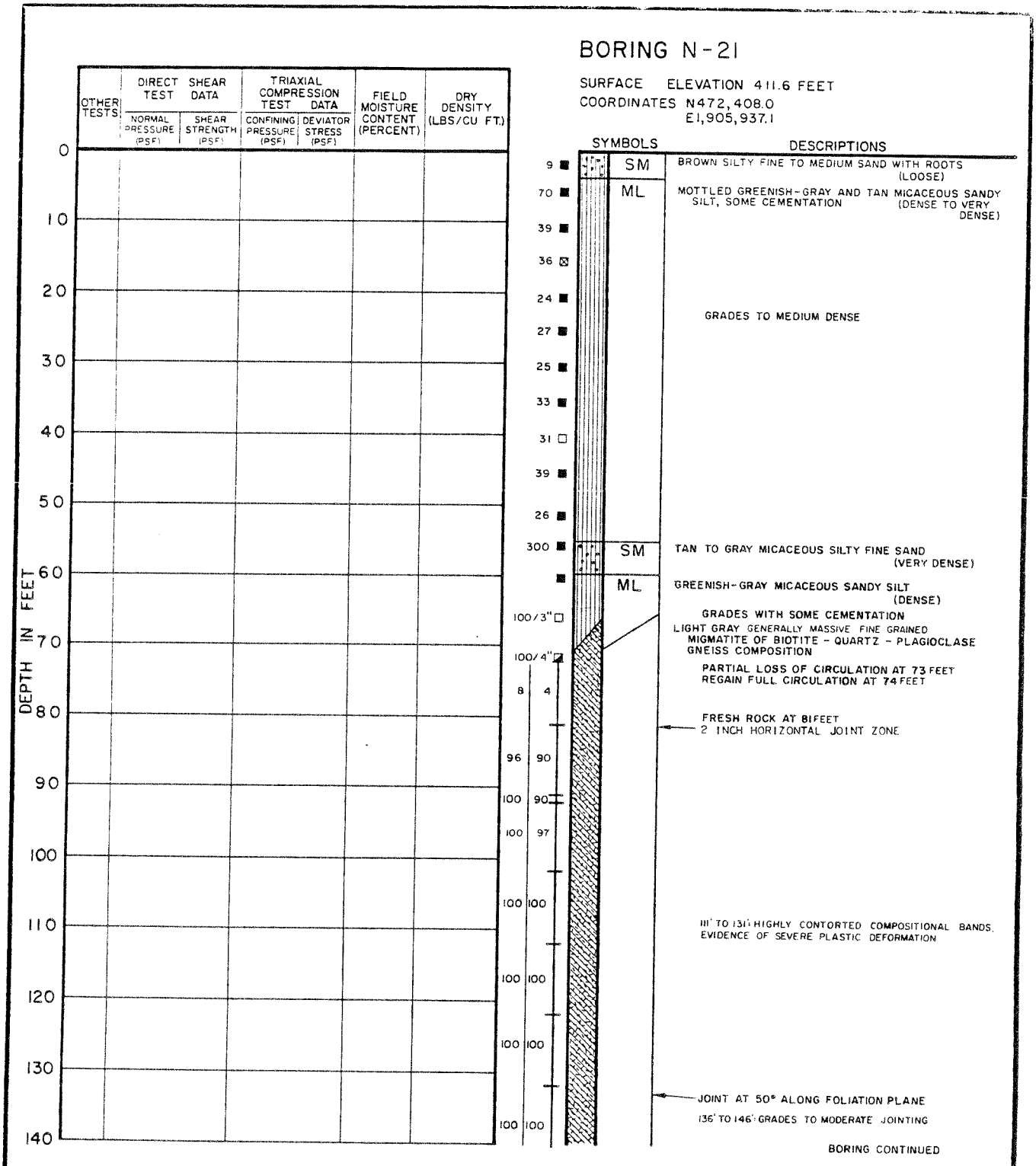


BORING TERMINATED 3/4/71
SAMPLER DRIVEN WITH A 300LB WEIGHT FALLING 28 INCHES, EXCEPT; * REFERS TO SAMPLER DRIVEN WITH A 140LB WEIGHT FALLING 30 INCHES.

GROUND WATER LEVEL AT DEPTH 46.6 FEET, ON 3-29-71.

LOG OF BORING N-20

Figure 2E-17a

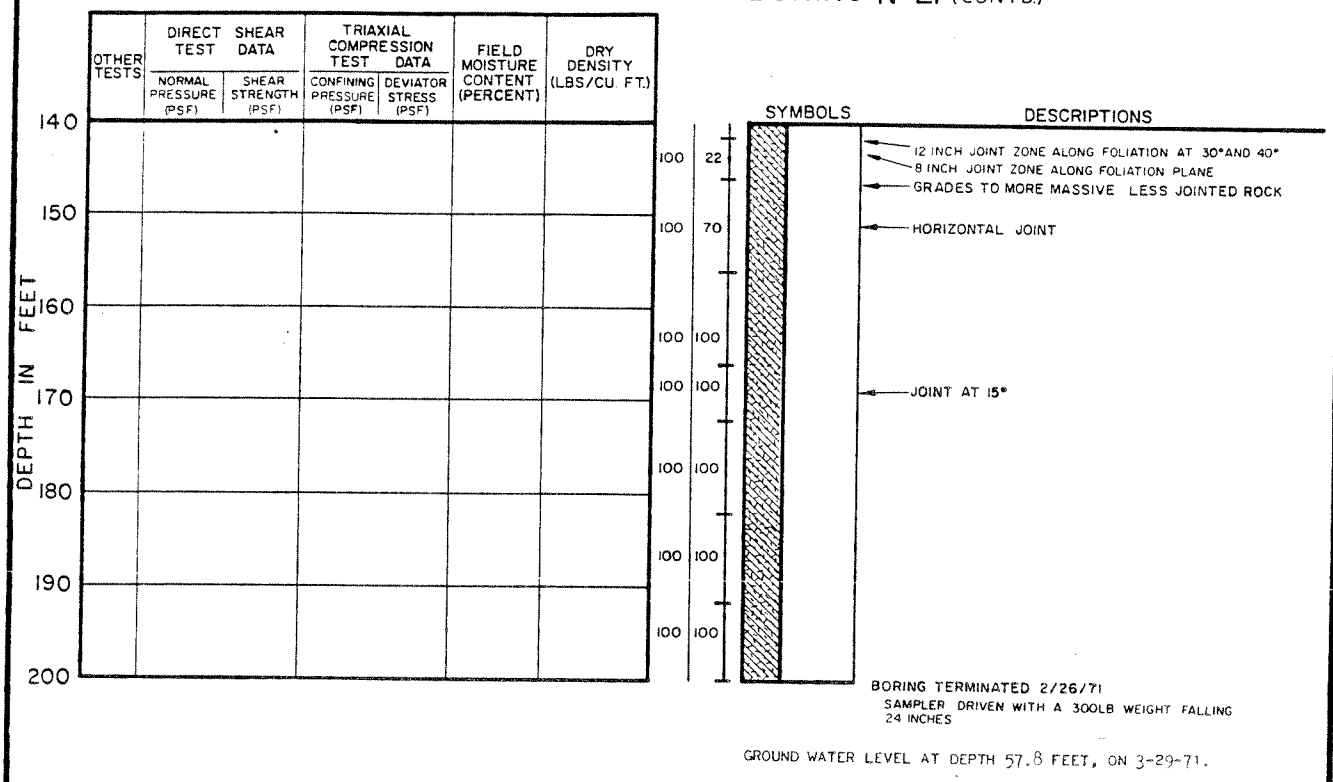


LOG OF BORING N-21

Amendment 0
August 1984

Figure 2E-18

BORING N-21 (CONTD.)



GROUND WATER LEVEL AT DEPTH 57.8 FEET, ON 3-29-71.

LOG OF BORING N-21

Amendment 0
August 1984

Figure 2E-18a

BORING N-22

SURFACE ELEVATION 475.1 FEET
COORDINATES N 472,373.8
E 1,904,768.0

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10		1000	1780			27	94
20							
30						18	99
40	A B	3000	3400			18	97
50						15	113
60							
70							
80							
90							
100							
110							
120							
130							
140							

		SYMBOLS	DESCRIPTIONS
9		CL	REDDISH-BROWN SILTY SANDY CLAY (STIFF)
12			GRADES WITH MORE SAND
8		SM	REDDISH-BROWN TO TAN MICACEOUS SILTY FINE SAND (LOOSE)
8			SOME CLAY IN UPPER FOUR TO FIVE FEET.
7			
9			
9			
10			
13			GRADES TO FINE TO MEDIUM GRAINED
13			
17			GRADES TO MEDIUM DENSE
32			
35			GRADES WITH ROCK FRAGMENTS
100/3"			
75/5"			
76	36		LIGHT TAN TO BUFF FINE GRAINED GRANODIORITE - PARTIALLY WEATHERED AND JOINTED TO 77 FEET.
22	7		4 INCH JOINT ZONE AT 0° AND 45°
			CROSS JOINTS AT 15° AND 45°
			JOINT AT 60°
99	28	SM-SP	TAN SILTY FINE TO MEDIUM SAND (MEDIUM DENSE)
			FRESH ROCK: LIGHT GRAY AND BLACK FINE TO MEDIUM GRAINED GRANODIORITE.
100	50		18 INCH HORIZONTAL JOINT ZONE. SOME IRON STAINING
			HORIZONTAL JOINT WITH IRON STAINS
			6 INCH HORIZONTAL JOINT ZONE WITH IRON STAINS
47	11		CROSS JOINTS AT 15° AND 50°
			HORIZONTAL JOINTS WITH MINOR IRON STAINS
54	17		1 FOOT HIGHLY JOINTED (MOSTLY HORIZONTAL) PARTIALLY DECOMPOSED ZONE
100	100		GRADES TO COARSE GRAINED GRANODIORITE WITH ZONED FELDSPARS
100	100		
100	99		CROSS JOINTS AT 15° AND 45°
			2 INCH HORIZONTAL JOINT ZONE WITH IRON STAINS
62	49		
99	69		2 FOOT HORIZONTAL JOINT ZONE WITH IRON STAINS
			BORING CONTINUED

LOG OF BORING N-22

Amendment 0
August 1984

Figure 2E-19

BORING N-22 (CONTD.)

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)

DEPTH IN FEET

140
150
160
170
180
190
200
210

96	45
97	97
100	84
98	95
100	100
100	82
89	99
100	99
95	95
100	100

SYMBOLS

DESCRIPTIONS

12" ZONE OF HORIZONTAL JOINTS WITH IRON STAINS
142' TO 144.5':
INCLUSIONS OF PARTIALLY WEATHERED BIOTITE - RICH AMPHIBOLITES
148' TO 154':
HIGHLY JOINTED AT 30° TO 40°

MASSIVE ROCK INFREQUENTLY JOINTED

CROSS JOINTS AT 65° AND 15°

3" JOINT ZONE AT 10° WITH IRON STAINS

GRADES TO MIGMATITE OF GRANODIORITE COMPOSITION - SOME ZONED FELDSPARS STILL EVIDENT

CROSS JOINTS AT 45° AND 30°

BORING TERMINATED 3/6/71

SAMPLE DRIVEN WITH A 300LB. WEIGHT FALLING 28 INCHES.

GROUND WATER LEVEL AT DEPTH 81.0 FEET, ON 3-29-71.

LOG OF BORING N-22

Figure 2E-19a

BORING N-23

SURFACE ELEVATION 464.0
COORDINATES N 472,766.2
E 1,904,433.6

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)	SYMBOLS	DESCRIPTIONS
0								ML	REDDISH-BROWN MICACEOUS CLAYEY SANDY SILT (STIFF)
10								SM	TAN TO GRAY MICACEOUS SILTY FINE TO MEDIUM SAND (LOOSE TO MEDIUM DENSE)
20									
30									GRADES LESS SILTY
40									LIGHT GRAY FINE TO MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION - PARTIALLY WEATHERED TO MODERATELY TO HIGHLY DECOMPOSED TO 65 FEET. DECOMPOSED ZONE OF SOIL CONSISTENCY GRADES TO SLIGHTLY WEATHERED AND FOLIATED
50									50 TO 65 FEET THOROUGHLY DECOMPOSED ZONE (NO RECOVERY)
60									FRESH ROCK AT 65.5 FEET.
70									2 FOOT WEATHERED AND DECOMPOSED ZONE, IRON STAINS ON JOINT SURFACES
80									8 INCH CROSS JOINT ZONE AT 30°, 45° AND 90°
90									AMPHIBOLITE INCLUSION - PARTIALLY WEATHERED JOINT AT 45°
100									6 INCH PARTIALLY WEATHERED ZONE WITH IRON STAINS ON 15° JOINT SURFACES
110									18 INCH DECOMPOSED IRON STAINED ZONE
120									2 INCH JOINT ZONE AT 50° WITH IRON STAINS
130									10 INCH JOINT ZONE AT 0° AND 15° WITH IRON STAINS
140									JOINT AT 60° WITH IRON STAINS
									3 INCH JOINT ZONE AT 60° WITH IRON STAINS
									30 INCH WEATHERED ZONE WITH IRON STAINED JOINTS AT 0° AND 25°
									6 INCH JOINT ZONE AT 30° WITH IRON STAINS
									JOINT AT 30° WITH IRON STAINS
									LOST CIRCULATION. DECOMPOSED HIGHLY CROSS JOINTED ZONES AT 45° AND 20°
									REGAIN 80% CIRCULATION
									8 INCH COARSE GRAINED LIGHT GRAY GRANODIORITE ZONE
									BORING CONTINUED

0						20			
10						27			
20						17			
30						11			
40						14			
50						16			
60						13			
70						24			
80						17	17		
90						60/4"			
100						33	20		
110						0	0		
120						0	0		
130						84	66		
140						86	72		
						93	73		
						98	94		
						93	63		
						100	93		
						90	83		
						100	100		
						100	100		
						100	100		

LOG OF BORING N-23

Amendment 0
August 1984

Figure 2E-20

BORING N-23 (CONTD)

SURFACE ELEVATION
COORDINATES

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
140							
150							
160							
170							
180							
190							
200							
210							

		SYMBOLS	DESCRIPTIONS
100	92		3 INCH JOINT ZONE AT 30° WITH SOME IRON STAINS
99	91		2 INCH JOINT ZONE AT 15° WITH IRON STAINS
			3 INCH JOINT ZONE AT 30° AND 60° WITH IRON STAINS
100	99		AMPHIBOLITE INCLUSION
			FOLIATION MORE PRONOUNCED
93	79		4 INCH JOINT ZONE AT 15° AND 60° WITH IRON STAINS
83	76		6 INCH WEATHERED ZONE WITH SOME IRON STAINS CROSS JOINTS AT 45°
100	100		
100	98		36 INCH ZONE OF LIGHT GRAY COARSE GRAINED GRANODIORITE WITH ZONED FELDSPARS
			2 INCH JOINT ZONE AT 45° WITH IRON STAINS
100	95		1 INCH JOINT ZONE AT 15° WITH IRON STAINS

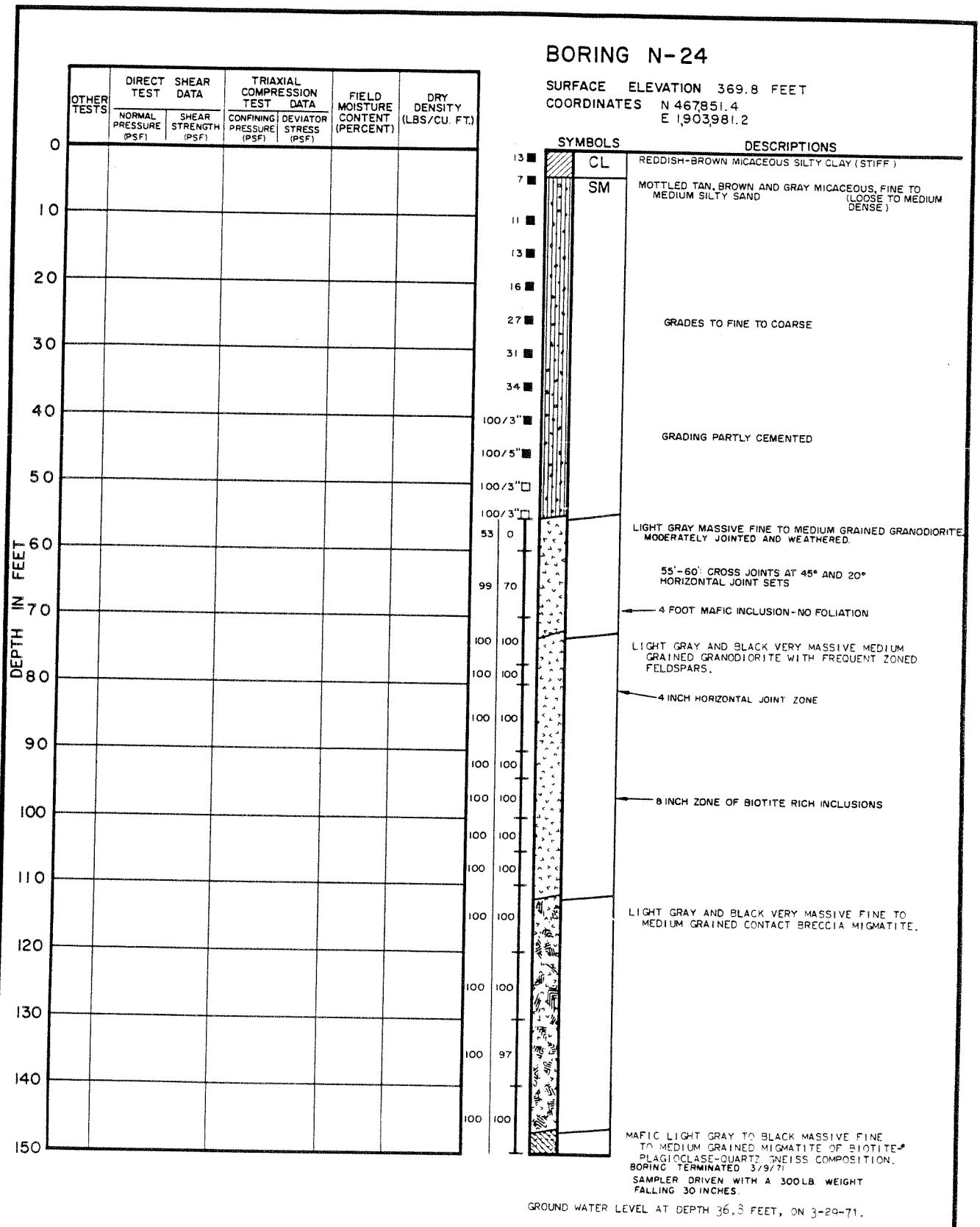
BORING TERMINATED 3/17/71

SAMPLER DRIVEN WITH A 300LB WEIGHT FALLING 30 INCHES.

GROUND WATER LEVEL AT DEPTH 67.0 FEET, ON 3-29-71.

LOG OF BORING N-23

Figure 2E-20a



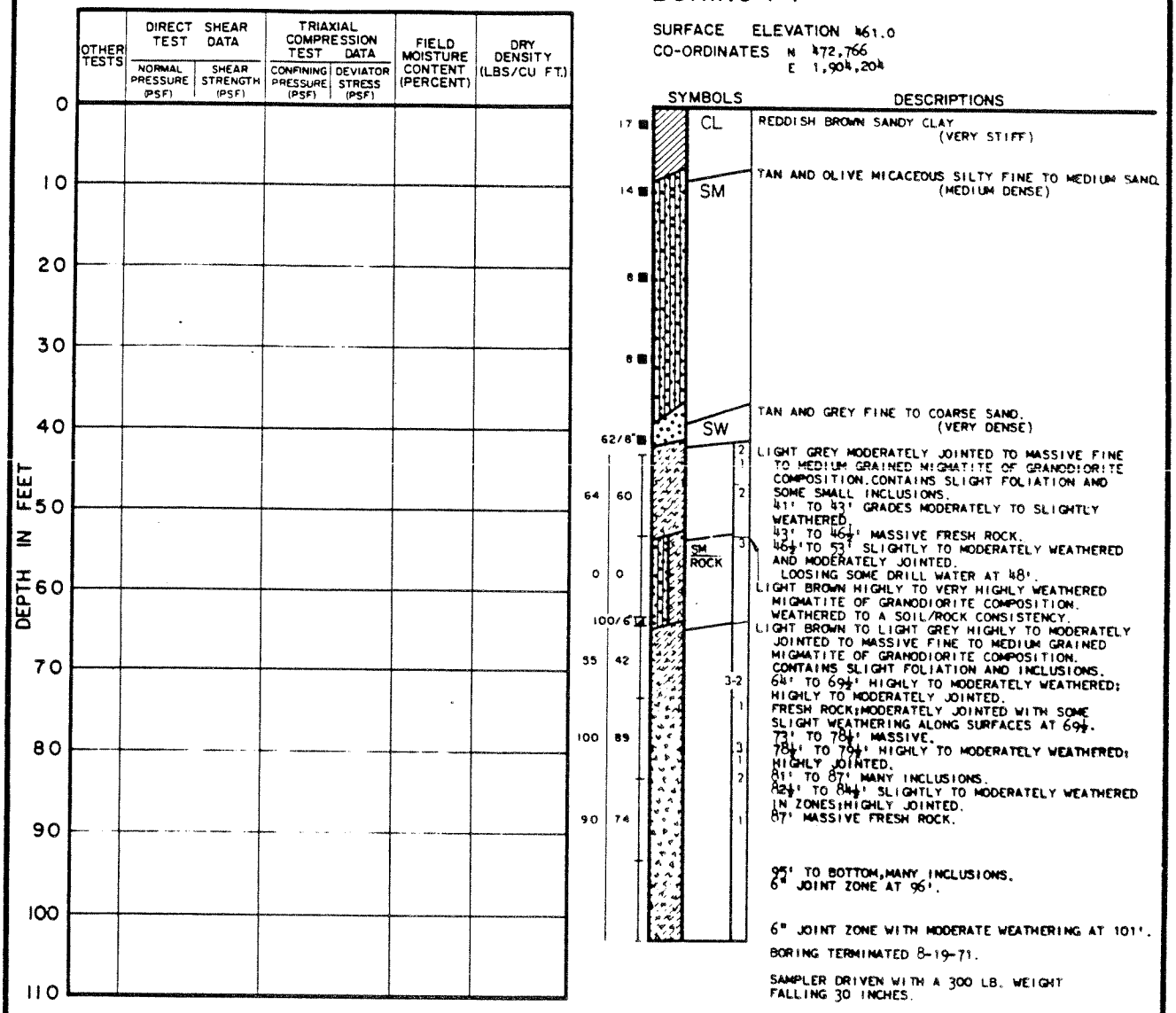
LOG OF BORING N-24

Amendment 0
August 1984

Figure 2E-21

BORING I-1

SURFACE ELEVATION 461.0
CO-ORDINATES N 472,766
E 1,904,204



LOG OF BORING I-1

Figure 2E-22

BORING 1-2

SURFACE ELEVATION 463.9
CO-ORDINATES N 472,660.5
E 1,904,081.5

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							

SYMBOLS	DESCRIPTIONS
9 ML CL	REDDISH BROWN SANDY CLAYEY SILT. (MEDIUM STIFF)
	REDDISH BROWN SANDY SILTY CLAY. (STIFF)
11 SM	REDDISH BROWN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)
14	GRADING MOTTLED GREY BROWN.
15	
30 SM	GREY AND BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
34	
50/2"	GRADES VERY DENSE.
92 | 85	DARK GREY MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION; CONTAINS MANY INCLUSIONS. FRESH ROCK.
	SLIGHT WEATHERING ALONG JOINT AT 65'.
	2" WEATHERED ZONE ALONG JOINT AT 67½'.
	6" JOINT ZONE WITH MODERATE WEATHERING AT 70½'.
	6" JOINT ZONE WITH SOME WEATHERING AT 77½'.
100 | 93	LIGHT GREY MASSIVE FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. FRESH ROCK.

BORING TERMINATED 8-10-71.

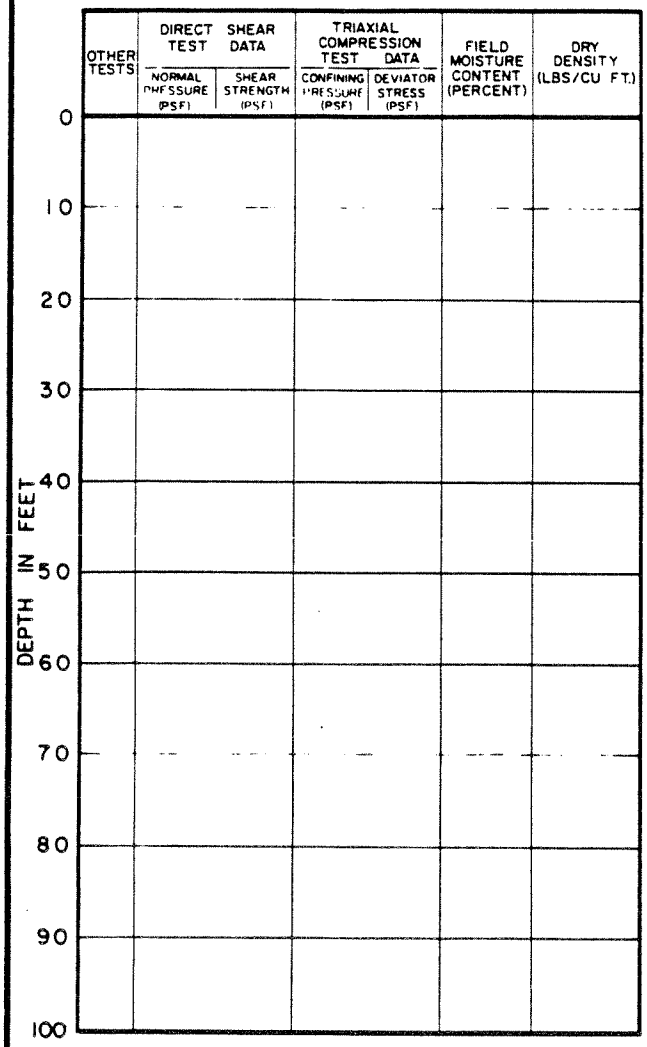
SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 18 INCHES.

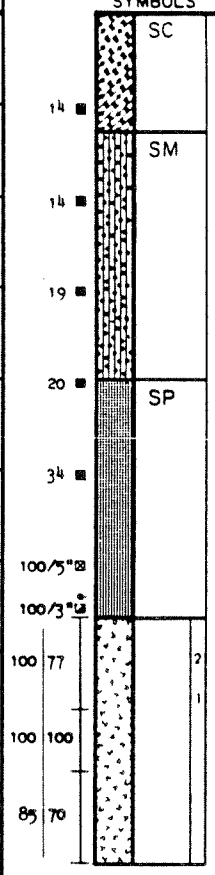
LOG OF BORING 1-2

Figure 2E-23

BORING I-3

SURFACE ELEVATION 467.4
CO-ORDINATES N 472,741.5
E 1,904,322





ORANGE RED SILTY CLAYEY SAND WITH SOME MICA. (STIFF)

YELLOW TAN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)

GRADES COARSER.

TAN TO BROWN MICACEOUS FINE TO MEDIUM SAND. (DENSE)

GRADES VERY DENSE.

LIGHT GREY MASSIVE MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SOME INCLUSIONS AND REMNANTS OF FOLIATION.

66' TO 71½' SLIGHTLY WEATHERED.
68½' TO 69½' FRACTURED ZONE.
71½' TO 73' MODERATELY WEATHERED.
FRESH ROCK AT 73'.
3" FRACTURED ZONE AT 77'.
6" FRACTURED ZONE AT 83½'.

6" JOINT ZONE WITH WEATHERED SURFACES.
BORING TERMINATED 8-5-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES. *INDICATES STANDARD PENETRATION TESTS.

LOG OF BORING I-3

BORING I-4

SURFACE ELEVATION 453.9
CO-ORDINATES N 472,600
E 1,904,000

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

SYMBOLS	DESCRIPTIONS
	RED CLAY, FILL FOR ACCESS.
CL	REDDISH BROWN SILTY CLAY. (STIFF)
SM-ML	MOTTLED REDDISH BROWN MICACEOUS VERY SILTY FINE SAND. (MEDIUM DENSE) GRADES TO OLIVE COLOR.
SM	MOTTLED BROWN MICACEOUS SILTY FINE SAND WITH LITTLE SILT. (VERY DENSE) GRADING OLIVE IN COLOR.
	DARK GREY MODERATE TO HIGHLY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION; HIGHLY CONTORTED FOLIATION. CONTAINS SOME INCLUSIONS. 58' TO 60' HIGHLY WEATHERED; HIGHLY JOINTED. 60' TO 70½' HIGHLY JOINTED. 60' TO 61' MODERATELY WEATHERED ZONE. 61' TO 65' SLIGHTLY WEATHERED. 65' TO 67½' FRESH ROCK. 67½' TO 70½' SLIGHTLY WEATHERED. 70½' TO 74½' MASSIVE. 70½' TO 76½' FRESH ROCK. 74½' TO 80½' HIGHLY JOINTED. 76½' TO 78' SLIGHTLY WEATHERED. 78' TO 80½' MODERATELY WEATHERED. 6" HIGHLY WEATHERED ZONE AT 78½'. MASSIVE FRESH ROCK, LESS CONTORTED FOLIATION AT 81'.
	LIGHT GREY MASSIVE COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION; CONTAINS SOME INCLUSIONS. LIGHT GREY MASSIVE COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS.

BORING TERMINATED 8-9-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES. *INDICATES STANDARD PENETRATION TESTS.

GROUND WATER LEVEL AT DEPTH 55 FEET, ON 10-14-71.

LOG OF BORING I-4

Amendment 0
August 1984

Figure 2E-25

BORING I-5

SURFACE ELEVATION 474.2
CO-ORDINATES N 472,603
E 1,904,210

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY WITH SOME SAND. (HARD)
SM-ML	REDDISH BROWN CLAYEY SILT WITH SOME MICA (VERY STIFF) AND MOTTLED WHITE AND ORANGE BROWN SILTY FINE SAND. (MEDIUM DENSE)
SM-ML	MOTTLED GREY, PINK, AND WHITE SILTY FINE SAND WITH SOME MICA (DENSE) AND SOME YELLOWISH BROWN SILT. DENSE) (MEDIUM DENSE)
SM	MOTTLED WHITE, LIGHT BROWN AND GREY MICACEOUS SILTY FINE TO MEDIUM SAND WITH SOME COARSE SAND. (MEDIUM DENSE)
SM	WHITE, BROWN, AND GREY MICACEOUS SILTY FINE TO MEDIUM SAND. (VERY DENSE)

11 ■
11 ■
12 ■
13 ■
16 ■
80/11½"*
51/4"*
50/1"*

80 | 29
70 | 0
28 | 0
100 | 65
100 | 92
100 | 95

3
2
3
2
1

DARK GREY TO TAN HIGHLY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-GNEISS COMPOSITION.
GRADES FROM HIGHLY TO MODERATELY WEATHERED WITH DEPTH.

LIGHT TAN MODERATELY JOINTED FINE GRAINED SLIGHTLY WEATHERED GRANODIORITE.

LIGHT GREY SLIGHTLY JOINTED FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SLIGHT FOLIATION.

FRESH ROCK AT 85½'.

LOST WATER CIRCULATION AT 86'.

BLACK TO LIGHT GREY AND TAN HIGHLY TO MODERATELY JOINTED FINE TO COARSE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION.
86' TO 97½' HIGHLY JOINTED.
88' TO 98' MODERATELY WEATHERED.
7" GRANOFELS INCLUSION AT 89½'.
1 FOOT HIGHLY WEATHERED, CONTAINS SOME INCLUSIONS AND HEALED SHEARS AT 90½'.
FRESH ROCK; MODERATELY JOINTED AT 98'.
HIGHLY CONTORTED FOLIATION AT 100½'.

LIGHT GREY MASSIVE MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SOME INCLUSIONS AND INTERMITTANT FOLIATION.

½" JOINT ZONE AT 103'.
½" ZONE OF WEATHERING ALONG FOLIATION AND JOINTS AT 105'.

LIGHT GREY MASSIVE FINE TO COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS.

LIGHT TO DARK GREY MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. CONTAINS MANY HEALED SHEARS.
SLIGHT WEATHERING ALONG TWO JOINTS AT 111'.

BORING TERMINATED 8-9-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES.
*INDICATES STANDARD PENETRATION TESTS.

GROUND WATER LEVEL AT DEPTH 73 FEET, ON 10-14-71.

LOG OF BORING I-5

Amendment 0
August 1984

Figure 2E-26

BORING I-6

SURFACE ELEVATION 459.4
CO-ORDINATES N 472,500
E 1,904,105

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY WITH SOME SAND AND SOME MICA. (VERY STIFF)
SM	MOTTLED YELLOWISH BROWN TO BROWN WITH SOME BLACK SILTY FINE SAND WITH SOME MICA. (DENSE)
	GRADES MOTTLED GREY BROWN, HIGHLY MICACEOUS.
SM	MOTTLED ORANGE, BROWN, AND GREY MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
	GRADES VERY DENSE; SOME WEATHERED ROCK FRAGMENTS.
	DARK GREY JOINTED TO MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. CONTAINS SOME INCLUSIONS AND MANY HEALED FRACTURES.
	52½' TO 58' HIGHLY JOINTED; SOME SLIGHT WEATHERING.
	6" MODERATELY WEATHERED ZONE AT 58'.
	6" SLIGHTLY WEATHERED ZONE AT 58½'.
	6" QUARTZOFELDSPATHIC DIKE AT 58½'.
	58½' TO 77' MASSIVE FRESH ROCK.
	2" HIGHLY WEATHERED ZONE ALONG JOINT AT 62'.
	6" JOINT ZONE WITH SOME WEATHERING AT 63½'.
	71½' TO 73' LIGHT GREY MASSIVE FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION.
	LIGHT GREY MASSIVE FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS REMNANTS OF FOLIATION. FRESH ROCK.
	BORING TERMINATED 8-10-71.
	SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES. *INDICATES STANDARD PENETRATION TESTS.

13							
23							
22							
25							
106/7"							
130							
67	0						
65	47						
99	73						
100	100						

2
1

LOG OF BORING I-6

Amendment 0
August 1984

Figure 2E-27

BORING I-7

SURFACE ELEVATION 456.0
CO-ORDINATES N 472,561
E 1,904,277

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							

	SYMBOLS	DESCRIPTIONS
7*		LIGHT BROWN FINE TO MEDIUM SAND, FILL FOR ACCESS. (LOOSE)
	CL	REDDISH BROWN SILTY CLAY. (MEDIUM STIFF)
15	SM	LIGHT BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
19		GRADES TO DARK BROWN.
70/10½"		GRADES OLIVE IN COLOR AND VERY DENSE.
50/3"	SP	TAN MICACEOUS FINE TO MEDIUM SAND. (VERY DENSE)
60/4½"		GRADING SILTY.
		GRADING VERY DENSE, SOME ROCK FRAGMENTS.
90 40		LIGHT TAN TO BROWN HIGHLY JOINTED TO MASSIVE FINE TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION, CONTAINS SLIGHT FOLIATION.
41 0	3-2	65' TO 78' MODERATELY WEATHERED AND MODERATELY TO HIGHLY JOINTED.
		65' TO 74' COARSE GRAINED.
		74' TO 83' FINE GRAINED.
60 38	2	78' TO 80½' SLIGHTLY WEATHERED AND SLIGHTLY JOINTED; CONTAINS DISTINCT FOLIATION.
100 88	1	MASSIVE FRESH ROCK AT 80½'.
		LIGHT PINK-GREY WITH BLACK MASSIVE COARSE GRAINED GRANODIORITE WITH ZONED FELDSPARS.
91 76		LIGHT GREY SLIGHTLY JOINTED FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS FOLIATION AND INCLUSIONS.
90 80		LIGHT PINK-GREY WITH BLACK MASSIVE MEDIUM TO COARSE GRAINED GRANODIORITE WITH ZONED FELDSPARS.
		3" JOINT ZONE AT 90½'.
		GRADES VERY COARSE GRAINED AT 94'.
		2" JOINT ZONE AT 95'.
		BORING TERMINATED 8-4-71.
		SAMPLER DRIVEN WITH A 140 LB. WEIGHT FALLING 30 INCHES. *INDICATES STANDARD PENETRATION TESTS.

GROUND WATER LEVEL AT DEPTH 55 FEET, ON 10-14-71.

LOG OF BORING I-7

Figure 2E-28

BORING 1-8

SURFACE ELEVATION 466.3
CO-ORDINATES N 472,384
E 1,904,000

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							

SYMBOLS	DESCRIPTIONS
ML	REDDISH BROWN MICACEOUS CLAYEY SILT. (STIFF)
SM-SP	TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
	GRADES SILTY FINE SAND.
SP	MOTTLED YELLOW AND BROWN MICACEOUS FINE TO MEDIUM SAND WITH SOME SILT. (DENSE)
	GRADES GREY AND TAN.
SW ROCK	INTERLAYERED ZONES OF HIGHLY WEATHERED ROCK AND FINE TO COARSE SAND.
	LIGHT AND DARK GREY HIGHLY JOINTED TO MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. CONTAINS INCLUSIONS AND HEALED SHEARS. 56' TO 60½' GRADES FROM HIGHLY TO SLIGHTLY WEATHERED; HIGHLY JOINTED. 60½' TO 64' FRESH ROCK; MODERATELY JOINTED WITH SLIGHT WEATHERING ALONG JOINT SURFACES. 6" HIGHLY TO MODERATELY WEATHERED JOINT ZONE AT 64½'. 64½' TO 66½' FRESH ROCK; HIGHLY JOINTED. 66½' TO 69' FRESH ROCK; SLIGHLY JOINTED. MASSIVE FRESH ROCK AT 69'.
	6" HIGH ANGLE JOINT AND FRACTURED ZONE HEALED WITH PINK FELDSPARS AT 82'.
	BORING TERMINATED 8-19-71.
	SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

15		
19		
30		
23		
31		
41		
50/3"		
0	0	3
33	18	3-2
88	62	2
97	88	1
100	91	

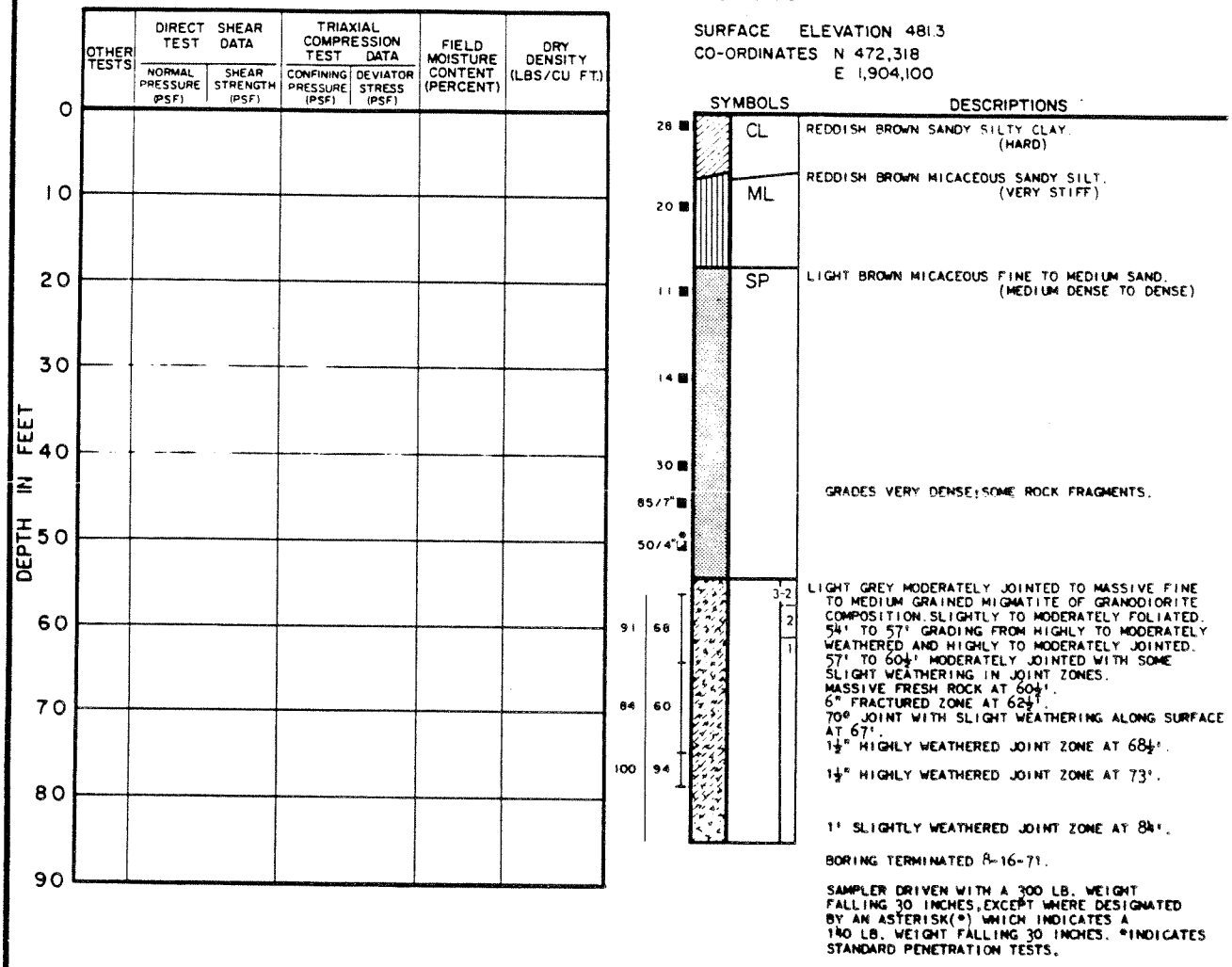
LOG OF BORING 1-8

Amendment 0
August 1984

Figure 2E-29

BORING 1-9

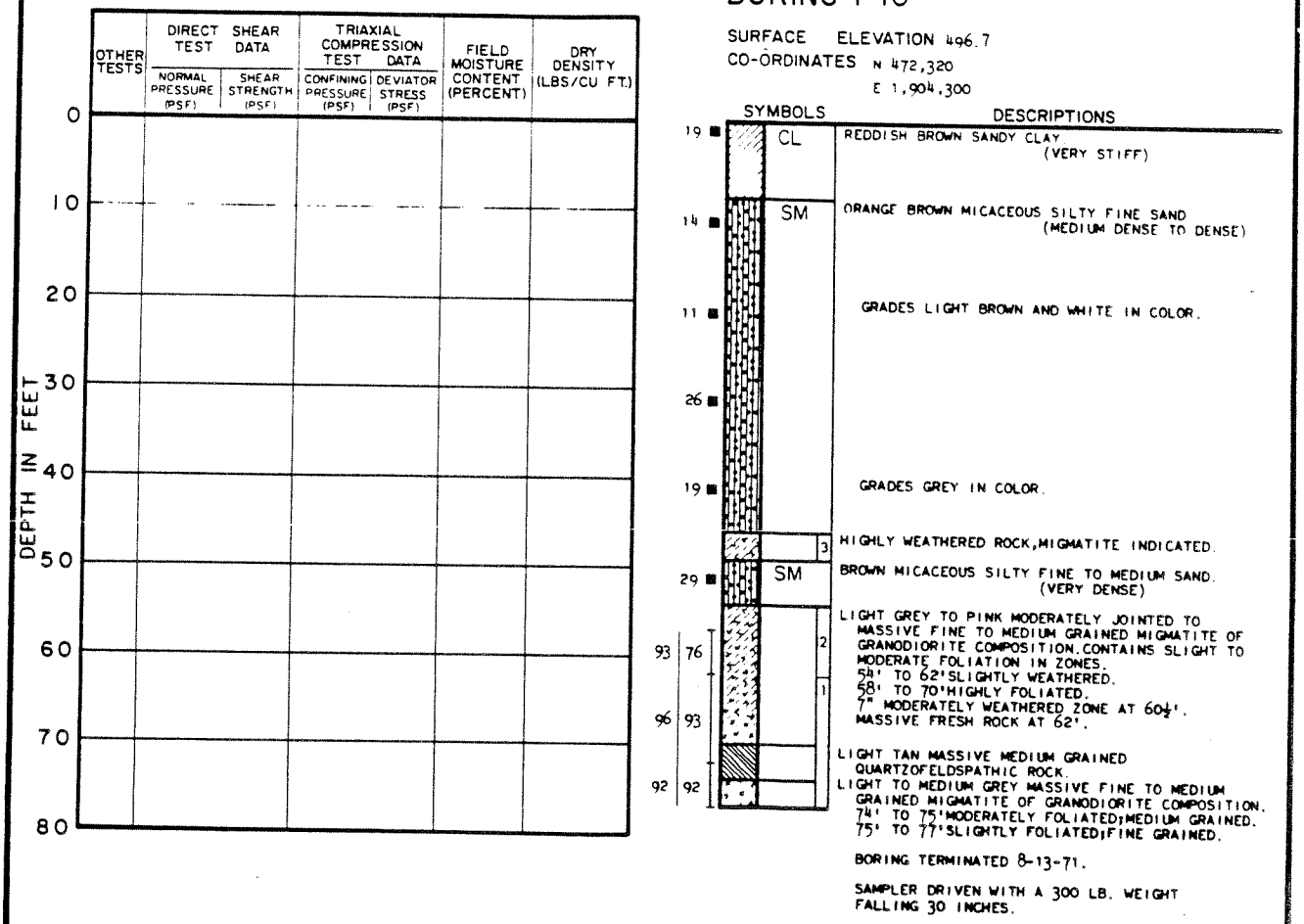
SURFACE ELEVATION 481.3
CO-ORDINATES N 472,318
E 1,904,100



LOG OF BORING 1-9

Amendment 0
August 1984

Figure 2E-30



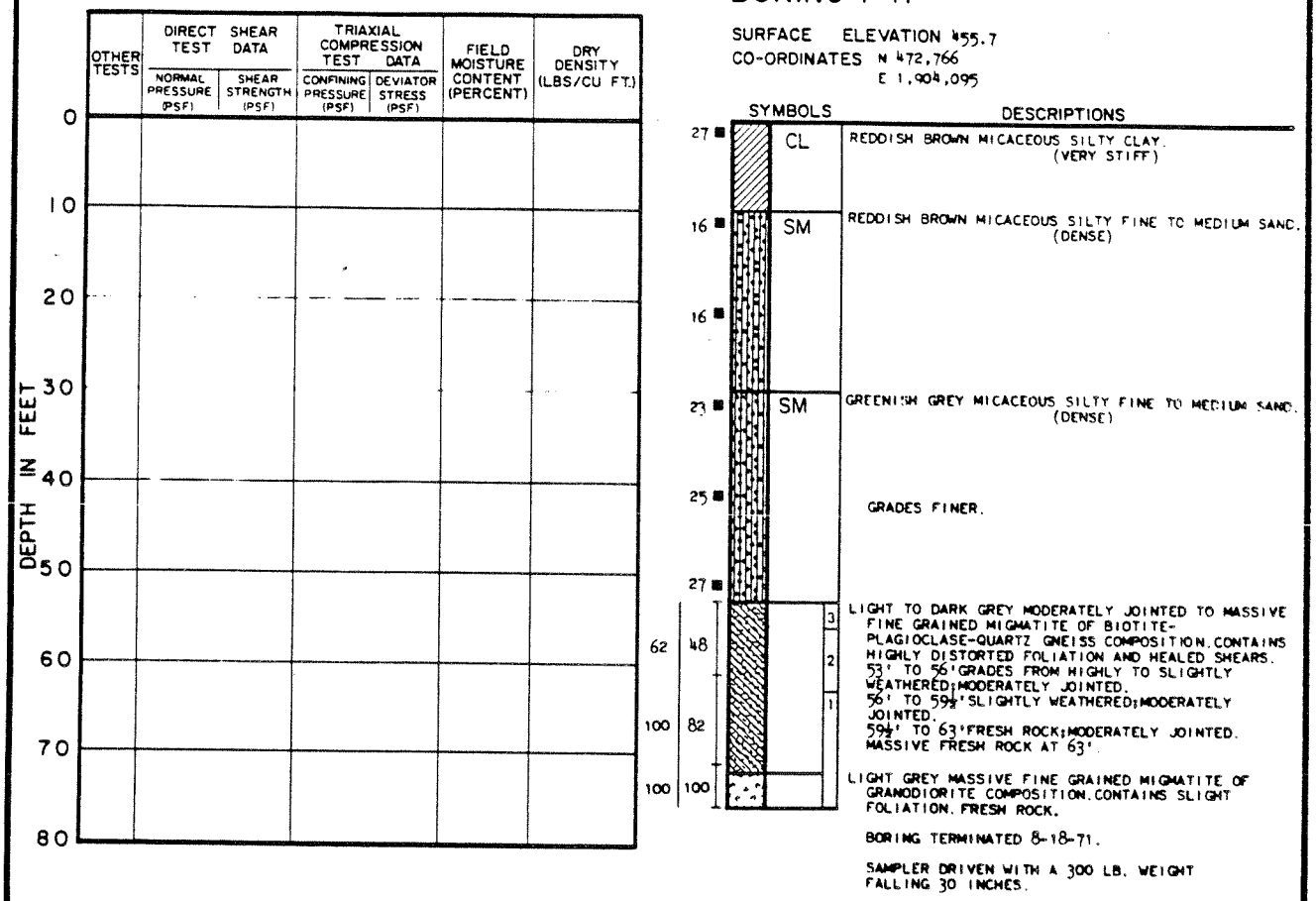
LOG OF BORING 1-10

Amendment 0
August 1984

Figure 2E-31

BORING I-11

SURFACE ELEVATION 455.7
CO-ORDINATES N 472,766
E 1,904,095



LOG OF BORING I-11

Amendment 0
August 1984

Figure 2E-32

BORING 1-12

SURFACE ELEVATION 400.6
CO-ORDINATES N 473,150
E 1,904,000

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							

SYMBOLS	DESCRIPTIONS
CL	RED BROWN SANDY CLAY (STIFF)
	GRADES MORE SANDY.
SM	TAN AND OLIVE MICACEOUS SILTY FINE SAND. (DENSE)
SP	TAN, OLIVE, BLACK AND WHITE MICACEOUS FINE TO MEDIUM SAND. (DENSE)
	LIGHT AND DARK GREY MASSIVE FINE GRAINED CONTACT BRECCIA MIGMATITE 61' TO 63' GRADES FROM WEATHERED TO FRESH ROCK. 63' TO 80' MASSIVE FRESH ROCK. LIGHT AND DARK GREY MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. LIGHT AND DARK GREY MASSIVE FINE GRAINED CONTACT BRECCIA MIGMATITE.

BORING TERMINATED 8-20-71.

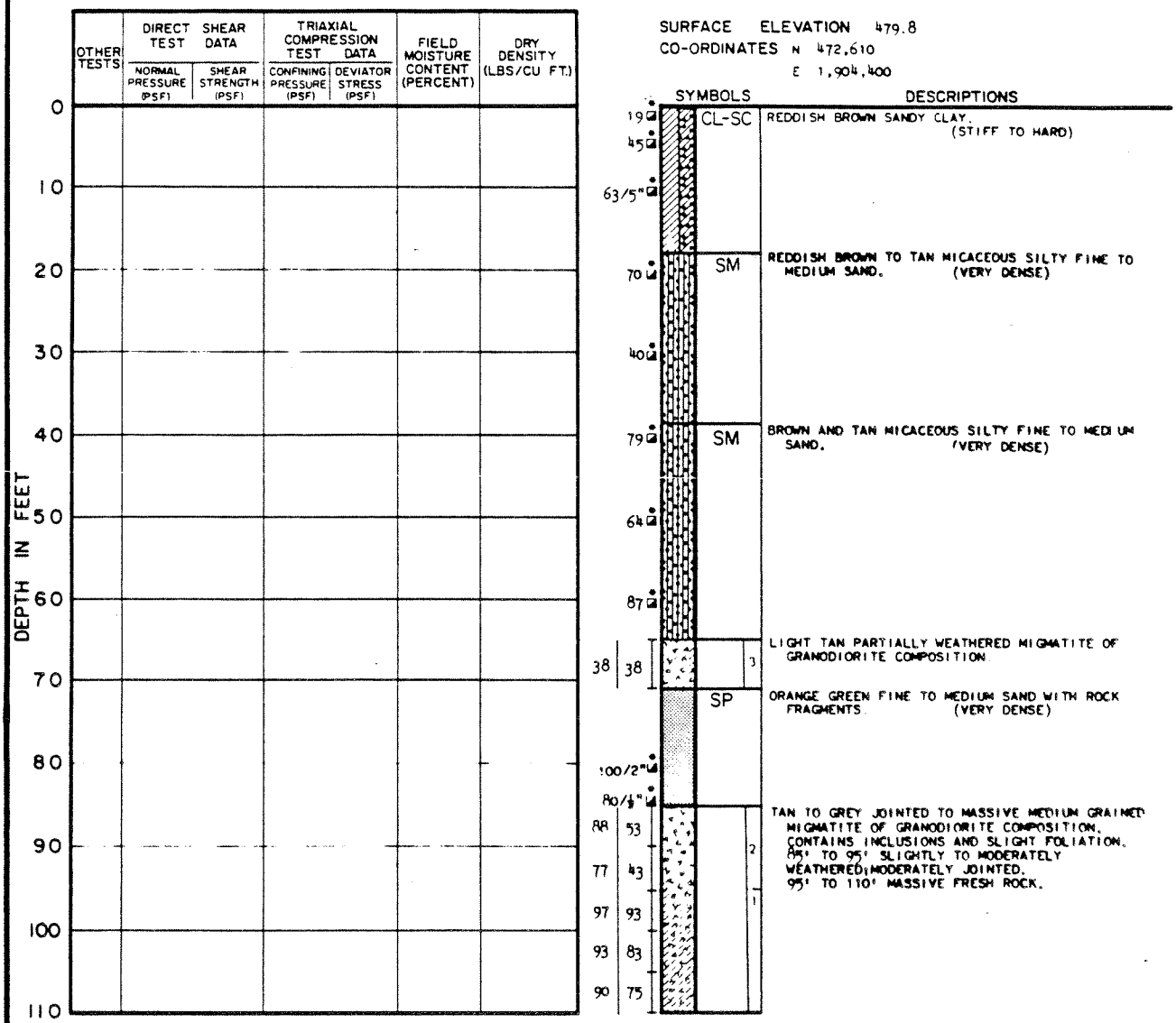
SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES. *INDICATES STANDARD PENETRATION TESTS.

GROUND WATER LEVEL AT DEPTH 31 FEET, ON 10-14-71.

LOG OF BORING 1-12

BORING 2-1

SURFACE ELEVATION 479.8
CO-ORDINATES N 472,610
E 1,904,400



BORING TERMINATED 7-30-71.

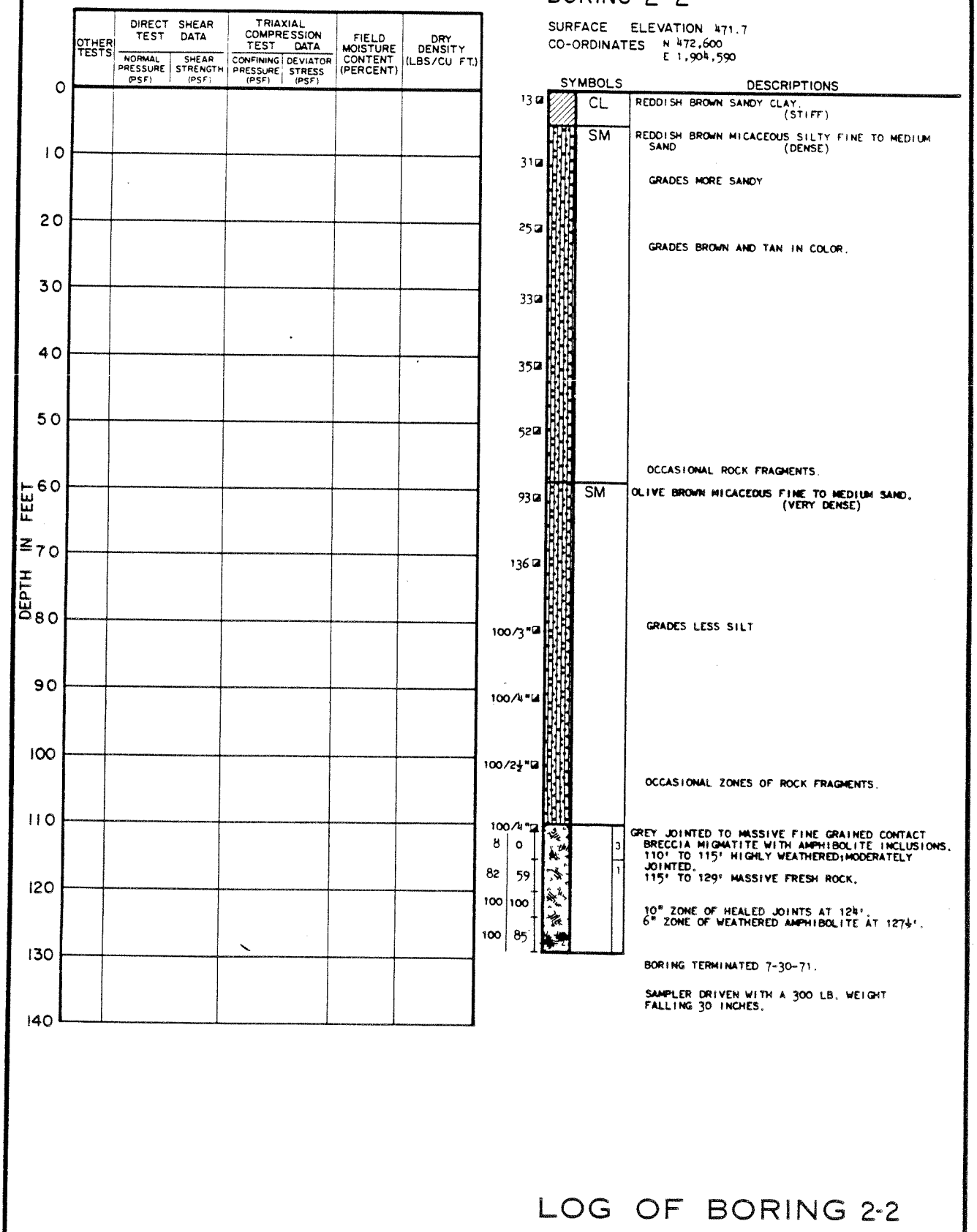
SAMPLER DRIVEN WITH A 140 LB. WEIGHT FALLING 30 INCHES. *INDICATES STANDARD PENETRATION TESTS.

NOTE:
BORING LOG IS A COMPOSITE OF TWO ADJACENT BORINGS, ONE OF WHICH WAS TERMINATED AT A SHALLOW DEPTH DUE TO EQUIPMENT PROBLEMS.

LOG OF BORING 2-1

Amendment 0
August 1984

Figure 2E-34

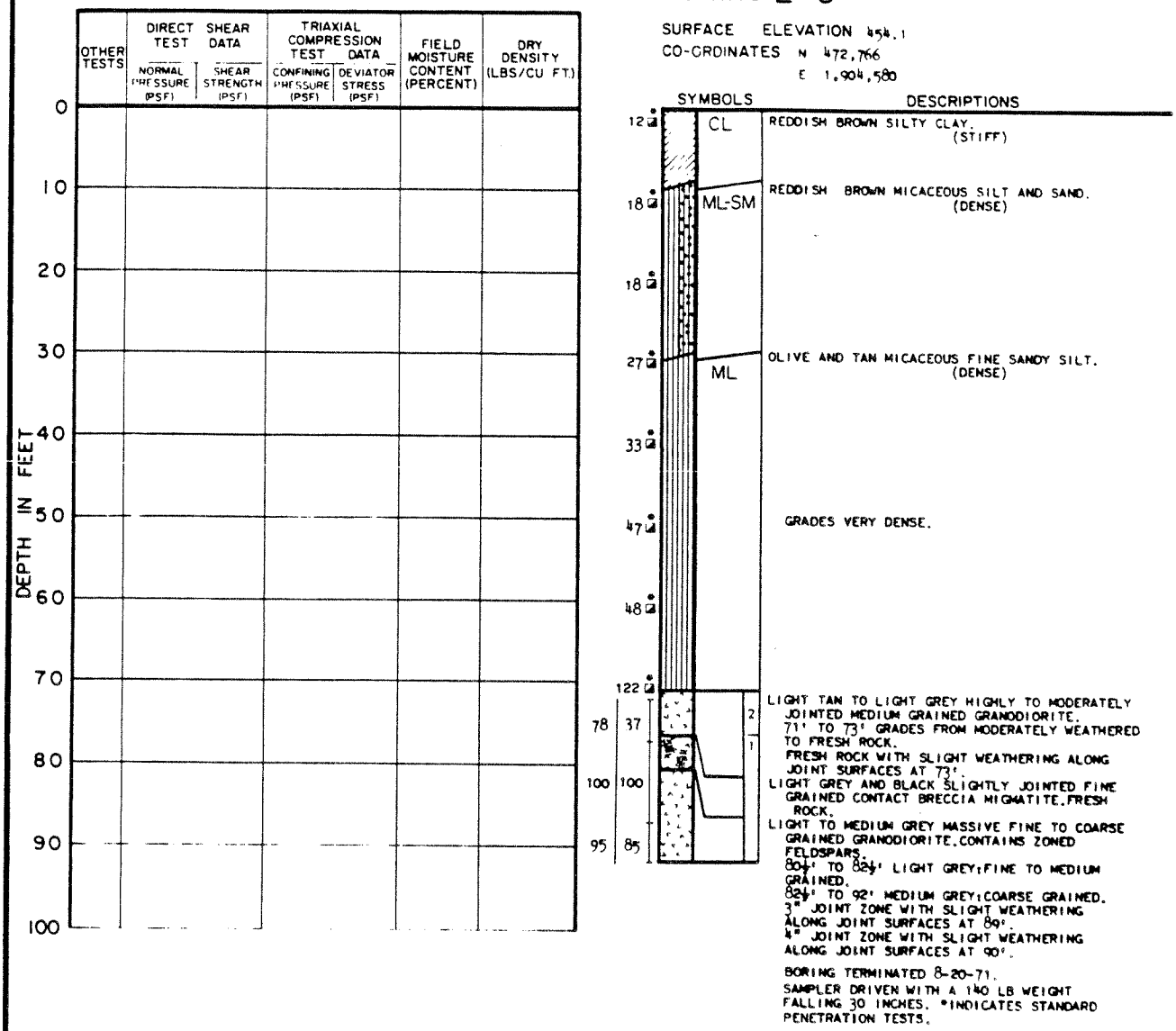


LOG OF BORING 2-2

Figure 2E-35

BORING 2-3

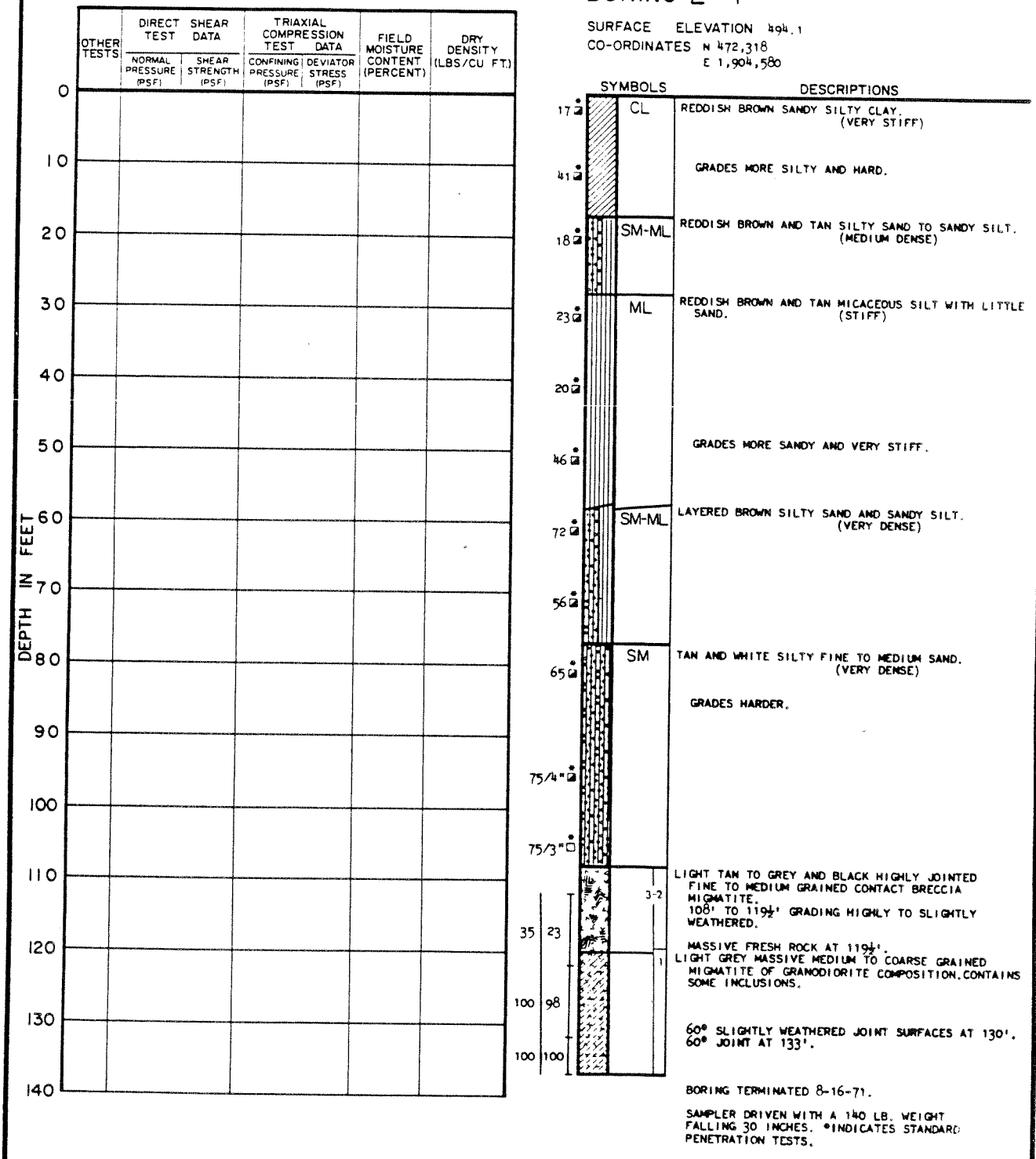
SURFACE ELEVATION 454.1
CO-ORDINATES N 472,766
E 1,904,580



LOG OF BORING 2-3

Amendment 0
August 1984

Figure 2E-36



LOG OF BORING 2-4

Amendment 0
August 1984

Figure 2E-37

BORING 3-1

SURFACE ELEVATION 457.6
CO-ORDINATES N 472,600
E 1,904,740

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							
120							

SYMBOLS	DESCRIPTIONS
	CLAY; FILL FOR ACCESS.
CL	REDDISH BROWN MICACEOUS SILTY CLAY. (VERY STIFF)
SM-ML	REDDISH BROWN MICACEOUS SANDY SILT TO SILTY SAND. (DENSE)
	GRADES PARTIALLY YELLOW IN COLOR.
	GRADES BROWN AND TAN IN COLOR.
SM	TAN AND BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (VERY DENSE)
	LIGHT GREY SLIGHTLY TO HIGHLY JOINTED FINE TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS. 80' TO 81' SLIGHTLY TO MODERATELY WEATHERED; HIGHLY JOINTED. 81' TO 82½' FRESH ROCK; SLIGHTLY JOINTED. 82½' TO 83' MODERATELY WEATHERED 6" JOINT ZONE WITH INCLUSIONS. 83' TO 84' SLIGHTLY TO MODERATELY WEATHERED; MODERATELY JOINTED. 84' TO 88½' MODERATELY WEATHERED; HIGHLY JOINTED. 1' ZONE OF SLIGHTLY WEATHERED ROCK AT 86'. 88½' TO 92½' MASSIVE FRESH ROCK. 92½' TO 98' MODERATELY WEATHERED; HIGHLY JOINTED. LIGHT GREY MASSIVE COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS. FRESH ROCK. 99' TO 100' SLIGHTLY WEATHERED JOINT ZONE. LIGHT GREY MASSIVE FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS AND REMNANTS OF FOLIATION. LIGHT GREY MASSIVE MEDIUM TO COARSE GRAINED GRANODIORITE. 1½' MODERATELY JOINTED WITH SOME ZONES OF SLIGHT WEATHERING AT 111' BORING TERMINATED 8-11-71.

SAMPLER DRIVEN WITH A 140 LB. WEIGHT FALLING 30 INCHES. *DENOTES STANDARD PENETRATION TEST.

29*			
24*			
14*			
26*			
26*			
37*			
67*			
80/4"*			
89	40		
100	100	2	
		1	
		3	
80	31		
		1	
98	91		

LOG OF BORING 3-1

Figure 2E-38

BORING 3-2

SURFACE ELEVATION 443.7
CO-ORDINATES N 472,600
E 1,904,900

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
A D					18	104
B					12	115
	3000	4380			14	116

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY. (VERY STIFF) GRADES YELLOW AND RED IN COLOR GRADES SANDY.
SM	TAN TO BROWN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE) GRADES REDDISH BROWN AND WITH FINE TO MEDIUM SAND. GRADES TAN TO BROWN IN COLOR. GRADES VERY DENSE.
SP	TAN TO BROWN MICACEOUS FINE TO MEDIUM SAND WITH A TRACE OF SILT AND SMALL ROCK FRAGMENTS. (VERY DENSE)
	LIGHT GREY-PINK HIGHLY JOINTED MEDIUM GRAINED GRANODIORITE. HIGHLY TO MODERATELY WEATHERED.
	LIGHT AND DARK GREY HIGHLY JOINTED FINE GRAINED CONTACT BRECCIA MIGMATITE. HIGHLY FRAGMENTED; SLIGHTLY TO MODERATELY WEATHERED.
SM/ ROCK	DARK BROWN HIGHLY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. HIGHLY WEATHERED WITH ZONES OF SOIL CONSISTENCY AND THIN LAYERS OF MORE COMPETENT CONTACT BRECCIA MIGMATITE.
SM/ ROCK	LIGHT AND DARK GREY HIGHLY JOINTED TO MASSIVE FINE GRAINED CONTACT BRECCIA MIGMATITE. 102' TO 110' HIGHLY JOINTED. 102' TO 105' MODERATELY WEATHERED. 105' TO 110' HIGHLY WEATHERED WITH ZONES OF SOIL CONSISTENCY.. MASSIVE FRESH ROCK AT 110'. STAINED JOINT AT 115'.
	LIGHT GREY MASSIVE FINE TO MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS AND FOLIATION. STAINED JOINT AT 120½'. 3" JOINT ZONE AT 126½'. BORING TERMINATED 8-9-71. SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

10		CL	
14			
		SM	
16			
13			
16			
21			
59			
		SP	
113			
90/4"	80		3
17	0		
			2
32	3		1
		SM/ ROCK	
78	17	SM/ ROCK	3
			1
99	88		
100	92		

GROUND WATER LEVEL AT A DEPTH OF 65 FEET ON 10-14-71.

LOG OF BORING 3-2

Amendment 0
August 1984

Figure 2E-39

BORING 3-3

SURFACE ELEVATION 425.4
CO-ORDINATES N 472,742
E 1,904,900

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0	C					23	
10							
20		2500	2050			19	86
30							
40	B	1500	1560			20	94
50	B					20	102
60	*,D					19	112
70							
80							
90							
100							
110							

SYMBOLS	DESCRIPTIONS
ML	BROWN SANDY CLAYEY SILT. (MEDIUM STIFF) GRADES REDDISH BROWN AND STIFF TO VERY STIFF
SM	REDDISH BROWN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)
SM	TAN AND OLIVE FINE TO MEDIUM SAND WITH SILT. (DENSE)
	GRADES VERY DENSE.
SW/ROCK	ZONES OF VERY HIGHLY WEATHERED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION, AND FINE TO COARSE SAND DERIVED FROM DECOMPOSED ROCK.
	LIGHT TO MEDIUM GREY MODERATELY JOINTED TO MASSIVE FINE GRAINED MIGMATITE OF BIOTITE-QUARTZ-PLAGIOCLASE GNEISS COMPOSITION. CONTAINS HIGHLY DISTORTED FOLIATION. 80' TO 81½' GRADES FROM HIGHLY TO MODERATELY WEATHERED; HIGHLY TO MODERATELY JOINTED. 81½' TO 93' MASSIVE FRESH ROCK. 6" PINK FELDSPAR HEALED ZONE AT 93' 93' TO 95' FRESH ROCK; MODERATELY JOINTED WITH SOME WEATHERING ALONG JOINTS. 95' TO 106' MASSIVE FRESH ROCK.
	3" JOINT ZONE AT 102½'.

11	0	0
31	18	7
11	100	95
25	100	75
22	100	98
24		
62		

BORING TERMINATED 8-23-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES. *DENOTES STANDARD PENETRATION TEST.

LOG OF BORING 3-3

Figure 2E-40

BORING 3-4

SURFACE ELEVATION 472.1
CO-ORDINATES N 472,318
E 1,904,900

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50		500	1050			21	97
60							
70							
80							
90							
100							
110							

SYMBOLS		DESCRIPTIONS
15	CL	REDDISH BROWN SILTY CLAY. (STIFF)
15	SM	REDDISH BROWN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)
17		GRADES PARTIALLY TAN IN COLOR.
61/8"	SM	TAN AND OLIVE MICACEOUS SILTY SAND. (MEDIUM DENSE) LENSES OF ROCK AT 31'.
15		
25		GRADES DENSE TO VERY DENSE.
40		
44		
50/2"		TAN TO MEDIUM GREY HIGHLY JOINTED TO MASSIVE FINE TO MEDIUM GRAINED GRANODIORITE. CONTAINS SOME AREAS OF FLOW STRUCTURE AND ZONED FELDSPARS. 55' TO 65' HIGHLY WEATHERED. 55' TO 70' MODERATELY JOINTED. 65' TO 66' MODERATELY WEATHERED. 66' TO 67½' SLIGHTLY WEATHERED. 67½' TO 68' HIGHLY WEATHERED. 68' TO 69' SLIGHTLY WEATHERED. 69' TO 70' MODERATELY WEATHERED. 70' TO 74' MASSIVE; VERY SLIGHTLY WEATHERED. 74' TO 78½' MODERATELY WEATHERED; MODERATELY JOINTED; TAN. 78½' TO 85' MASSIVE FRESH ROCK. 85' TO 88' FRESH TO SLIGHTLY WEATHERED; SLIGHTLY JOINTED. 88' TO 94½' FRESH TO SLIGHTLY WEATHERED; HIGHLY JOINTED.
50/1"		
62	32	
86	63	
97	90	
100	55	94½' TO 101' FRESH ROCK; SLIGHTLY JOINTED.
100	81	101' TO 109' MASSIVE FRESH ROCK.

BORING TERMINATED 8-23-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES.

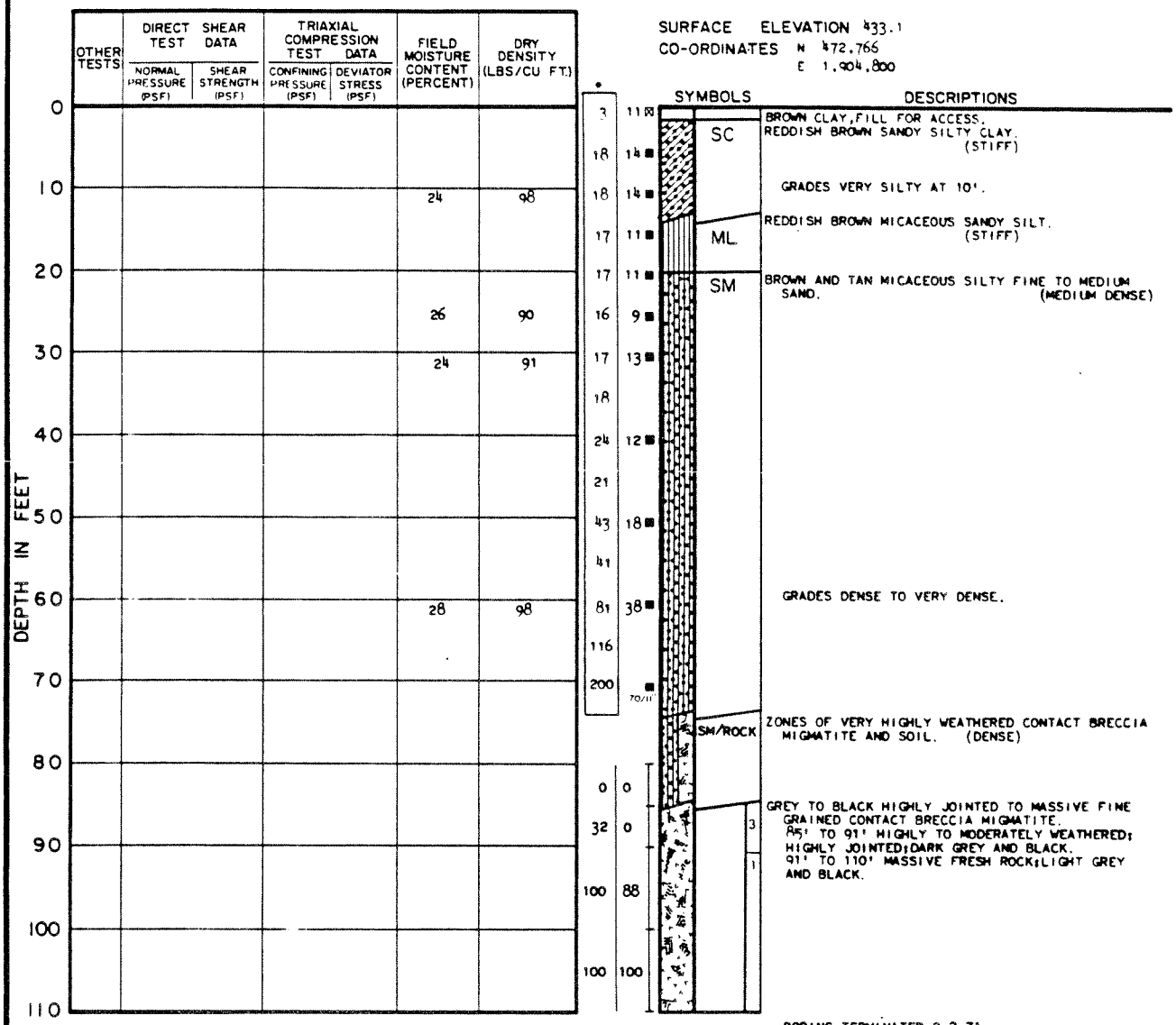
LOG OF BORING 3-4

Amendment 0
August 1984

Figure 2E-41

BORING 3-5

SURFACE ELEVATION 433.1
CO-ORDINATES N 472,766
E 1,904,800



BORING TERMINATED 9-2-71.

NUMBERS ENCLOSED WITHIN THE COLUMN DESIGNATED BY ASTERISK (*) INDICATE BLOWCOUNTS OBTAINED FROM AN ADJACENT BORING UTILIZING STANDARD PENETRATION EQUIPMENT.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE ENCLOSED WITHIN THE COLUMN DESIGNATED BY ASTERISK (*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES.
*INDICATES STANDARD PENETRATION TEST.

LOG OF BORING 3-5

Amendment 0
August 1984

Figure 2E-42

BORING 3-6

SURFACE ELEVATION 442.6
CO-ORDINATES N 472,640
E 1,904,875

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20		1500	1300			20	89
30							
40							
50		2500	2070			13	103
60							
70							
80							
90							
100							
110							
120							
130							
140							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SANDY SILTY CLAY. (VERY STIFF)
ML	REDDISH BROWN AND TAN CLAYEY SANDY SILT. (VERY STIFF)
SM	REDDISH BROWN AND TAN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)
SM	TAN AND OLIVE MICACEOUS FINE SAND WITH SILT. (MEDIUM DENSE)
SM	GREY, BROWN AND OLIVE MICACEOUS SILTY FINE TO MEDIUM SAND WITH ROCK FRAGMENTS. (DENSE)
	GRADES VERY DENSE
SP/ROCK	ZONES OF VERY HIGHLY JOINTED, HIGHLY WEATHERED CONTACT BRECCIA MIGMATITE AND SOIL.
	GREY AND BLACK HIGHLY JOINTED FINE TO MEDIUM GRAINED CONTACT BRECCIA MIGMATITE. CONTAINS VERY HIGHLY CONTORTED FOLIATION AND NUMEROUS ANGULAR INCLUSIONS. 91' TO 95' MODERATELY WEATHERED. 95' TO 99' FRESH ROCK WITH SLIGHT WEATHERING ALONG SOME JOINTS. 99' TO 103' MODERATELY WEATHERED. 103' TO 107' SLIGHTLY TO MODERATELY WEATHERED. 107' TO 108' FRESH ROCK.
	LIGHT GREY MASSIVE FINE GRAINED GRANODIORITE. FRESH ROCK. 2" SLIGHTLY WEATHERED JOINT ZONE AT 110'.
	LIGHT GREY AND BLACK HIGHLY JOINTED TO MASSIVE FINE GRAINED CONTACT BRECCIA MIGMATITE. 112' TO 113½' FRESH TO MODERATELY WEATHERED. 113½' TO 116½' MODERATELY WEATHERED; HIGHLY JOINTED. 116½' TO 122½' MASSIVE FRESH ROCK.
	LIGHT GREY MASSIVE MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS. FRESH ROCK.
	MEDIUM GREY AND BLACK MASSIVE FINE TO MEDIUM GRAINED CONTACT BRECCIA MIGMATITE. FRESH ROCK.

BORING CONTINUED

LOG OF BORING 3-6

Amendment 0
August 1984

Figure 2E-43

BORING 3-6 CONT'D.

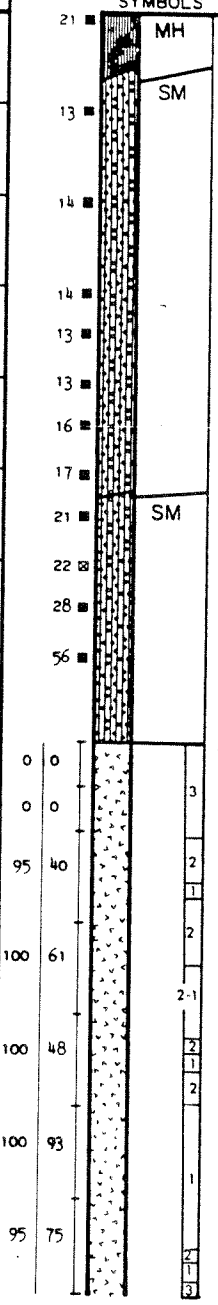
DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)	SYMBOLS	DESCRIPTIONS
140								100 100	MEDIUM GREY MASSIVE FINE TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION CONTAINS SOME INCLUSIONS GRADING TO GRANODIORITE AT 155'
150									
160									BORING TERMINATED 8-31-71. SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.
170									

LOG OF BORING 3-6

BORING 3-7

SURFACE ELEVATION 466.9
CO-ORDINATES N 472,500
E 1,904,740

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50		3500	3230			20	98
60							
70		4000	3690			18	102
80							
90							
100							
110							
120							
130							
140							



TAN TO GREY HIGHLY JOINTED TO MASSIVE MEDIUM TO COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS.
80' TO 90' HIGHLY WEATHERED; HIGHLY JOINTED; TAN.

90' TO 92' MODERATELY WEATHERED, MODERATELY JOINTED; TAN.
92' TO 93½' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED; TAN.
93½' TO 95' FINE GRAINED FRAGMENTED QUARTZ ZONE.
95' TO 95½' FRESH ROCK.
95½' TO 104½' MODERATELY WEATHERED; MODERATELY TO HIGHLY JOINTED; SOME THIN HIGHLY WEATHERED ZONES.
104½' TO 112' FRESH ROCK; SLIGHTLY TO MODERATELY JOINTED.
4" MODERATELY WEATHERED JOINT ZONE AT 107'.
4" MODERATELY WEATHERED JOINT ZONE AT 108'.
3" MODERATELY WEATHERED JOINT ZONE AT 111'.
112' TO 113½' SLIGHTLY WEATHERED; MODERATELY JOINTED.
113½' TO 115½' FRESH ROCK; SLIGHTLY JOINTED.
115½' TO 119' MODERATELY WEATHERED; HIGHLY JOINTED; SOME THIN HIGHLY WEATHERED ZONES.
119' TO 135' MASSIVE FRESH ROCK.

135' TO 136' SLIGHTLY WEATHERED, HIGHLY JOINTED.
136' TO 138½' MASSIVE FRESH ROCK.
138½' TO 140' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED.
140' TO 141' MODERATELY WEATHERED; MODERATELY JOINTED.
141' TO 149½' MASSIVE FRESH ROCK.

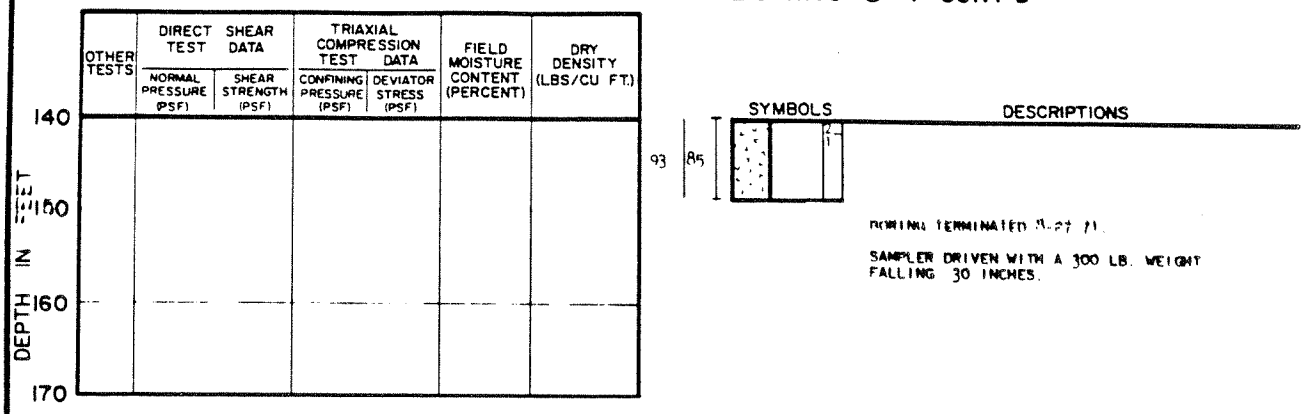
BORING CONTINUED

LOG OF BORING 3-7

Amendment 0
August 1984

Figure 2E-44

BORING 3-7 CONT'D



LOG OF BORING 3-7

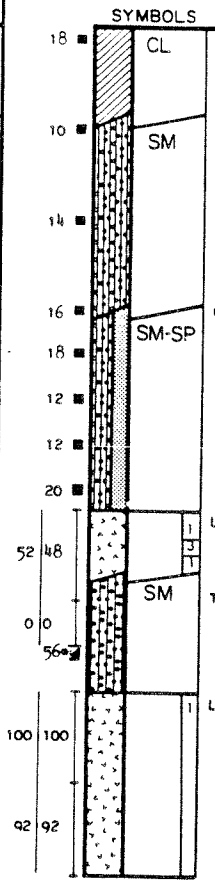
Amendment 0
August 1984

Figure 2E-44a

BORING 3-8

SURFACE ELEVATION 453.0
CO-ORDINATES N 472,500
E 1,904,900

DEPTH IN FEET	OTHER TESTS	DIRECT TEST SHEAR DATA: NORMAL PRESSURE (PSF)	DIRECT TEST SHEAR DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30		2000	1800			15	98
	8					15	95
40		3000	2420			21	96
50							
60							
70							
80							
90							
100							



DESCRIPTIONS

REDDISH BROWN MICACEOUS SILTY SANDY CLAY. (STIFF)

TAN AND OLIVE MICACEOUS SILTY FINE SAND (MEDIUM DENSE)

OLIVE AND TAN SILTY MICACEOUS FINE TO COARSE SAND AND ZONES OF SAND WITHOUT SILT. (MEDIUM DENSE)

LIGHT GREY MASSIVE COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS.
53' TO 56' FRESH ROCK.
56' TO 57½' VERY HIGHLY WEATHERED.
57½' TO 60' FRESH ROCK.
TAN SILTY FINE SAND. (VERY DENSE)

LIGHT GREY MASSIVE COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS. FRESH ROCK.

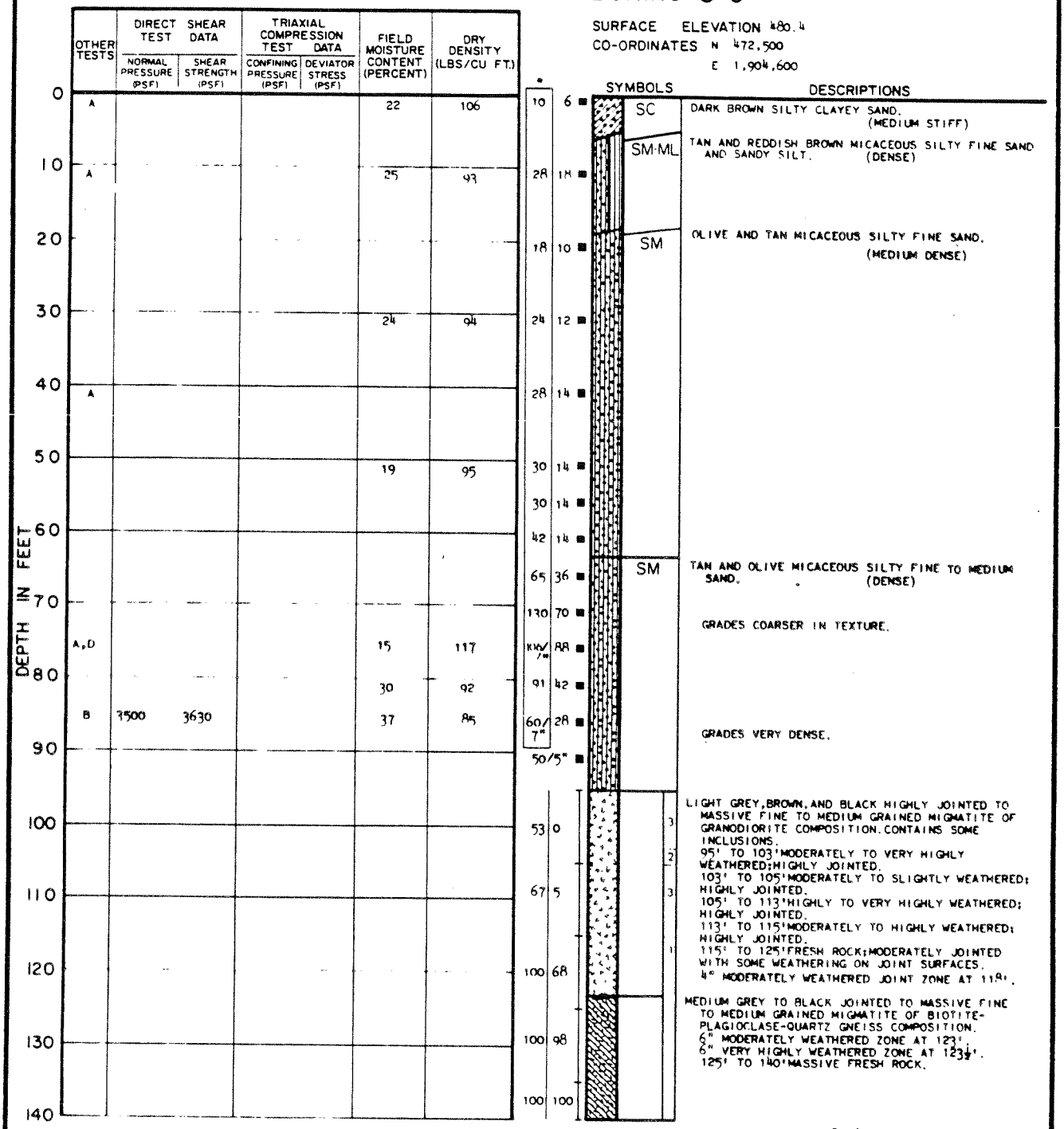
BORING TERMINATED 8-25-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES
*INDICATES STANDARD PENETRATION TEST.

LOG OF BORING 3-8

BORING 3-9

SURFACE ELEVATION 480.4
CO-ORDINATES N 472,500
E 1,904,600



BORING TERMINATED 8-26-71.

NUMBERS ENCLOSED WITHIN THE COLUMN DESIGNATED BY ASTERISK (*) INDICATE BLOWCOUNTS OBTAINED FROM AN ADJACENT BORING UTILIZING STANDARD PENETRATION EQUIPMENT.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE ENCLOSED WITHIN THE COLUMN DESIGNATED BY ASTERISK (*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES.

*INDICATES STANDARD PENETRATION TESTS.

LOG OF BORING 3-9

BORING 3-10

SURFACE ELEVATION 445.9
CO-ORDINATES N 472,400
E 1,905,000

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0	A					32	
10		1500	1830			18	94
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							
120							
130							
140							

SYMBOLS

10 ■ SC — REDDISH BROWN SILTY CLAYEY SAND. (STIFF)

12 ■ 12 ■ 12 ■ 14 ■ 20. ■ SM — OLIVE AND BROWN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)

88 88 — 3 — LIGHT GREY HIGHLY JOINTED TO MASSIVE COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS.
35' TO 38' HIGHLY WEATHERED.
38' TO 45' MASSIVE FRESH ROCK.

43 33 — SM — BROWN AND OLIVE SILTY FINE TO MEDIUM SAND. (VERY DENSE)

85/10" 70 82

98/3" 96 82 59 36 100 51 73 12 92 52 63 39 86 47

LIGHT GREY JOINTED TO MASSIVE COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS.
64' TO 71½' MASSIVE FRESH ROCK.
71½' TO 76' MODERATELY WEATHERED; HIGHLY JOINTED.
76' TO 79' MASSIVE FRESH ROCK.
79' TO 80' MODERATELY WEATHERED; HIGHLY JOINTED.
80' TO 86' HIGHLY TO VERY HIGHLY WEATHERED; HIGHLY JOINTED.
86' TO 87' SLIGHTLY WEATHERED; HIGHLY JOINTED.
87' TO 92' MASSIVE FRESH ROCK.
6" SLIGHTLY WEATHERED JOINT ZONE AT 89'.
LIGHT GREY JOINTED TO MASSIVE MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SOME INCLUSIONS AND SLIGHT FOLIATION.
92' TO 93' SLIGHTLY WEATHERED; HIGHLY JOINTED.
93' TO 94' FRESH ROCK.
94' TO 95' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED AT HIGH ANGLE.
95' TO 103' HIGHLY TO VERY HIGHLY WEATHERED; HIGHLY JOINTED.
LIGHT GREY JOINTED TO MASSIVE COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS. FRESH ROCK.
103' TO 112' MASSIVE TO SLIGHTLY JOINTED.
3" MODERATELY WEATHERED JOINT ZONE AT 105½'.
12" SLIGHTLY WEATHERED JOINT ZONE AT 107½'.
LIGHT GREY JOINTED TO MASSIVE MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS AND FOLIATION.
112' TO 116½' MASSIVE FRESH ROCK.
116½' TO 120½' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED.
120½' TO 122½' SLIGHTLY WEATHERED; MODERATELY JOINTED.
LIGHT GREY TO BLACK HIGHLY JOINTED FINE TO MEDIUM GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. FRESH ROCK WITH SOME SLIGHT WEATHERING ALONG JOINTS.
129½' TO 134' MASSIVE FRESH ROCK.
LIGHT TO MEDIUM GREY MASSIVE FINE TO MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION CONTAINS INCLUSIONS AND FOLIATION.

BORING TERMINATED 8-30-71.

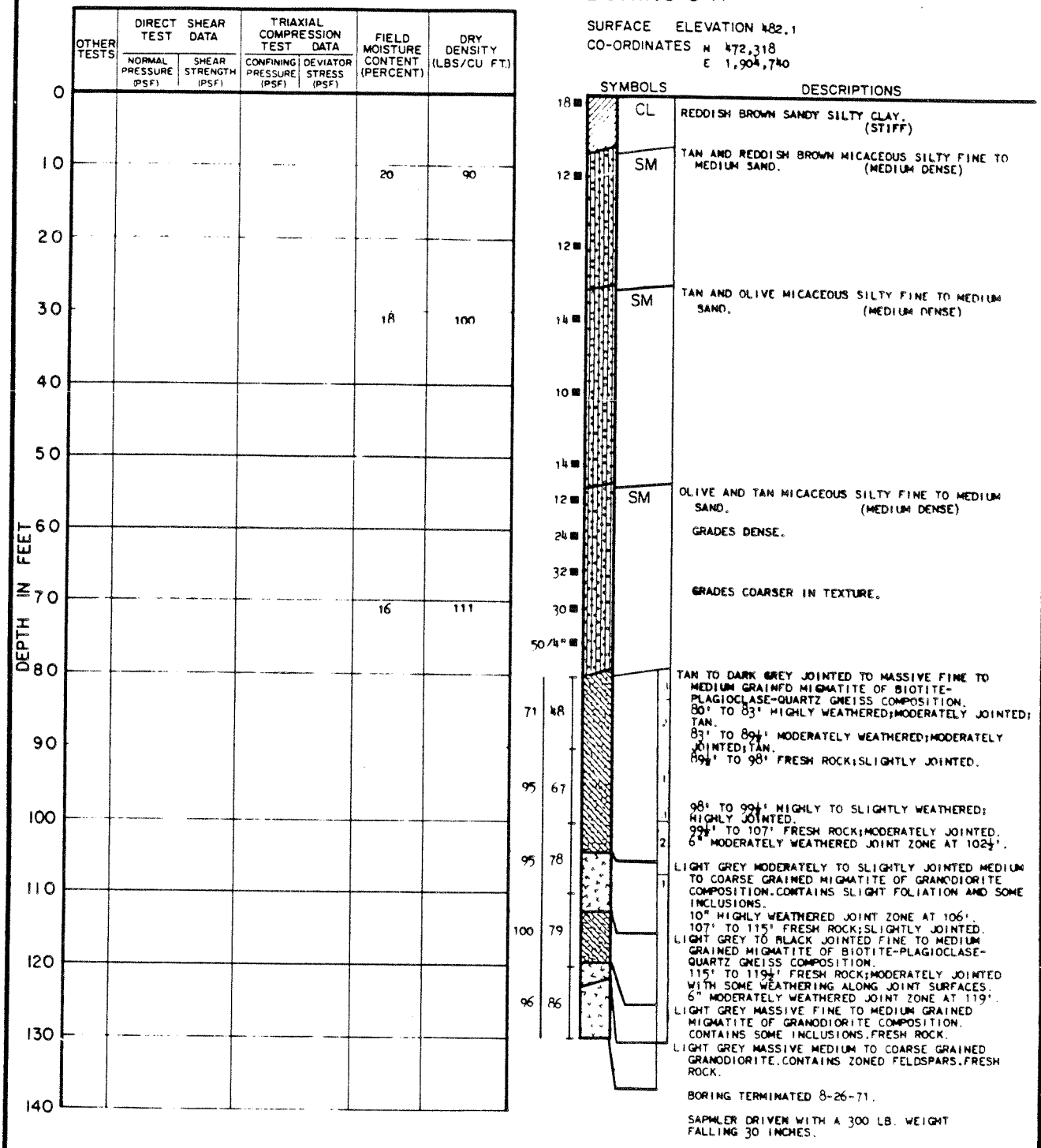
SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE DESIGNATED BY AN ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES.

*INDICATES STANDARD PENETRATION TEST.

LOG OF BORING 3-10

BORING 3-11

SURFACE ELEVATION 482.1
CO-ORDINATES N 472,318
E 1,904,740



LOG OF BORING 3-11

Amendment 0
August 1984

Figure 2E-48

BORING 3-12

SURFACE ELEVATION 417.7
CO-ORDINATES N 473,075
E 1,905,000

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							
120							
130							
140							

SYMBOLS	DESCRIPTIONS
CL-SC	BROWN CLAY TO CLAYEY SAND. (SOFT TO MEDIUM STIFF)
GM/ROCK	LIGHT GREEN TO DARK GREY-GREEN MODERATELY TO HIGHLY WEATHERED FRAGMENTED ROCK, AND FINE SILTY SANDY GRAVEL. (DENSE) PROBABLE CONTACT BRECCIA MIGMATITE. (HARD)
ML/ROCK	ZONES OF LIGHT GREY-GREEN AND TAN BANDED SILT (STIFF) AND BLACK ROCK. PROBABLE AMPHIBOLITE MIGMATITE.
GM/ROCK	GRADING MOTTLED LIGHT GREEN TO DARK GREY-GREEN AND GREEN SILT, FINE SAND, AND GRAVEL (MEDIUM DENSE) WITH INTERMITTENT HARD LAYERS OF ROCK. ROCK IS GNEISSIC MIGMATITE.
	BLACK HIGHLY JOINTED FINE GRAINED MIGMATITE OF AMPHIBOLITE GNEISS COMPOSITION. CONTAINS MANY HIGH ANGLE JOINTS. 49' TO 56½' HIGHLY WEATHERED. 56½' TO 57' FRESH ROCK. 57' TO 58' HIGHLY WEATHERED. 58' TO 78' MODERATELY WEATHERED WITH ZONES OF HIGHLY WEATHERED AND FRESH ROCK.
SM-GM ROCK	ALTERNATING ZONES OF FRESH TO VERY HIGHLY WEATHERED MIGMATITE OF GNEISSIC COMPOSITION, AND SOIL (DENSE) DERIVED FROM COMPLETELY DECOMPOSED ROCK FORMING DARK GREY AND GREEN SILTY AND GRAVELLY SAND.
	MEDIUM TO VERY DARK GREY HIGHLY JOINTED MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS FOLIATION AND INCLUSIONS. 118' TO 125' MODERATELY TO HIGHLY WEATHERED.
	BANDED GREY AND BLACK MODERATELY TO HIGHLY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. 125' TO 138' MODERATELY WEATHERED. 1' HIGHLY WEATHERED ZONE AT 136'. 138' TO 142' HIGHLY WEATHERED; HIGHLY JOINTED.

10 ■ 60 ■ 20 ■ REFUSAL ⊠ 17 ▣ 16 ▣ 21 ▣ 16 ▣ 48 ▣

55	0	3
30	0	2-3
40	0	
40	0	
30	0	
10	0	
10	0	
64	12	3
88	37	2
		3

BORING CONTINUED

LOG OF BORING 3-12

BORING 3-12 CONT'D

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
140							
150							
160							

SYMBOLS			DESCRIPTIONS
RR	37	3	142' TO 145' MODERATELY WEATHERED; MODERATELY JOINTED.
			LIGHT GREY JOINTED MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS FOLIATION AND INCLUSIONS.
			145' TO 147½' FRESH ROCK; MODERATELY JOINTED.
			147½' TO 152½' SLIGHTLY WEATHERED; MODERATELY JOINTED.
100	96	2	152½' TO 157' MODERATELY WEATHERED; MODERATELY JOINTED.
			DARK GREY TO BLACK HIGHLY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION.
		1	157' TO 160' HIGHLY TO MODERATELY WEATHERED.

BORING TERMINATED 9-7-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

GROUND WATER LEVEL AT DEPTH 62 FEET, ON 10-14-71.

LOG OF BORING 3-12

Figure 2E-49a

BORING 3-13

SURFACE ELEVATION 457.0
CO-ORDINATES N 472,275
E 1,905,000

DEPTH IN FEET	OTHER TESTS	DIRECT TEST SHEAR DATA: NORMAL PRESSURE (PSF)	DIRECT TEST SHEAR DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10						20	92
20							
30							
40	A					15	109
50	A						
60							
70							
80							
90							

SYMBOLS	DESCRIPTIONS
8 ■ CL	REDDISH BROWN SANDY SILTY CLAY. (MEDIUM STIFF)
8 ■ SM	TAN, OLIVE AND BROWN MICACEOUS FINE TO MEDIUM SILTY SAND. (MEDIUM DENSE)
8 ■ 14 ■ 14 ■	
34 ■ SP-SW	OLIVE AND TAN MICACEOUS SILTY FINE TO COARSE SAND. (DENSE)
22 ■ 28 ■	
34 ■ SP-SM	TAN AND OLIVE MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
34 ■ 32 ■	
70 ■	GRADING VERY DENSE.
95 81	LIGHT GREY MASSIVE FINE TO COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS. FRESH ROCK. 69' TO 72½' COARSE GRAINED. 72½' TO 74½' MODERATELY WEATHERED JOINT ZONE. 74½' TO 89' FINE GRAINED. 3" SLIGHTLY WEATHERED JOINT ZONE AT 78'.
100 99	1" JOINT ZONE WITH SOME WEATHERING ALONG JOINT SURFACES AT 86'. BORING TERMINATED 9-1-71. SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORING 3-13

Figure 2E-50

BORING 3-14

SURFACE ELEVATION 447.9
CO-ORDINATES N 472,670
E 1,904,770

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0	C					24	
10						30	94
20						28	90
30							
40							
50						27	86
60						27	96
70							
80							
90							
100							
110							
120							
130							
140							

SYMBOLS	DESCRIPTIONS
SC	REDDISH BROWN CLAYEY SAND, (STIFF)
SM-ML	REDDISH BROWN MICACEOUS FINE SILTY SAND WITH SOME SANDY SILT. (MEDIUM DENSE)
SM	TAN AND BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
SM-ML	TAN AND BROWN MICACEOUS FINE TO MEDIUM SILTY SAND AND SANDY SILT. (MEDIUM DENSE)
	MEDIUM GREY JOINTED TO MASSIVE MEDIUM TO COARSE GRAINED GRANODIORITE, CONTAINS ZONED FELDSPARS. 68' TO 85' HIGHLY TO MODERATELY WEATHERED; HIGHLY JOINTED.
	85' TO 92' FRESH ROCK; SLIGHTLY JOINTED. 1' SLIGHTLY WEATHERED JOINT ZONE AT 88'. 3" HIGHLY WEATHERED JOINT ZONE AT 89'. 92' TO 97' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED. 97' TO 98' MASSIVE FRESH ROCK.
	MEDIUM GREY JOINTED TO MASSIVE MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SLIGHT FOLIATION AND INCLUSIONS. 98' TO 99' FRESH ROCK; MODERATELY JOINTED WITH SOME SLIGHT WEATHERING ALONG JOINT SURFACES. 99' TO 120' MASSIVE FRESH ROCK. SLIGHTLY WEATHERED JOINT AT 104'. SLIGHTLY WEATHERED JOINT AT 108'. 5" MODERATELY TO HIGHLY WEATHERED JOINT ZONE AT 116'. SLIGHTLY WEATHERED JOINT AT 118'. SLIGHTLY WEATHERED HEALED JOINTS AT 119'. 120' TO 125' SLIGHTLY WEATHERED; MODERATELY JOINTED WITH HIGH ANGLE OR VERTICAL JOINTS. 125' TO 128½' MODERATELY WEATHERED; MODERATELY TO HIGHLY JOINTED. 128½' TO 141½' MASSIVE FRESH ROCK.

10		SC	
12		SM-ML	
6		SM	
8			
6			
10		SM-ML	
8			
10			
14			
14			
14			
36			
50/0"			
50/2"			
50	46		3
			1
85	48		3
			1
			2
98	98		1
100	95		2
99	51		
100	100		1

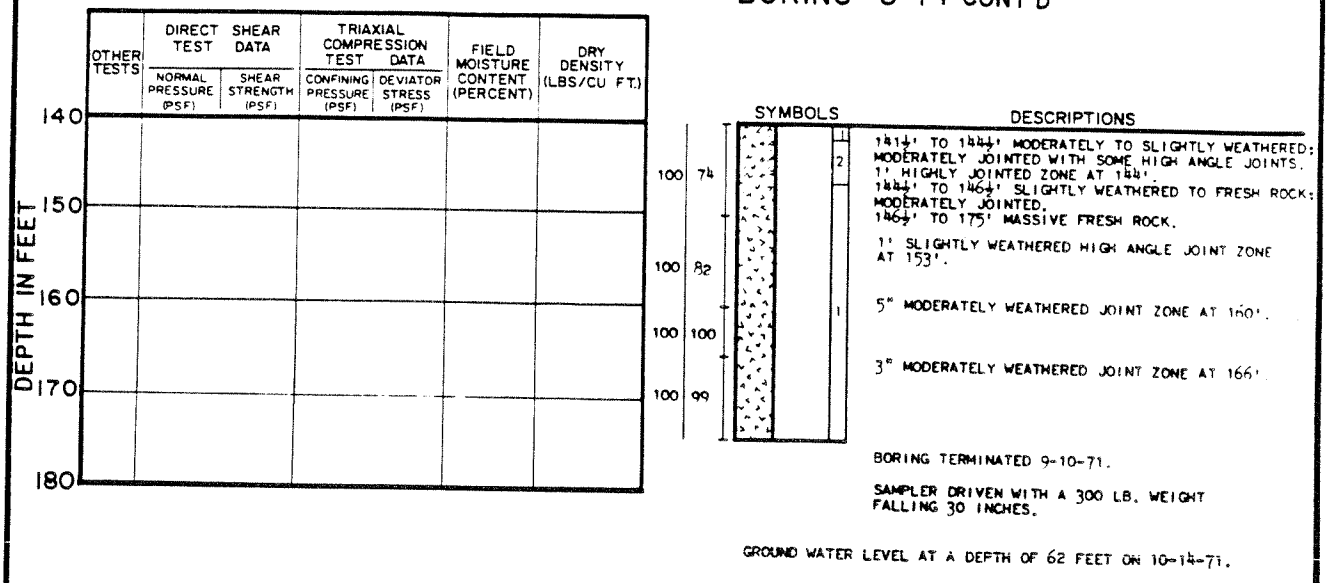
BORING CONTINUED

LOG OF BORING 3-14

Amendment 0
August 1984

Figure 2E-51

BORING 3-14 CONT'D



LOG OF BORING 3-14

Figure 2E-51a

BORING 3-15

SURFACE ELEVATION 451.9
CO-ORDINATES N 472,570
E 1,904,840

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0	C					22	
10						22	89
20							
30							
40						21	85
50							
60							
70							
80							
90							
100							
110							
120							
130							
140							
150							

SYMBOLS	DESCRIPTIONS
ML-SC	REDDISH BROWN SANDY CLAYEY SILT. (MEDIUM STIFF)
SM	OLIVE AND TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
SM	TAN AND OLIVE MICACEOUS SILTY FINE TO COARSE SAND. (MEDIUM DENSE TO DENSE)
	GRADES VERY DENSE TO HARD.
REFUSAL	LIGHT GREY JOINTED TO MASSIVE MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS FOLIATION AND INCLUSIONS.

6 11 14 14 16 16 19 19 20 23 32 58 95 80

17	0	3
87	58	1 3 1
98	33	2 3
94	86	21
91	55	1
93	79	3 1 3
68	37	

75' TO 89½' HIGHLY WEATHERED; HIGHLY JOINTED.

89½' TO 90' MODERATELY WEATHERED; HIGHLY JOINTED.
90' TO 93' MASSIVE FRESH ROCK.
93' TO 95' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED.
95' TO 99½' MASSIVE FRESH ROCK.
99½' TO 102' MODERATELY WEATHERED; HIGHLY JOINTED.
102' TO 105' SLIGHTLY WEATHERED; HIGHLY JOINTED.
105' TO 106½' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED.
106½' TO 120' FRESH ROCK; SLIGHTLY TO MODERATELY JOINTED.
1' WEATHERED ZONE AT 109'.
SOME HIGH ANGLE JOINTS AT 110'.
1' WEATHERED ZONE AT 113'.

1' SLIGHTLY TO MODERATELY WEATHERED ZONE AT 119'.
1" HIGHLY WEATHERED ZONE AT 120'.
120' TO 131½' MASSIVE FRESH ROCK.

131½' TO 133' MODERATLEY TO HIGHLY WEATHERED; HIGHLY JOINTED.
133' TO 138' MASSIVE FRESH ROCK.
4" MODERATELY WEATHERED JOINT ZONE AT 137'.
138' TO 143' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED.

BORING TERMINATED 9-8-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

GROUND WATER LEVEL AT DEPTH 66 FEET ON 10-14-71.

LOG OF BORING 3-15

Amendment 0
August 1984

Figure 2E-52

BORING 3-16

SURFACE ELEVATION 468.1
CO-ORDINATES N 472,390
E 1,904,840

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10						20	105
20							
30						16	99
40							
50							
60	B	3500	3700			11	117
70							
80							
90							
100							

SYMBOLS	DESCRIPTIONS
13 ■ CL	REDDISH BROWN SILTY SANDY CLAY. (STIFF)
31 ■ SC-SM	REDDISH BROWN SILTY CLAYEY FINE TO COARSE SAND. (DENSE)
12 ■ SM	TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
18 ■	
42 ■	PROBABLE DIKE.
20 ■ SM-SP	OLIVE AND TAN MICACEOUS FINE TO MEDIUM SAND. (DENSE)
25 ■	
30 ■	
39 ■	
63/9" ■	GRADES VERY DENSE
50/5" ⊠	
REFUSAL □ SP/ROCK	ALTERNATING ZONES OF HIGHLY WEATHERED GRANODIORITE AND FINE SAND DERIVED FROM DECOMPOSED ROCK.
95 92	LIGHT GREY MODERATELY JOINTED FINE GRAINED GRANODIORITE. FRESH ROCK. 80½' TO 83½' MODERATELY TO HIGHLY WEATHERED ZONE. (2, 3, 2)

BORING TERMINATED 9-10-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORING 3-16

BORING 3-17

SURFACE ELEVATION 449.8
CO-ORDINATES N 472,729
E 1,904,665

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10	A	1500	2420			28	94
20	A	3000	2200			28	71
30	D,A					23	98
40							
50						23	107
60							
70							
80							
90							
100							
110							
120							
130							
140							

SYMBOLS		DESCRIPTIONS
16	CL	REDDISH BROWN SANDY SILTY CLAY. (VERY STIFF)
25	ML	REDDISH BROWN SANDY CLAYEY SILT. (VERY STIFF)
16	SM	TAN TO REDDISH BROWN SILTY FINE TO COARSE SAND. (VERY DENSE)
60		
6	SM	TAN TO REDDISH BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
11		
11		
17		GRADING DENSER AND MORE SANDY.
14		
27	SM	GREY TO TAN FINE TO COARSE SILTY SAND WITH SOME MICA. (DENSE)
27		GRADING VERY DENSE AND MICACEOUS.
46		
46		GREY TO BLACK JOINTED TO MASSIVE FINE GRAINED CONTACT BRECCIA MIGMATITE, CONTAINS INCLUSIONS AND EXHIBITS SLIGHT TO MODERATE FOLIATION. 67' TO 80½' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED.
37 6		
96 96		80½' TO 108½' FRESH ROCK; SLIGHTLY JOINTED TO MASSIVE.
100 88		LOSING DRILL WATER AT 3 TO 4 GALLONS/MINUTE AT 90½'.
89 89		
100 100		LIGHT TO DARK GREY SLIGHTLY JOINTED TO MASSIVE COARSE GRAINED GRANODIORITE. CONTAINS ZONED FELDSPARS, FRESH ROCK.
90 90		
100 100		
* 70 70		

BORING TERMINATED 9-16-71

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

*PORTION OF ROCK CORE LEFT IN BORING, THEREFORE ACTUAL RECOVERY AND R.Q.D. ARE GREATER THAN INDICATED.

LOG OF BORING 3-17

Figure 2E-54

BORING 3-18

SURFACE ELEVATION 467.1
CO-ORDINATES N 472,600
E 1,904,665

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10						25	99
20	B	2000	2050			20	95
30							
40						20	97
50							
60	C					14	
70						15	116
80							
90							
100							
110							
120							
130							
140							
150							

SYMBOLS		DESCRIPTIONS
7	CL	REDDISH BROWN SILTY SANDY CLAY. (MEDIUM STIFF)
27	ML	REDDISH BROWN SANDY CLAYEY SILT. (VERY STIFF)
13	SM	REDDISH BROWN TO OLIVE AND TAN MICACEOUS SILTY FINE TO COARSE SAND. (MEDIUM DENSE)
16		
15		
21	SM	OLIVE AND TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
23		
30		
48		GRADING VERY DENSE.
60		
59		
74		
84/9"		
101		TAN HIGHLY JOINTED COARSE GRAINED GRANODIORITE. MODERATELY TO HIGHLY WEATHERED.
42	9	3
80	68	LIGHT GREY JOINTED TO MASSIVE FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS AND EXHIBITS SLIGHT FOLIATION.
		3
		95' TO 96½' SLIGHTLY WEATHERED TO FRESH; MASSIVE. 1
		96½' TO 98½' HIGHLY WEATHERED; HIGHLY JOINTED. 2
		98½' TO 100½' MASSIVE FRESH ROCK. 3
65	55	LIGHT GREY JOINTED TO MASSIVE COARSE GRAINED GRANODIORITE, CONTAINS ZONED FELDSPARS.. 3
		100½' TO 102½' MASSIVE FRESH ROCK.
		102½' TO 106½' FRESH ROCK; MODERATELY JOINTED.
		106½' TO 109½' HIGHLY WEATHERED; HIGHLY JOINTED.
85	72	109½' TO 110½' MASSIVE FRESH ROCK. 2
		110½' TO 111½' MODERATELY WEATHERED; HIGHLY JOINTED.
		111½' TO 125½' FRESH ROCK; MODERATELY JOINTED. 3
		6" MODERATELY WEATHERED HIGHLY JOINTED ZONE AT 114'.
72	72	125½' TO 127' MODERATELY TO HIGHLY WEATHERED: HIGHLY JOINTED. 2
		127' TO 133½' FRESH ROCK; MODERATELY JOINTED. 3
		133½' TO 135½' MODERATELY TO HIGHLY WEATHERED: HIGHLY JOINTED.
100	100	135½' TO 143½' FRESH ROCK; MODERATELY JOINTED. 2

BORING TERMINATED 9-17-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORING 3-18

Figure 2E-55

BORING 3-19

SURFACE ELEVATION 442.6
CO-ORDINATES N 472,585
E 1,904,960

DEPTH IN FEET	OTHER TESTS	DIRECT TEST SHEAR DATA: NORMAL PRESSURE (PSF)	DIRECT TEST SHEAR DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT)
0							
10							
20		2000	1800			31	76
30						22	84
40						27	78
50							
60							
70							
80							
90							
100							
110							
120							

		SYMBOLS	DESCRIPTIONS
19	10	ML-CL	REDDISH BROWN CLAYEY SILT TO SILTY CLAY. (STIFF)
23	14	SM	DARK BROWN, TAN, AND ORANGE-BROWN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)
17	8		
21	14	ML-SM	GREY AND BROWN MICACEOUS FINE SANDY SILT AND SILTY SAND. (STIFF TO MEDIUM DENSE)
28	12		
29	14		
29	12		
27	14		
39	24		GRADES DENSE.
40	28		
60	32	SM	TAN AND LIGHT GREY MICACEOUS SILTY FINE SAND. (DENSE TO VERY DENSE)
88	36		
80	41		
120	61		
30	23		LIGHT GREY, DARK GREY, AND BLACK HIGHLY JOINTED TO MASSIVE FINE GRAINED CONTACT BRECCIA MIGMATITE. 82' TO 89½' HIGHLY WEATHERED; HIGHLY JOINTED. 89½' TO 91' MASSIVE FRESH ROCK.
93	84		LIGHT GREY MASSIVE FINE TO MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS NUMEROUS INCLUSIONS. FRESH ROCK. 3" JOINT ZONE WITH MODERATELY WEATHERED SURFACES AT 93'. 6" JOINT ZONE WITH SLIGHTLY WEATHERED SURFACES AT 100'.
86	85		

BORING TERMINATED 9-13-71.

NUMBERS ENCLOSED WITHIN THE COLUMN DESIGNATED BY ASTERISK (*) INDICATE BLOWCOUNTS FROM AN ADJACENT BORING UTILIZING STANDARD PENETRATION EQUIPMENT.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE ENCLOSED WITHIN THE COLUMN DESIGNATED BY ASTERISK (*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES.

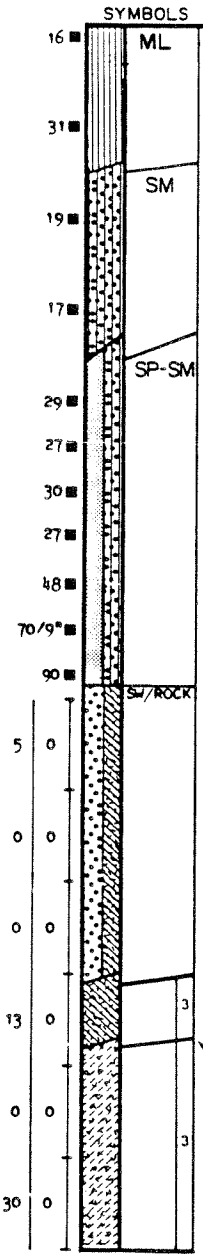
*INDICATES STANDARD PENETRATION TESTS.

LOG OF BORING 3-19

BORING 3-20

SURFACE ELEVATION 483.4
CO-ORDINATES N 472,390
E 1,904,680

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0	C					26	
10	A	3000 1500	3700 2305			23 23	93 93
20						7	116
30	A					24	88
40							
50							
60							
70							
80							
90							
100							
110							
120							
130							
140							



REDDISH BROWN CLAYEY SANDY SILT. (VERY STIFF)

OLIVE AND TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)

TAN TO YELLOW-BROWN FINE TO MEDIUM SAND WITH LITTLE SILT. (DENSE)

ALTERNATING ZONES OF HIGHLY JOINTED AND HIGHLY WEATHERED MIGMATITE OF GNEISSIC COMPOSITION, AND FINE TO COARSE SAND DERIVED FROM THE DECOMPOSED ROCK. ROCK CONTAINS SOME THIN QUARTZ VEINS.
73½' TO 91½' SOME QUARTZ PRESENT.

TAN TO BROWN HIGHLY JOINTED FINE GRAINED MIGMATITE OF GNEISSIC COMPOSITION. CONTAINS HIGHLY DISTORTED FOLIATION. MODERATELY TO VERY HIGHLY WEATHERED. MUCH HIGH ANGLE JOINTING.

GREY TO TAN HIGHLY JOINTED COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. MODERATELY TO HIGHLY WEATHERED. MUCH HIGH ANGLE JOINTING.

BORING TERMINATED 9-13-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORING 3-20

BORING AR-1

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 471,824
E 1,904,576

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0						17	109
10						21	102
20							

SYMBOLS		DESCRIPTIONS
25 / 16	CL-SC	REDDISH BROWN SILTY SANDY CLAY. (HARD)
20	ML-MH	REDDISH BROWN SANDY CLAYEY SILT. (HARD)
35		
21	SM	REDDISH BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)

BORING TERMINATED 10-16-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING AR-2

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 471,480
E 1,905,428

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0	A,C			0	8700	20	107
	A,C					22	106
10							
20							

SYMBOLS		DESCRIPTIONS
24	CL-ML	RED-BROWN SANDY SILTY CLAY. (HARD)
62	SC-MH	RED-BROWN CLAYEY SILT AND CLAYEY SAND. (HARD)
21	SM	REDDISH BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
20		

BORING TERMINATED 10-16-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING AR-3

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 471,547
E 1,906,425

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0						21	101
	A,C					21	95
10							
20							

SYMBOLS		DESCRIPTIONS
26		RED-BROWN CLAYEY SILT. (FILL)
	ML-MH	RED-BROWN SANDY CLAYEY SILT. (HARD)
16	SM	REDDISH BROWN AND BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
18		
14		

BORING TERMINATED 10-16-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS AR-1 AR-2 & AR-3

Amendment 0
August 1984

Figure 2E-58

BORING AR-4

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 471,526
E 1,907,306

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0						4	120
10							
20							

SYMBOLS		DESCRIPTIONS
25	ML	REDDISH BROWN CLAYEY SILT TO BROWN SAND. (FILL) (DENSE)
49		REDDISH BROWN SANDY CLAYEY SILT TO SANDY CLAY. (HARD)
15	SM	RED-BROWN AND BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
15		

BORING TERMINATED 10-16-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING AR-5

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 471,699
E 1,908,130

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0						24	98
10						22	105
20							

39	CL-ML	REDDISH BROWN SANDY SILTY CLAY TO CLAYEY SILT. (HARD)
50		
21	SM	REDDISH BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE TO DENSE)
19		GRADES COARSER AND PARTIALLY GREY AND WHITE IN COLOR.

BORING TERMINATED 10-16-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING AR-6

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 471 534
E 1,909,101

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0	A					12	119
10	A,C			0	4600*	20	99
20							

*FAILED ALONG DESICCATION CRACKS

28		REDDISH BROWN CLAYEY SILTY SAND. (FILL) (DENSE)
32	SM-CH	REDDISH BROWN SANDY CLAYEY SILT. (HARD)
34	SM	REDDISH BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE) GRADES TAN AND BROWN.
20		

BORING TERMINATED 10-15-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS AR-4 AR-5 & AR-6

BORING AR-7

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 470,950
E 1,909,772

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0	A					16	109
10							
20							

	SYMBOLS	DESCRIPTIONS
37		REDDISH BROWN CLAYEY SAND AND SAND. (FILL) (STIFF TO DENSE)
38	SC	REDDISH BROWN CLAYEY SAND. (DENSE)
	SM-ML	REDDISH BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
	3	ROCK(WEATHERED)

BORING TERMINATED 10-15-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING AR-8

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 470,309
E 1,910,450

DEPTH IN FEET							
0						22	102
10							
20							

19	SC-SM	REDDISH BROWN AND WHITE SILTY CLAYEY SAND. (DENSE TO VERY DENSE)
80		
23	SM	REDDISH BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
	3	ROCK (WEATHERED)

BORING TERMINATED 10-15-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING AR-9

SURFACE ELEVATION TO BE SURVEYED
CO-ORDINATES N 470,565
E 1,911,051

DEPTH IN FEET							
0	A,C		0	1100*	17	109
10					14	107
20						

*SAMPLE FAILED ALONG VERTICAL SAND LENSES

21	SM-ML	REDDISH BROWN CLAYEY SILTY SAND. (DENSE)
24		GRADING LESS CLAYEY AND VERY MICACEOUS.
24	SP-SM	TAN AND BROWN FINE TO MEDIUM SAND WITH LITTLE SILT. (DENSE)
29		GRADES WHITE IN COLOR.

BORING TERMINATED 10-15-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS AR-7 AR-8 & AR-9

Figure 2E-60

BORING CT-4

SURFACE ELEVATION 456.0
CO-ORDINATES N 472,318
E 1,903,700

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50		4000	5260			6	133
60							
70							
80							

	SYMBOLS	DESCRIPTIONS
16 ■	CL	REDDISH BROWN CLAY. (STIFF)
15 ■	ML	REDDISH ORANGE SANDY SILT. (MEDIUM STIFF)
13 ■	SM	OLIVE AND TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
18 ■		
52 ■		GRADES LESS SILTY AND VERY DENSE TO HARD.
57 ■		GRADING SMALL ROCK FRAGMENTS.
50/5" □		
75/6" ■		
49/9" ■		
50/3" □		
96 | 60	3 / 1	LIGHT GREY JOINTED COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS; 61' TO 63' MODERATELY WEATHERED; HIGHLY JOINTED. 63' TO 71' FRESH ROCK; SLIGHTLY TO MODERATELY JOINTED. 4" JOINT ZONE WITH SLIGHT WEATHERING ALONG JOINT SURFACES AT 65'. 2" JOINT ZONE WITH SLIGHT WEATHERING ALONG JOINT SURFACES AT 66'. 5" JOINT ZONE WITH SLIGHT WEATHERING ALONG JOINT SURFACES AT 67'.

BORING TERMINATED 8-31-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORING CT-4

BORING CT-5

SURFACE ELEVATION 416.1
CO-ORDINATES N 472,318
E 1,903,200

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0		2000	2200			10	122
		2000	2680			15	114
10		4000	5060			10	124
20							
30							
40							

SYMBOLS	DESCRIPTIONS
7 ■ SM	BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
16 ■	GRADES DENSE.
33 ■	
52 ■ SM/ROCK	ZONES OF VERY HIGHLY WEATHERED MIGMATITE OF GRANODIORITE COMPOSITION AND SOIL.
65 | 42	LIGHT GREY MODERATELY TO SLIGHTLY JOINTED FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION, CONTAINS SLIGHT FOLIATION AND INCLUSIONS. FRESH ROCK. 1/4" SLIGHTLY WEATHERED JOINT ZONE AT 25'. LIGHT TO DARK GREY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. 26' TO 27' FRESH ROCK; MODERATELY JOINTED. 27' TO 31½' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED. 31½' TO 32' FRESH ROCK; MODERATELY JOINTED.
	BORING TERMINATED 8-31-71.
	SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING CT-6

SURFACE ELEVATION 422.5
CO-ORDINATES N 472,000
E 1,903,500

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10		2000	2090			10	115
20							
30							
40							

SYMBOLS	DESCRIPTIONS
4 ■	BROWN SILTY SAND. (FILL) (LOOSE)
11 ■ SM	REDDISH BROWN MICACEOUS FINE TO MEDIUM SAND. (MEDIUM DENSE)
22 ■	GRADES OLIVE AND TAN IN COLOR.
64/9" ■ SW	OLIVE AND TAN MICACEOUS SILTY FINE TO COARSE SAND. (VERY DENSE)
50 | 14	GREY JOINTED MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION, CONTAINING INCLUSIONS. 20' TO 25' VERY HIGHLY WEATHERED; HIGHLY JOINTED. 25' TO 28' MODERATELY WEATHERED; MODERATELY JOINTED. 28' TO 30' MODERATELY WEATHERED; HIGHLY JOINTED.
	BORING TERMINATED 9-1-71.
	SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS CT-5 & CT-6

Amendment 0
August 1984

Figure 2E-62

BORING DP-1

SURFACE ELEVATION 495.0
CO-ORDINATES N 472,130
E 1,904,200

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

	SYMBOLS	DESCRIPTIONS
12	CL	REDDISH BROWN SANDY CLAY. (MEDIUM STIFF TO STIFF)
10	ML	RED, BROWN AND YELLOW MICACEOUS SILT. (STIFF)
12	SM-SP	TAN AND GREY MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)
16		
68		GRADES COARSER IN TEXTURE AND DENSE.
105/10"		
100 11	2	LIGHT GREY HIGHLY TO MODERATELY JOINTED MEDIUM GRAINED GRANODIORITE DIKE. MODERATELY WEATHERED.
	ROCK/SW	ZONES OF VERY HIGHLY WEATHERED MIGMATITE OF GRANODIORITE COMPOSITION AND FINE TO COARSE SAND DERIVED FROM ROCK WEATHERED TO A SOIL CONSISTENCY. CONTAINS SOME WEATHERED INCLUSIONS.
80 73	1 / 3-2 / 3-2	LIGHT TO MEDIUM GREY HIGHLY JOINTED TO MASSIVE FINE TO MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. 69½' TO 70½' HIGHLY WEATHERED. 70½' TO 75' MASSIVE FRESH ROCK. 75' TO 78' MODERATELY WEATHERED AND JOINTED. 6" HIGHLY WEATHERED AND HIGHLY JOINTED ZONE AT 77½'.
100 42	1-2	ZONED LIGHT BROWN, GREY, AND BLACK HIGHLY JOINTED FINE TO MEDIUM GRAINED CONTACT BRECCIA MIGMATITE. 78' TO 85' VERY HIGHLY TO MODERATELY WEATHERED.
100 34	2	LIGHT GREY SLIGHTLY TO MODERATELY JOINTED FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SOME LARGE INCLUSIONS; SOME SLIGHT WEATHERING NEAR JOINTS. 18" VERY HIGHLY WEATHERED ZONE AT 93'.

BORING TERMINATED 8-23-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORING DP-1

Figure 2E-63

BORING DP-2

SURFACE ELEVATION 488.2
CO-ORDINATES N 472,150
E 1,904,700

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10						20	87
20							
30						17	94
40							
50						12	108
60		3500	3860			12	113
70							
80							
90							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY. (HARD)
SM	BROWN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE)
SM	TAN, BROWN, AND OLIVE MICACEOUS SILTY FINE SAND (MEDIUM DENSE)
	GRADES DENSE.
SM	TAN, WHITE, AND OLIVE MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
	LIGHT GREY TO BLACK JOINTED TO MASSIVE FINE TO MEDIUM GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE GNEISS COMPOSITION. CONTAINS SOME HIGHLY DISTORTED FOLIATION.
	71' TO 76' VERY HIGHLY WEATHERED.
	76' TO 79' MASSIVE FRESH ROCK.
	79' TO 82½' MODERATELY TO SLIGHTLY WEATHERED; MODERATELY JOINTED.
	82½' TO 85' MODERATELY WEATHERED; MODERATELY TO HIGHLY JOINTED.
	LIGHT TO DARK GREY MASSIVE MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS SOME INCLUSIONS.
	BORING TERMINATED 8-24-71.
	SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

100/2½"	0	3
67	53	1
92	68	1-2
		2
		1

LOG OF BORING DP-2

Amendment 0
August 1984

Figure 2E-64

BORING DP-3

SURFACE ELEVATION 425.5
CO-ORDINATES N 472,130
E 1,905,200

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10		1500	1520			24	93
20							
30							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN MICACEOUS SILTY CLAY. (SOFT TO MEDIUM STIFF)
SM	TAN AND OLIVE MICACEOUS SILTY FINE TO COARSE SAND. (MEDIUM DENSE)
	GRADES PARTIALLY BLACK IN COLOR.
3	VERY LIGHT GREY TO LIGHT TAN AND BLACK HIGHLY TO MODERATELY JOINTED COARSE GRAINED GRANODIORITE.
2	$21\frac{1}{4}$' TO $24\frac{1}{2}$' HIGHLY WEATHERED.
	$24\frac{1}{2}$' TO $26\frac{1}{2}$' SLIGHTLY WEATHERED WITH MODERATE WEATHERING ALONG JOINTS. MODERATELY JOINTED. TAN MICACEOUS FINE TO MEDIUM SAND.
SP	

4 ■ 9 ■ 7 ■ 25 ■

BORING TERMINATED 8-23-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING DP-4

SURFACE ELEVATION 443.7
CO-ORDINATES N 471,980
E 1,905,700

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10		1500	1550			21	96
20							
30		3000	2690			17	91
40							
50							
60							

SYMBOLS	DESCRIPTIONS
SC	REDDISH BROWN SANDY CLAY. (SOFT TO MEDIUM STIFF)
SM	TAN AND GREY MICACEOUS FINE TO MEDIUM SILTY SAND. (MEDIUM DENSE)
	GRADES VERY DENSE.

9 ■ 10 ■ 8 ■ 12 ■ 6 ■ 8 ■

BORING TERMINATED 8-24-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS DP-3 & DP-4

Amendment 0
August 1984

Figure 2E-65

BORING DP-5

SURFACE ELEVATION 426.9
CO-ORDINATES N 471,750
E 1,906,300

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10		3000	2,340			20	86
20						20	98
30							
40							

SYMBOLS		DESCRIPTIONS
5 ■		REDDISH BROWN CLAYEY SAND. (FILL) (SOFT)
19 ■	ML	REDDISH BROWN AND TAN MICACEOUS FINE SANDY SILT (DENSE)
13 ■		
42 ■	SM	ORANGE AND GREY MICACEOUS SILTY FINE SAND. (DENSE)
17 ■		
28 ■		

GRADES MORE SILTY.
REFUSAL AT 39', ROCK INDICATED.

BORING TERMINATED 8-24-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORING DP-5

Figure 2E-66

BORING ECP-1

SURFACE ELEVATION 367.1
CO-ORDINATES N 472,600
E 1,905,350

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10		2000	2540			16	114
20							
30		4000	3730			30	95
40							
50							
60							
70							
80							
90							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN CLAY. (FILL) (SOFT TO STIFF)
	REDDISH BROWN SANDY SILTY CLAY. (STIFF)
SM	GREENISH GREY MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)
	GRADES MORE SILTY.
	GRADES GREY AND YELLOW IN COLOR; VERY DENSE.
	GRADING SOME LENSES AND LAYERS OF HIGHLY WEATHERED ROCK.
SM/ROCK	ALTERNATING ZONES OF VERY HIGHLY WEATHERED MIGMATITE AND MICACEOUS SILTY SAND.
SM	GREY MICACEOUS SILTY SAND. (VERY DENSE)
	LIGHT AND DARK GREY VERY HIGHLY TO MODERATELY JOINTED FINE GRAINED MIGMATITE OF BIOTITE-PLAGIOCLASE-QUARTZ GNEISS COMPOSITION. 66½' TO 69' MODERATELY WEATHERED; MODERATELY JOINTED. 69' TO 70½' HIGHLY WEATHERED; VERY HIGHLY JOINTED. 70½' TO 75½' MODERATELY TO SLIGHTLY WEATHERED; MODERATELY JOINTED.
SM	GREY SILTY FINE SAND. (VERY DENSE)

BORING TERMINATED 8-25-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

GROUND WATER LEVEL AT DEPTH 3 FEET, ON 10-14-71.

LOG OF BORING ECP-1

Amendment 0
August 1984

Figure 2E-67

BORING ECP-2

SURFACE ELEVATION 364.±
CO-ORDINATES N 472,700
E 1,905,370

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATION STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT)
0							
10		3000	2910			23	101
20							
30						22	102
40						25	96
50							
60						32	92
70							
80							

*		SYMBOLS	DESCRIPTIONS
67	37	SM	REDDISH BROWN SILTY SANDY CLAY. (FILL)
30	33		TAN AND YELLOW BROWN MICACEOUS FINE SILTY SAND. (DENSE TO VERY DENSE)
47	28		
56	43		
50	33	SP-SM	TAN AND YELLOW BROWN MICACEOUS FINE SAND WITH SOME SILT. (DENSE TO VERY DENSE)
67	27		
82	50		
72	32	SM	TAN AND YELLOW BROWN MICACEOUS FINE SILTY SAND. (DENSE TO VERY DENSE)
54	45		
33	23		
68/8"@			
***			GREY JOINTED COARSE GRAINED GRANODIORITE. WEATHERING IN UPPER FOOT GRADING TO FRESH ROCK AT 74'.

BORING TERMINATED 9-20-71.

NUMBERS ENCLOSED WITHIN THE COLUMN DESIGNATED BY ONE ASTERISK(*) INDICATE BLOWCOUNTS OBTAINED FROM AN ADJACENT BORING UTILIZING STANDARD PENETRATION EQUIPMENT.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES, EXCEPT WHERE ENCLOSED WITH THE COLUMN DESIGNATED BY ONE ASTERISK(*) WHICH INDICATES A 140 LB. WEIGHT FALLING 30 INCHES.

*INDICATES STANDARD PENETRATION TESTS.

*** CORE BARREL NOT RECOVERED.

LOG OF BORING ECP-2

Figure 2E-68

BORING ECP-3

SURFACE ELEVATION 354.8
CO-ORDINATES N 472,800
E 1,905,500

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10		2000	2340			16	108
		3000	4290			15	116
20							
30							

SYMBOLS		DESCRIPTIONS
5 ■		REDDISH BROWN TO YELLOW SILTY SANDY CLAY (FILL) (STIFF)
17 ■	CL-SC	BROWN SILTY SAND AND CLAY (MEDIUM DENSE)
49 ■	SP-SM	GREY TO TAN FINE SAND WITH SOME MICA AND SILT. (VERY DENSE)
88/7" ■		
60/2" ▨	3	WEATHERED ROCK.

BORING TERMINATED 9-21-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING ECP-4

SURFACE ELEVATION 434.0
CO-ORDINATES N 472,502
E 1,905,035

DEPTH IN FEET	SYMBOLS		DESCRIPTIONS
0	14 ■	CL	REDDISH BROWN SILTY SANDY CLAY. (STIFF)
10	15 ■	ML	TAN TO REDDISH BROWN SANDY SILT WITH SOME MICA. (DENSE)
	26 ■	SM	TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE)

BORING TERMINATED 10-5-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING ECP-5

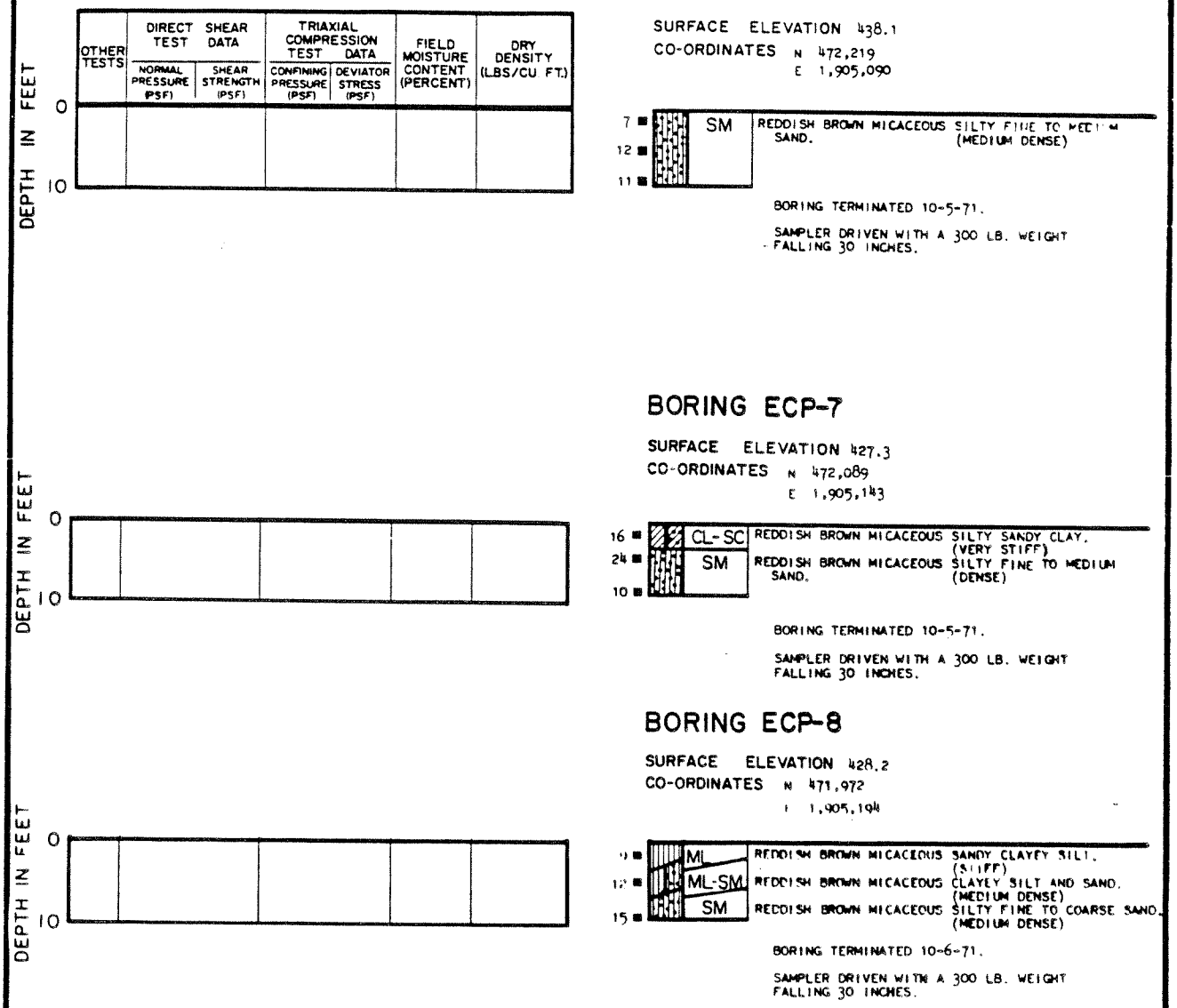
SURFACE ELEVATION 427.6
CO-ORDINATES N 472,360
E 1,905,062

DEPTH IN FEET	SYMBOLS		DESCRIPTIONS
0	18 ■	CL-SC	REDDISH BROWN SILTY SANDY CLAY. (STIFF TO VERY STIFF)
	18 □		
10	20 ■		
	25 ■	ML-SM	REDDISH BROWN SANDY SILT WITH SOME CLAY AND MICA. (DENSE)
20	14 ■		

BORING TERMINATED 10-5-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS ECP-3 ECP-4 & ECP-5



LOG OF BORINGS ECP-6 ECP-7 & ECP-8

Amendment 0
August 1984

Figure 2E-70

BORING IP-3

SURFACE ELEVATION 420.7
CO-ORDINATES N 473,000
E 1,905,000

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							

SYMBOLS	DESCRIPTIONS
CL-ML	BROWN AND OLIVE SILTY CLAY TO SILTY SAND (DENSE)
	BLACK JOINTED FINE GRAINED ULTRA MAFIC INTRUSIVE ROCK.
SM	BROWN AND OLIVE SILTY SAND. (DENSE)
	BLACK JOINTED FINE GRAINED ULTRA MAFIC INTRUSIVE ROCK. HARD FRESH HIGHLY FRAGMENTED ROCK WITH WEATHERED ZONES. 12' TO 13' VERY HIGHLY WEATHERED. 16' TO 18' VERY HIGHLY WEATHERED.

BORING TERMINATED 8-30-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING IP-4

SURFACE ELEVATION 424.0
CO-ORDINATES N 472,800
E 1,905,000

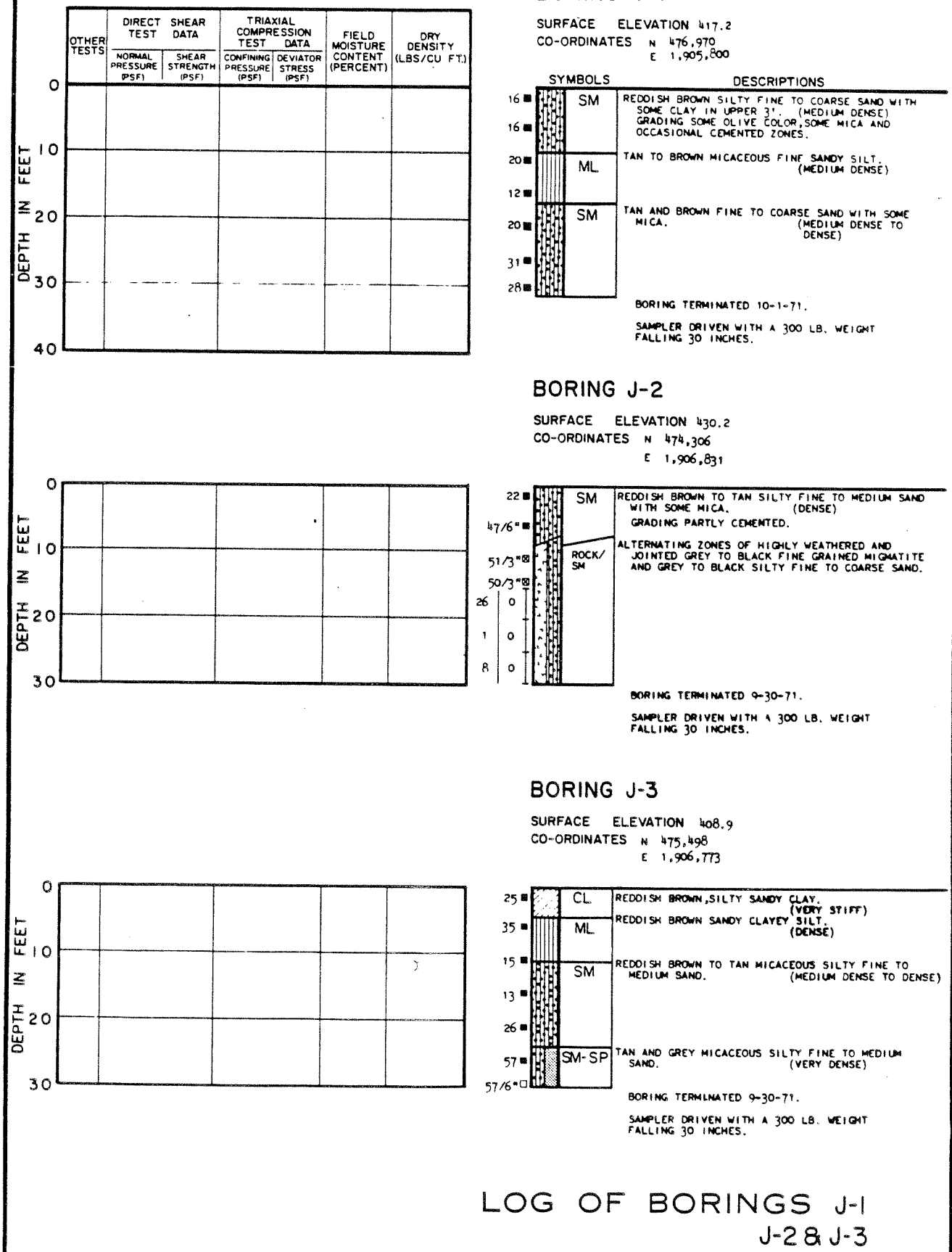
DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10		2500	1930			9	89
20							
30							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY CLAY. (STIFF)
SM	REDDISH BROWN MICACEOUS SILTY FINE SAND. (MEDIUM DENSE) GRADES TAN AND OLIVE IN COLOR.

BORING TERMINATED 8-30-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS IP-3 & IP-4



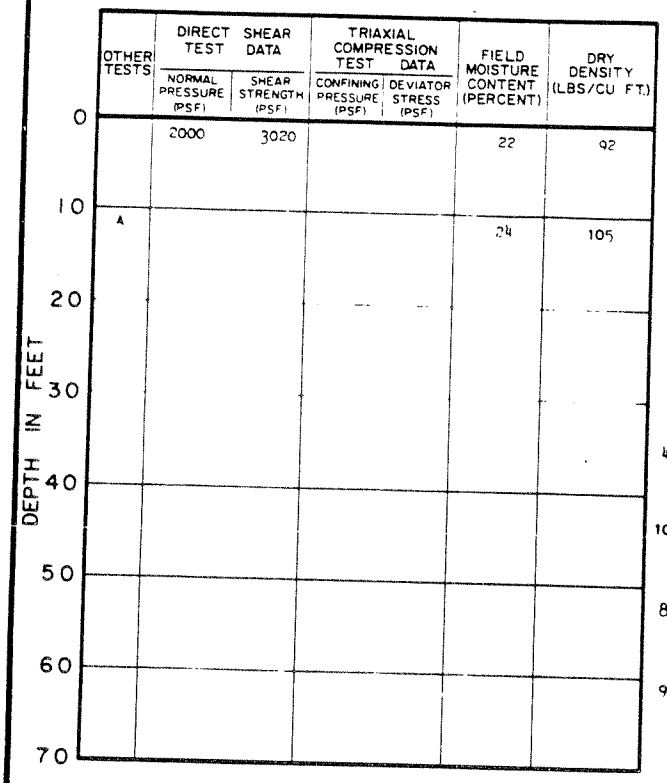
LOG OF BORINGS J-1 J-2 & J-3

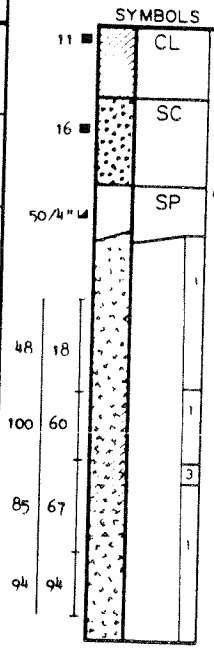
Amendment 0
August 1984

Figure 2E-72

BORING SSA-6

SURFACE ELEVATION 482.7
CO-ORDINATES N 471,830
E 1,904,293





DESCRIPTIONS

REDDISH BROWN CLAY. (STIFF)

REDDISH BROWN CLAYEY SAND. (MEDIUM DENSE TO FINES)

OLIVE AND TAN MICACEOUS SILTY SAND. (VERY FINES)

TAN TO LIGHT GREY JOINTED TO MASSIVE FINE TO MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION.
23' TO 35' HIGHLY TO VERY HIGHLY WEATHERED; HIGHLY JOINTED; TAN.

35' TO 37½' HIGHLY WEATHERED; MODERATELY JOINTED.
37½' TO 39' MODERATELY WEATHERED; MODERATELY JOINTED; LIGHT GREY.
39' TO 44' MASSIVE FRESH ROCK; LIGHT GREY.
44' TO 47' FRESH ROCK; MODERATELY JOINTED WITH SOME SLIGHT WEATHERING ALONG JOINT SURFACES.
47' TO 49' MODERATELY TO HIGHLY WEATHERED; HIGHLY JOINTED.
49' TO 64½' MASSIVE FRESH ROCK.
1' JOINT ZONE WITH SLIGHT WEATHERING AT 53'.

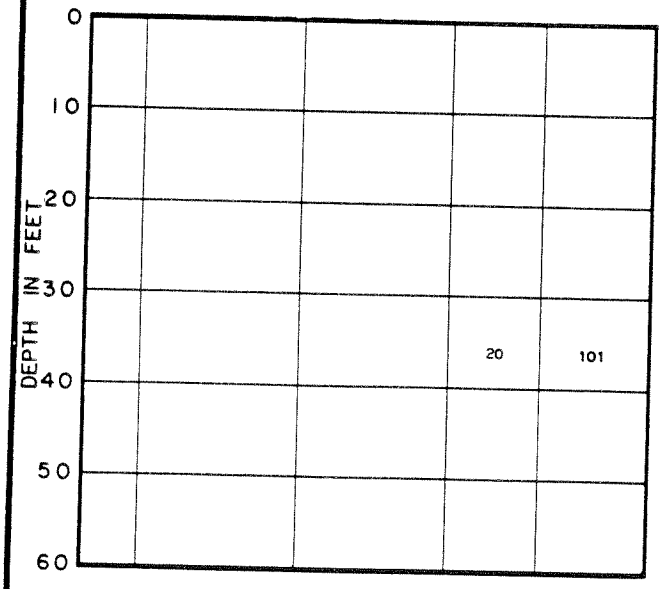
2" JOINT ZONE AT 57'.

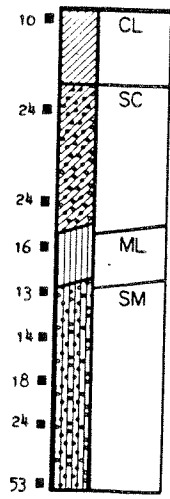
BORING TERMINATED 9-2-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING SSA-7

SURFACE ELEVATION 460.5
CO-ORDINATES N 471,635
E 1,904,508





REDDISH BROWN SANDY SILTY CLAY. (STIFF)

REDDISH BROWN CLAYEY SAND. (DENSE)

REDDISH BROWN SANDY SILT. (STIFF)

TAN AND OLIVE MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)

GRADES DENSE TO VERY DENSE.

BORING TERMINATED 9-1-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS SSA-6 & SSA-7

Amendment 0
August 1984

Figure 2E-73

BORING SSA-8

SURFACE ELEVATION 478.6
CO-ORDINATES N 471,895
E 1,904,550

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0						22	97
10	A						
20							
30							
40		3000	2830			14	109
50						19	103
60							
70							

SYMBOLS		DESCRIPTIONS
6	CL	REDDISH BROWN SILTY CLAY. (MEDIUM STIFF)
18	ML	REDDISH BROWN SANDY CLAYEY SILT. (HARD)
12	SM	OLIVE AND TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
12		
16		
24		GRADES DENSE AND COARSER IN TEXTURE.
40		
22		
34		
20		

BORING TERMINATED 9-1-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING SSA-9

SURFACE ELEVATION 443.9
CO-ORDINATES N 471,545
E 1,904,703

DEPTH IN FEET					
0					
10				15	101
20					
30					
40					

4	SM	BROWN MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
16		
16		GRADES OLIVE AND TAN AND FINER.
16		
18		
34		GRADES DENSE TO VERY DENSE.
40		
54		

BORING TERMINATED 9-1-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS SSA-8 & SSA-9

Figure 2E-74

BORING SSA-10

SURFACE ELEVATION 467.0
CO-ORDINATES N 471,795
E 1,904,850

OTHER TESTS	DIRECT SHEAR TEST: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT)
A					18	84
A	4000	5480			10	113
					13	116

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SANDY SILTY CLAY. (STIFF)
SM	TAN AND OLIVE MICACEOUS SILTY FINE TO MEDIUM SAND. (MEDIUM DENSE)
SM	OLIVE AND TAN MICACEOUS SILTY FINE TO MEDIUM SAND. (DENSE TO VERY DENSE)

14, 8, 12, 30, 66, 90/10", 50/4", 50/5", 87/9"

BORING TERMINATED 9-1-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING SSA-11

SURFACE ELEVATION 444.0
CO-ORDINATES N 471,635
E 1,905,090

OTHER TESTS	DIRECT SHEAR TEST: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT)
					23	87

DEPTH IN FEET: 0, 10, 20, 30, 40

SYMBOLS	DESCRIPTIONS
SC	REDDISH BROWN SILTY SANDY CLAY. (MEDIUM STIFF)
SM-ML	OLIVE, BROWN AND TAN MICACEOUS SILTY SAND AND SANDY SILT. (MEDIUM DENSE)

14, 11, 12, 15, 14, 17, 13

BORING TERMINATED 9-2-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

LOG OF BORINGS SSA-10 & SSA-11

BORING SWP-I

SURFACE ELEVATION 382.8

CO-ORDINATES N 473,100
E 1,905,480

OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)

DEPTH IN FEET: 0, 10, 20, 30, 40, 50, 60, 70, 80

		SYMBOLS	DESCRIPTIONS
7 ■		ML	BROWN TO TAN CLAYEY SANDY SILT WITH SOME MICA. (MEDIUM DENSE)
88 ■		SM	BROWN AND TAN MICACEOUS SILTY SAND WITH SOME SANDY SILT. (VERY DENSE)
60 ■			
100 ■			
57/2"⊠			GREY TO TAN MODERATELY TO HIGHLY JOINTED FINE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. HIGHLY WEATHERED. CONTAINS INCLUSIONS AND IS MODERATELY FOLIATED
38	15		
17	0		
52	18		TAN TO GREY JOINTED TO MASSIVE COARSE GRAINED GRANODIORITE. 43' TO 61' HIGHLY WEATHERED; MODERATELY TO HIGHLY JOINTED.
86	46		
100	73		61' TO 75' SLIGHTLY WEATHERED TO FRESH; SLIGHTLY JOINTED TO MASSIVE.
100	100		MODERATELY WEATHERED, HIGHLY JOINTED ZONES AT 63' TO 64' AND 65' TO 66½'
			LOST DRILLING CIRCULATION AT 71'
			BORING TERMINATED 9-24-71.
			SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

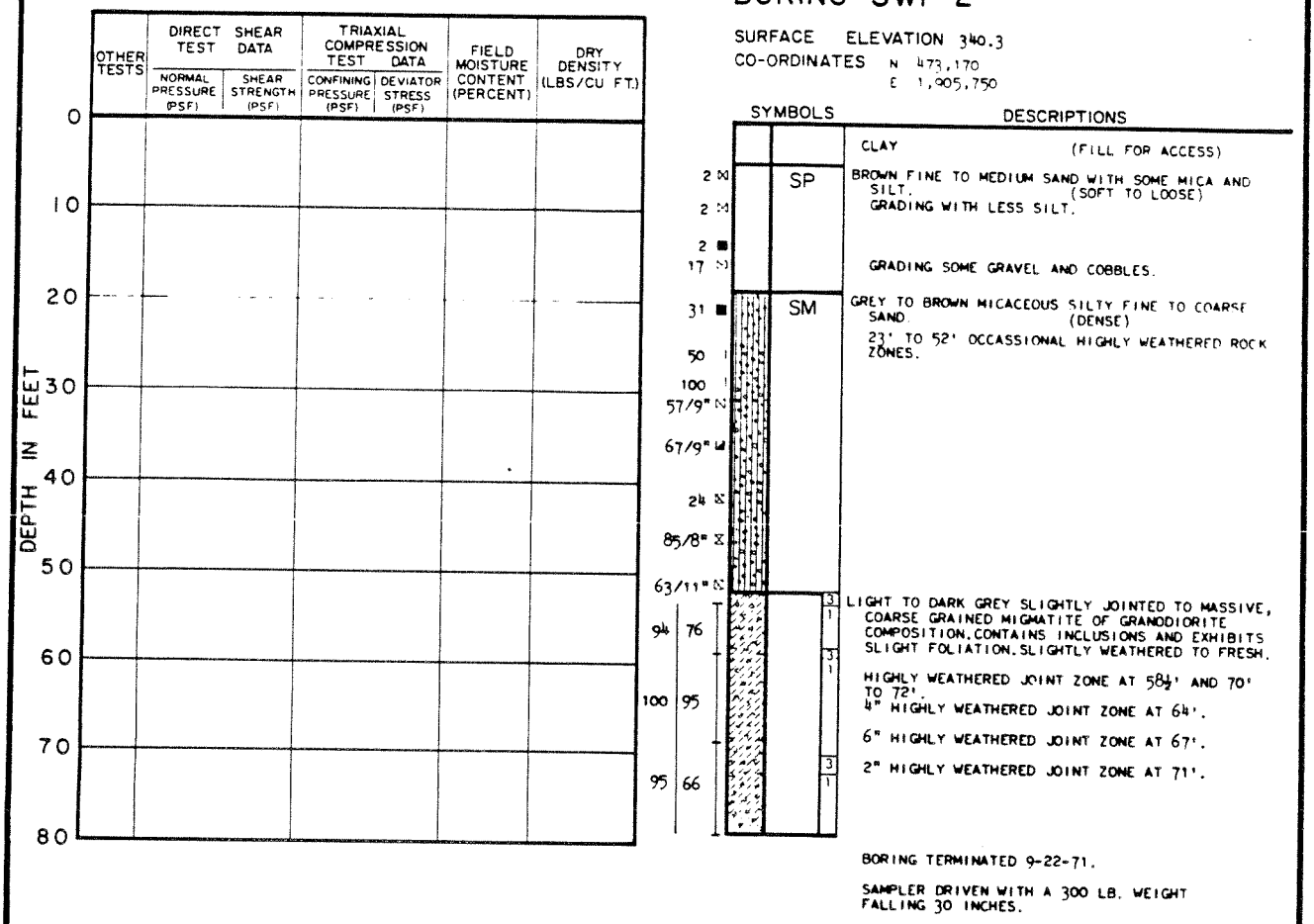
LOG OF BORING SWP-I

Amendment 0
August 1984

Figure 2E-76

BORING SWP-2

SURFACE ELEVATION 340.3
CO-ORDINATES N 473,170
E 1,905,750



LOG OF BORING SWP-2

Amendment 0
August 1984

Figure 2E-77

BORING SWP-3

SURFACE ELEVATION 393.2

CO-ORDINATES N 473,250
E 1,906,050

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							

SYMBOLS	DESCRIPTIONS
4 ■	BROWN SILTY FINE TO MEDIUM SAND. (LOOSE)
90/8"■	GRADING VERY DENSE AND MICACEOUS, PARTIALLY CEMENTED AT 3½'.
30 ⊠	GREY TO BLACK JOINTED FINE TO MEDIUM GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS AND EXHIBITS MODERATE FOLIATION.
95 15	10' TO 52' HIGHLY WEATHERED; HIGHLY JOINTED.
70 0	
93 5	
90 7	
52 0	52' TO 61' SLIGHTLY TO MODERATELY WEATHERED; MODERATELY TO HIGHLY JOINTED.
90 50	CIRCULATION LOST AT 52½'.
	BORING TERMINATED 9-28-71.
	SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

SM

3

32

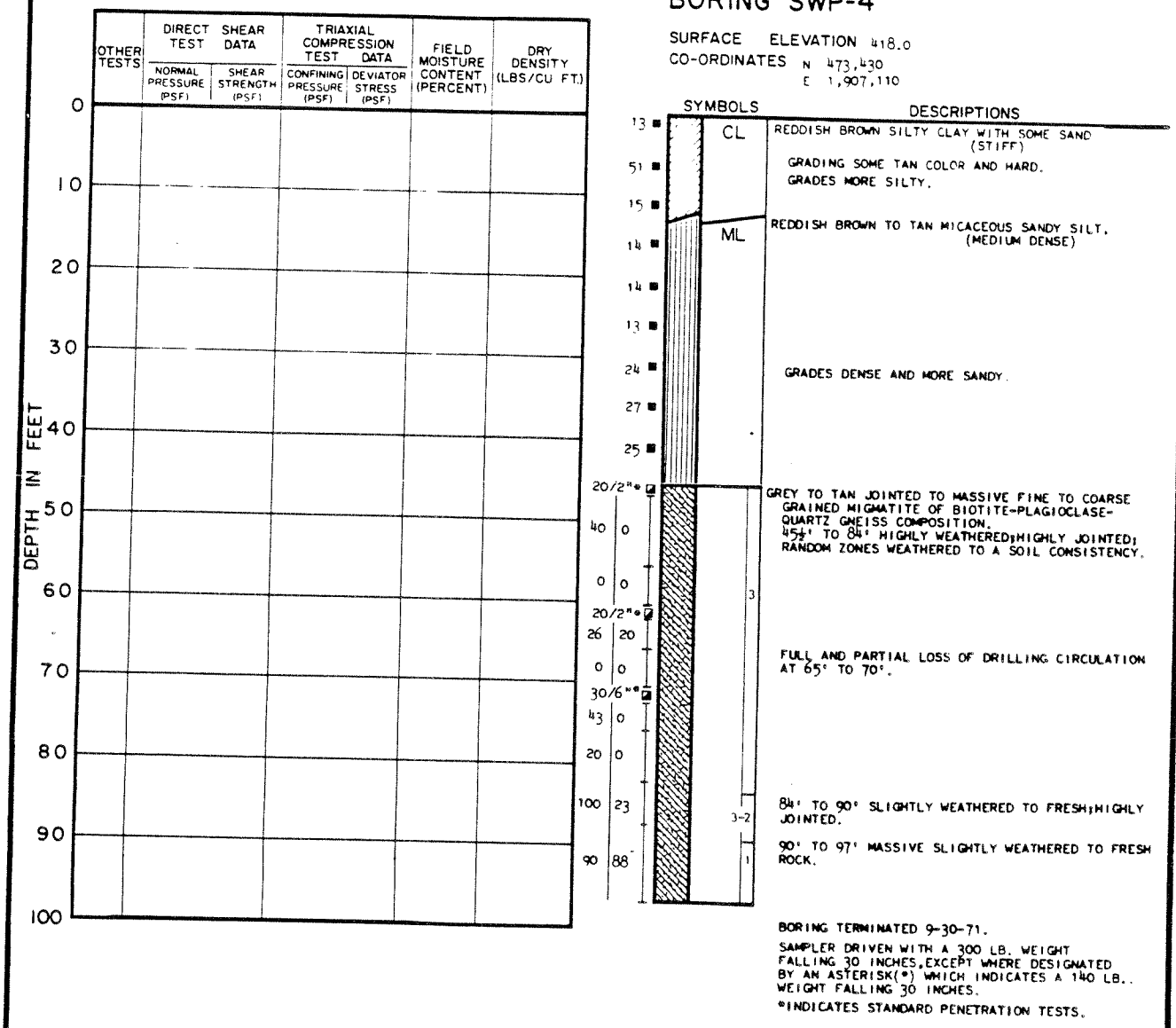
LOG OF BORING SWP-3

Amendment 0
August 1984

Figure 2E-78

BORING SWP-4

SURFACE ELEVATION 418.0
CO-ORDINATES N 473,430
E 1,907,110



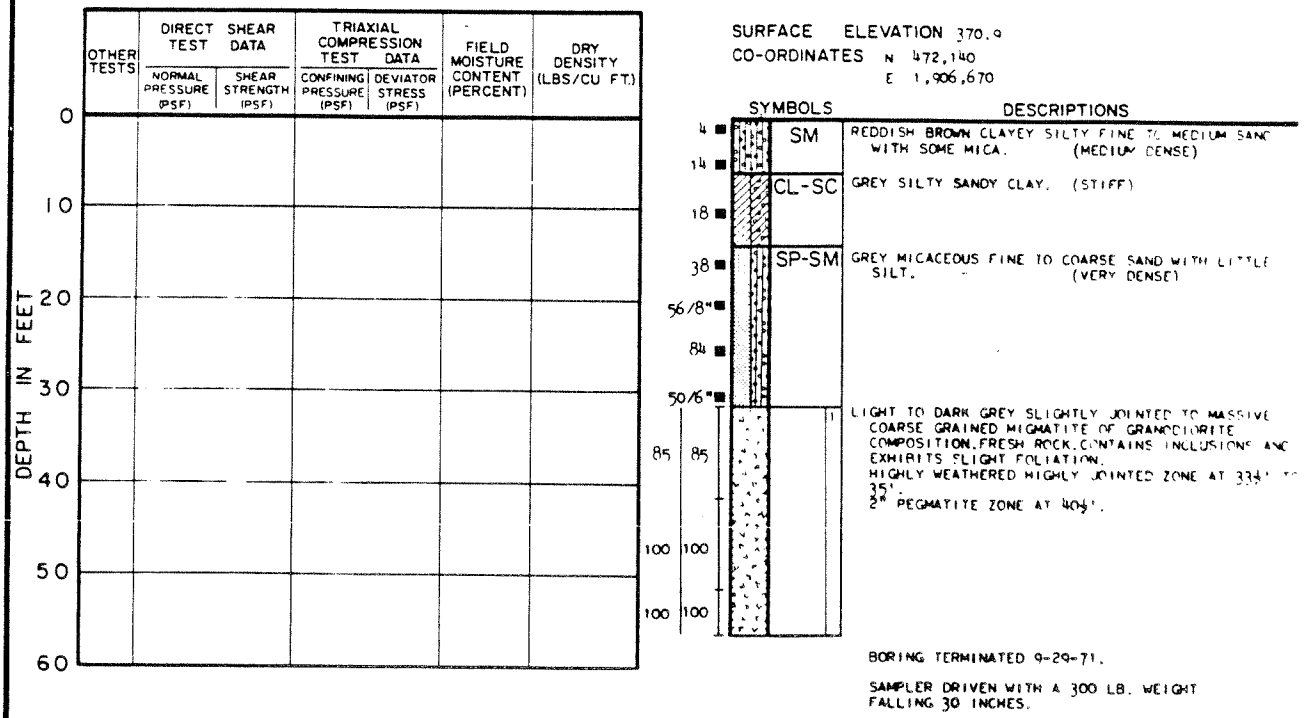
LOG OF BORING SWP-4

Amendment 0
August 1984

Figure 2E-79

BORING SWP-5

SURFACE ELEVATION 370.9
CO-ORDINATES N 472,140
E 1,906,670

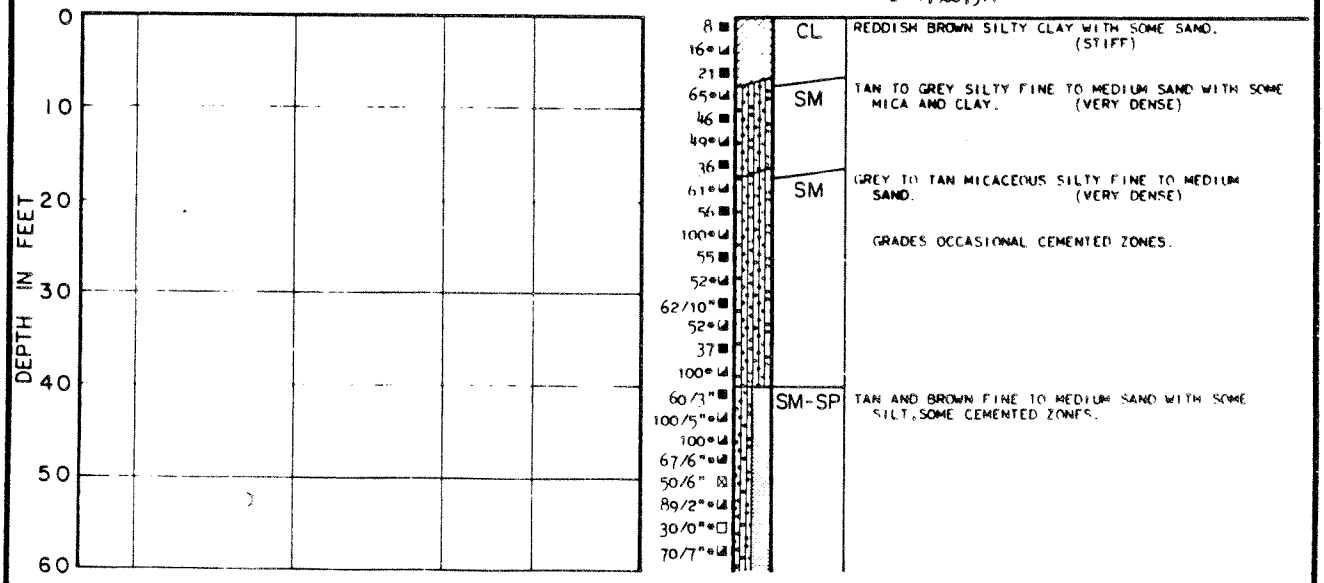


BORING TERMINATED 9-29-71.

SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.

BORING SWP-6

SURFACE ELEVATION 410.9
CO-ORDINATES N 471,964
E 1,906,511



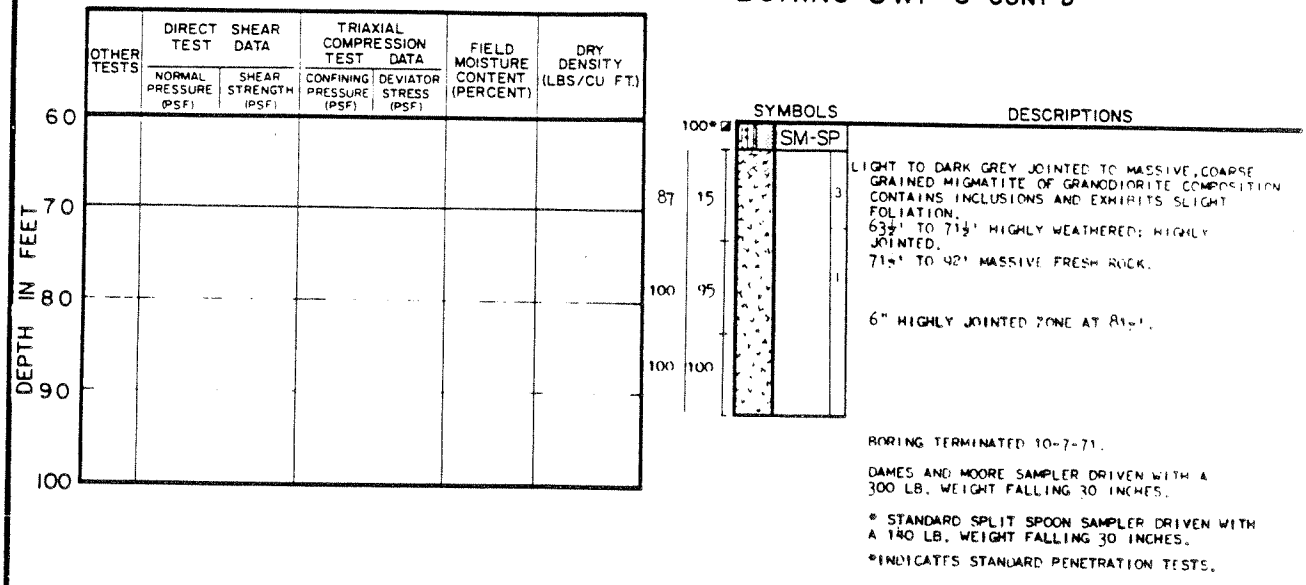
BORING CONTINUED

LOG OF BORINGS SWP-5 & SWP-6

Amendment 0
August 1984

Figure 2E-80

BORING SWP-6 CONT'D



LOG OF BORING SWP-6

Amendment 0
August 1984

Figure 2E-80a

BORING SWP-7

SURFACE ELEVATION 410.4
CO-ORDINATES N 472,096
E 1,906,810

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							

	SYMBOLS	DESCRIPTIONS
40 ■ 81 ● 50 ■ 102 ● 83/9" ■ 125 ● 112 ■ 100/6" ● 120 ■ 105/7" ● 70/6" ■ 164/10" ● 174/7" ■ 100/6" ● 120/4" ● 100/2" ●	SM	YELLOW TAN MICACEOUS SILTY FINE TO MEDIUM SAND (DENSE)
	SP-SM	GREY TO TAN MICACEOUS FINE TO MEDIUM SAND WITH LITTLE SILT. (VERY DENSE)
		GRADING SOME CEMENTATION AT 7½'.
50 0		GREY TO TAN JOINTED TO MASSIVE COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION. CONTAINS INCLUSIONS AND EXHIBITS SLIGHT FOLIATION. 40' TO 52' HIGHLY WEATHERED; HIGHLY JOINTED.
100 0		52' TO 70': SLIGHTLY WEATHERED TO FRESH; SLIGHTLY JOINTED TO MASSIVE.
95 67		HIGHLY WEATHERED JOINTS AT 56½' TO 59'.
79 68		HIGHLY WEATHERED, HIGHLY JOINTED ZONE AT 64' TO 66'.
		BORING TERMINATED 10-13-71
		DAMES AND MOORE SAMPLER DRIVEN WITH A 300 LB. WEIGHT FALLING 30 INCHES.
		*SPLIT SPOON DRIVEN WITH A 140 LB. WEIGHT FALLING 30 INCHES.
		•INDICATES STANDARD PENETRATION TESTS.

LOG OF BORING SWP-7

BORING SWP-8

SURFACE ELEVATION 430.5
CO-ORDINATES N 471,450
E 1,906,960

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							

SYMBOLS	DESCRIPTIONS
CL	REDDISH BROWN SILTY SANDY CLAY. (VERY STIFF)
SM	REDDISH BROWN TO TAN MICACEOUS SILTY SAND. (MEDIUM DENSE)
ML	YELLOW TAN SILT WITH SOME MICA AND SAND. (DENSE)
SM	TAN TO BROWN MICACEOUS SILTY FINE TO COARSE SAND. (DENSE)
ML-SM	GREY MICACEOUS SILT AND FINE SAND. (VERY DENSE)
ROCK / SM	ZONES OF HIGHLY WEATHERED MIGMATITE OF GRANODIORITE COMPOSITION AND SOIL.
	TAN TO BROWN MODERATELY TO HIGHLY JOINTED COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION, CONTAINS INCLUSIONS AND EXHIBITS SLIGHT FOLIATION. HIGHLY WEATHERED.
	MODERATELY WEATHERED ZONE AT 60' TO 62'.
	MODERATELY WEATHERED ZONE AT 77' TO 80'.

18 38* 19 17* 12 14* 14 17* 17 21* 27 21* 26 37* 28 32* 35 60* 60/8" 77/6"*

11 0
40 0
100 10
100 27
100 30

2 3 2 3

BORING TERMINATED 10-11-71

SAMPLER DRIVEN WITH 300 LB. WEIGHT FALLING 30 INCHES.

*SPLIT SPOON DRIVEN WITH A 140 LB. WEIGHT FALLING 30 INCHES.
*INDICATES STANDARD PENETRATION TESTS.

LOG OF BORING SWP-8

Amendment 0
August 1984

Figure 2E-82

BORING 4-1

SURFACE ELEVATION 436
CO-ORDINATES N 472,420
E 1,905,020

DEPTH IN FEET	OTHER TESTS	DIRECT TEST / SHEAR DATA: NORMAL PRESSURE (PSF)	DIRECT TEST / SHEAR DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT)
0							
10						15 15	
20				1500 3000 6000	2015 4601 7051	14 12	86
30						9	
40						9 12	87
50						11 10 7	101
60							
70							
80							

SYMBOLS	DESCRIPTIONS
SC	REDDISH BROWN SILTY CLAYEY SAND GRADES WITH MICA
SM-SC	OLIVE AND BROWN MICACEOUS SILTY SAND TO CLAYEY SAND (MEDIUM DENSE TO STIFF)
SM	BROWN MICACEOUS SILTY FINE TO MEDIUM COARSE SAND (SAPROLITE) (LOOSE)
	GRADES MEDIUM DENSE
	GRADES MOTTLED BROWN, GRAY AND BLACK - BLACK BANDS
	GRADES WITH TRACE OF COARSE SAND
	GRADES DENSE
	GRADES VERY DENSE
	LIGHT GRAY, JOINTED AND MASSIVE, MEDIUM TO COARSE GRAINED MIGMATITE OF GRANODIORITE COMPOSITION.
	55.5' TO 63' SLIGHTLY TO MODERATELY WEATHERED WITH BROWN STAINING. ABUNDANT MEDIUM TO HIGH ANGLE WEATHERED JOINTS.
	63' TO 66.8' - HIGHLY WEATHERED
	66.8' TO 68.5' - SLIGHLTY WEATHERED WITH OCCASIONAL LOW TO HIGH ANGLE OPEN JOINTS
	68.5' TO 71' - UNWEATHERED AND MASSIVE
	71' TO 73.5' - SLIGHTLY WEATHERED ZONES WITH OCCASIONAL OPEN JOINTS AND OCCASIONAL INCLUSIONS OF ALTERED GNEISSIC MATERIAL
	BORING TERMINATED AT 73.5' ON 4-21-76
	GROUNDWATER LEVEL NOT ENCOUNTERED

P ■ 9 ■ P ■ 8 ■ P ■ 12 ■ P ■ 19 ■ P ■ 23 ■ P ■ 43 ■ P ■ 34 ■ P ■ 38 ■ P ■ 49 ■ P ⊠ 70 ■

74 | 23 | 2

89 | 60 | 1 | 2

NOTES:

- 9 ◪ INDICATES DISTURBED SAMPLE WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- 9 ⊠ INDICATES NO RECOVERY WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- TW ■ INDICATES UNDISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHEMENT HYDRAULICALLY PUSHED
- TW ⊠ INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW ☐ INDICATES NO RECOVERY WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- P ■ INDICATES UNDISTRUBED SAMPLE WITH 3 INCH O.D. SHELBY TUBE HYDRAUICALLY PUSHED

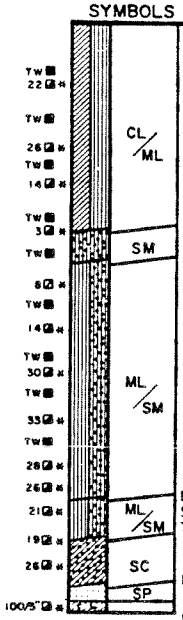
LOG OF BORING 4-1

Figure 2E-83

BORING 4-2

SURFACE ELEVATION 433.05
COORDINATES N 472,474.22
E 1,905,182.55

	OTHER TESTS	DIRECT SHEAR TEST DATA		TRIAXIAL COMPRESSION TEST DATA		FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
		NORMAL PRESSURE (PSF)	SHEAR STRENGTH (PSF)	CONFINING PRESSURE (PSF)	DEVIATOR STRESS (PSF)		
0							
						27.0	98.4
10						22.9	99.7
						24.4	96.6
20						24.3	95.9
						28.5	84.0
30						23.2	104.6
						23.9	99.8
40						22.7	104.0
						24.2	100.8
50							
60							
70							



FILL: REDDISH BROWN SILTY CLAY TO CLAYEY SILT (STIFF)

LAYER OF REDDISH BROWN CLAYEY SILT OF HIGH PLASTICITY (MH)
GRADES WITH MICA
GRADES SOFTER WITH LAYER OF SILTY FINE SAND
CIRCULATION LOST AT 18 FEET

GRADES TO SOFT

FILL: GRAYISH BROWN MICACEOUS SILTY FINE SAND (MEDIUM DENSE) GRADES WITH GRAVEL

FILL: ALTERNATING LAYERS OF REDDISH BROWN SILTY CLAY TO CLAYEY SILT AND GRAYISH BROWN MICACEOUS SILTY FINE SAND (MEDIUM STIFF TO LOOSE)
GRADES STIFF TO MEDIUM DENSE

SET CASING TO 51'

BROWN AND GRAY MICACEOUS FINE SANDY SILT TO SILTY FINE SAND (MEDIUM DENSE TO STIFF)

REDDISH BROWN CLAYEY FINE TO MEDIUM COARSE SAND (MEDIUM DENSE)

BROWN SILTY FINE TO MEDIUM COARSE SAND WITH MICA (SAPROLITE) (VERY DENSE)

WEATHERED ROCK
BORING TERMINATED AT 64' ON 9/30/76
BORING CAVED AT 23'-6"; WATER LEVEL NOT RECORDED

NOTES:

- 9 ⊡ INDICATES DISTURBED SMAPLE WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- 9 ☒ INDICATES NO RECOVERY WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- TW ■ INDICATES UNDISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW ⊠ INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW □ INDICATES NO RECOVERY WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- P ■ INDICATES UNDISTURBED SAMPLE WITH 3 INCH O.D. SHELBY TYBE HYDRAULICALLY PUSHED

LOG OF BORING 4-2

BORING 4-3

SURFACE ELEVATION 414.28
COORDINATES N 472,561.62
E 1,905,088.60

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10							
20							
30							
40							
50							
60							
70							

SYMBOLS	DESCRIPTIONS
12 P* 7 P* 45 P*	ML/CL — FILL: REDDISH BROWN MICACEOUS CLAYEY SILT TO SILTY CLAY (MEDIUM STIFF)
	TRACE OF ORGANIC MATERIAL
21 P*	ML/CL — REDDISH BROWN MICACEOUS CLAYEY SILT TO SILTY CLAY WITH TRACE OF ORGANICS AND MICA (VERY STIFF)
27 P*	ML — MOTTLED REDDISH BROWN, BROWN, TAN AND BLACK FINE SANDY SILT WITH TRACE OF CLAY (SAPROLITE) (STIFF)
24 P* 45 P* 28 P* 36 P* 33 P* 32 P* 52 P*	ML/SM — ALTERNATING ZONES OF VERY HIGHLY WEATHERED MIGMATITE OF GNEISSIC COMPOSITION, AND SAPROLITE DERIVED FROM COMPLETELY DECOMPOSED MIGMATITE OF GNEISSIC COMPOSITION FORMING MULTICOLORED SILT AND SILTY FINE SAND (MEDIUM DENSE TO VERY DENSE)
	HARDER ZONE FROM 24' TO 26'
	GRAY AND TAN COLOR
	GRADES WITH TRACE OF MICA
	GRADES WITH MORE MICA
	GRAY, WHITE AND BROWN COLOR
	GRAY AND TAN COLOR
	GREENISH GRAY TO TAN COLOR
100/7" P*	GRAY HIGHLY WEATHERED MIGMATITE OF GNEISSIC COMPOSITION

BORING TERMINATED AT 63'-2" ON 10/1/76

WATER LEVEL AT 40' ON 10/4/76

NOTES:

- P* ◪ INDICATES DISTURBED SAMPLE WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- P* ⊘ INDICATES NO RECOVERY WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- TW ■ INDICATES UNDISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW ⊠ INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW □ INDICATES NO RECOVERY WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- P ■ INDICATES UNDISTURBED SAMPLE WITH 3 INCH O.D. SHELBY TUBE HYDRAULICALLY PUSHED

LOG OF BORING 4-3

BORING 4-4

SURFACE ELEVATION 434.24
COORDINATES N 472,476.12
E 1,905,203.30

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10	B					27.7	94.2
20						18.9	108.3
30						22.0	103.5
						20.8	106.3
40							
50						22.6	103.5
60						21.5	104.0
70							

SYMBOLS	DESCRIPTIONS
ML/CL	FILL: REDDISH BROWN MICACEOUS CLAYEY SILT TO SILTY CLAY (STIFF)
	LAYER OF SILTY FINE SAND
ML/SM	FILL: ALTERNATING LAYERS OF BROWN AND GRAYISH BROWN MICACEOUS SILTY SAND AND REDDISH BROWN MICACEOUS SANDY AND CLAYEY SILT (MEDIUM DENSE TO STIFF)
	DENSER FROM 37' TO 42'
	LAYER OF REDDISH BROWN MICACEOUS CLAYEY SILT OF HIGH PLASTICITY (MH)
SM/ML	FILL: REDDISH BROWN MICACEOUS SILTY FINE SAND TO FINE SANDY SILT (MEDIUM DENSE TO STIFF)
SM	REDDISH BROWN SILTY CLAY WITH A TRACE OF MICA (VERY STIFF)
SM	GRAY, GREENISH BROWN MICACEOUS SILTY FINE SAND (SAPROLITE) (DENSE)
	WEATHERED ROCK
	BORING TERMINATED AT 67' ON 10/5/76
	HOLE CAVED; WATER LEVEL NOT RECORDED

NOTES:

- S: INDICATES DISTURBED SAMPLE WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- S: INDICATES NO RECOVERY WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- TW: INDICATES UNDISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW: INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW: INDICATES NO RECOVERY WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- P: INDICATES UNDISTURBED SAMPLE WITH 3 INCH O.D. SHELBY TUBE HYDRAULICALLY PUSHED

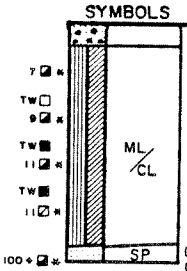
LOG OF BORING 4-4

Figure 2E-86

BORING 4-5

SURFACE ELEVATION 432.83
COORDINATES N 472,463.70
E 1,905,156.30

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10						26.3	88.5
20						27.6	98.6
30							



SYMBOLS / DESCRIPTIONS

CRUSHED ROCK DRILLING MAT
FILL: REDDISH BROWN CLAYEY SILT TO SILTY CLAY (MEDIUM STIFF TO STIFF)

LAYER OF SILTY FINE SAND

SOFT ZONE FROM 21'-6" TO 23'

GRAY MICACEOUS SILTY FINE SAND
OBSTRUCTION (MASSIVE AND HARD) AT 25'-10"
BORING TERMINATED AT 25'-10" ON 10/6/76
HOLE CAVED; WATER LEVEL NOT RECORDED

NOTES:

- 9 ■ INDICATES DISTURBED SAMPLE WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- 9 ☒ INDICATES NO RECOVERY WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- TW ■ INDICATES UNDISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW ☒ INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW □ INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- P ■ INDICATES UNDISTURBED SAMPLE WITH 3 INCH O.D. SHELBY TUBE HYDRAULICALLY PUSHED

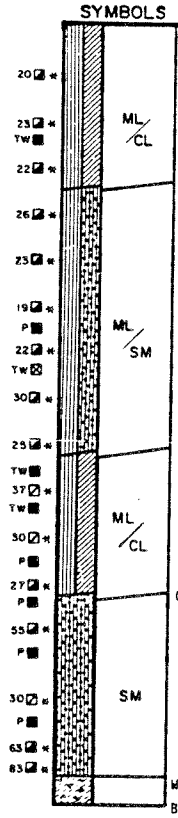
LOG OF BORING 4-5

Figure 2E-87

BORING 4-6

SURFACE ELEVATION 435.68
COORDINATES N 472,392.82
E 1,905,270.70

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							



NOTES:

- 9 ◪ INDICATES DISTURBED SAMPLE WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- 9 ⊠ INDICATES NO RECOVERY WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- INDICATES UNDISTURBED SAMPLE WITH
- TW ■ DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW ⊠ INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW □ INDICATES NO RECOVERY WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- P ■ INDICATES UNDISTURBED SAMPLE WITH 3 INCH O.D. SHELBY TUBE HYDRAULICALLY PUSHED

LOG OF BORING 4-6

BORING 4-7

SURFACE ELEVATION 435.67
COORDINATES N 471,843.48
E 1,905,726.82

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU FT.)
0							
10							
20							
30							
40							
50							
60							

SYMBOLS	DESCRIPTIONS
ML-CL	FILL: REDDISH BROWN CLAYEY SILT TO SILTY CLAY (MEDIUM STIFF)
11 ⊠ *	SAPROLITE DERIVED FROM COMPLETELY DECOMPOSED MIGMATITE OF GRANODIORITE COMPOSITION FORMING MOTTLED BROWN, TAN, WHITE AND GRAY MICACEOUS SILTY FINE TO COARSE SAND WITH FINE GRAVEL SIZE ROCK FRAGMENTS (MEDIUM DENSE)
11 ⊠ *	
TW ■	
12 ⊠ *	
P ■	
14 ⊠ *	
P ■	
19 ⊠ *	
SM	
15 ⊠ *	
TW ■	
22 ⊠ *	GRADES TO DENSE
	GRADES COARSER
33 ⊠ *	
TW ⊠	
47 ⊠ *	
100/3" ⊠ *	MOTTLED BROWN, GRAY AND TAN HIGHLY WEATHERED MIGMATITE OF GRANODIORITE COMPOSITION
	BORING TERMINATED AT 50'-3" ON 10/11/73
	HOLE CAVED AT 39'; WATER LEVEL NOT RECORDED

NOTES:

- 9 ⊠ * INDICATES DISTURBED SAMPLE WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- 9 ☒ INDICATES NO RECOVERY WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- TW ■ INDICATES UNDISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW ⊠ INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW ☐ INDICATES NO RECOVERY WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- P ■ INDICATES UNDISTURBED SAMPLE WITH 3 INCH O.D. SHELBY TUBE HYDRAULICALLY PUSHED

LOG OF BORING 4-7

Figure 2E-89

BORING 4-8

SURFACE ELEVATION 432.9
COORDINATES N472,519.12
E 1,905,162.43

DEPTH IN FEET	OTHER TESTS	DIRECT SHEAR TEST DATA: NORMAL PRESSURE (PSF)	DIRECT SHEAR TEST DATA: SHEAR STRENGTH (PSF)	TRIAXIAL COMPRESSION TEST DATA: CONFINING PRESSURE (PSF)	TRIAXIAL COMPRESSION TEST DATA: DEVIATOR STRESS (PSF)	FIELD MOISTURE CONTENT (PERCENT)	DRY DENSITY (LBS/CU. FT.)
0							
10						25.7	99.1
						27.3	91.8
20							
30							
						21.4	105.1
40							
50						18.8	106.2
60							
70							

SYMBOLS		DESCRIPTIONS
12 S4, TW, 14 S, TW, 10 S, TW	CL/ML	FILL: REDDISH BROWN CLAYEY SILT TO SILTY CLAY (STIFF)
20 S, TW	SP	FILL: GRAY MICACEOUS SILTY FINE SAND
32 S	GP	FILL: SAND AND GRAVEL
36 S, TW, 32 S, TW	SM/ML	FILL: ALTERNATING LAYERS OF GRAYISH BROWN AND REDDISH BROWN SILTY SAND TO SANDY SILT (DENSE TO VERY STIFF)
27 S, P, 16 S	ML/CL	FILL: ALTERNATING LAYERS OF REDDISH BROWN MICACEOUS CLAYEY SILT TO SILTY CLAY AND GRAYISH BROWN MICACEOUS SANDY SILT (STIFF)
TW, 14 S, P	CL/ML	REDDISH BROWN SILTY CLAY TO CLAYEY SILT WITH A TRACE OF SAND (STIFF)
20 S	SM	REDDISH BROWN SILTY FINE SAND WITH CLAY
		WEATHERED ROCK
26 S, P	SM/ML	BROWN, REDDISH BROWN AND TAN SILTY FINE SAND TO SANDY SILT (SAPROLITE) (MEDIUM DENSE)
133 S	SP	BROWN MICACEOUS SILTY FINE TO COARSE SAND (SPAROLITE) (VERY DENSE)
100/1" S		WEATHERED ROCK
		BORING TERMINATED AT 69' ON 10/13/76
		WATER LEVEL NOT RECORDED

NOTES:

- S* INDICATES DISTURBED SAMPLE WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- S INDICATES NO RECOVERY WITH 2 INCH O.D. SAMPLER (STANDARD PENETRATION TEST)
- TW INDICATES UNDISTRUBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW INDICATES DISTURBED SAMPLE WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- TW INDICATES NO RECOVERY WITH DAMES & MOORE TYPE U SAMPLER AND THIN-WALLED SAMPLING TUBE ATTACHMENT HYDRAULICALLY PUSHED
- P INDICATES UNDISTURBED SAMPLE WITH 3 INCH O.D. SHELBY TUBE HYDRAULICALLY PUSHED

LOG OF BORING 4-8