56. COMPILATION OF PALEOMAGNETIC AND ROCK MAGNETIC RESULTS OF BASALT SAMPLES FROM DEEP SEA DRILLING PROJECT LEGS, 51, 52, AND 53

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INTRODUCTION

The primary purpose of Legs 51, 52, and 53 was to achieve the deepest penetration of the igneous oceanic crust in a single hole. This resulted in having the two deeper holes (Holes 417D and 418A) drilled during three legs, so that for either hole there are two sets of paleomagnetic results (Hole 417D, Legs 51 and 52; Hole 418A, Legs 52 and 53). In this report we assemble the paleomagnetic data of Legs 51, 52, and 53 primarily to consolidate the results for Holes 417D and 418A. Further reason for this compilation is that the two sites (four holes) drilled on Legs 51, 52, and 53 are very close together, not more than 5 km apart. Table 1 describes the "division of labor" for the magnetic studies, and the data are presented in four tables (2 through 5) (one for each hole), the specimens being listed as a function of depth from the water/sediment interface. For the shared (Legs 52 and 53) holes, Holes 417D and 418A, the data are presented in Tables 3a, b and 4a, b, respectively, whose division is determined by the actual coring on each leg. In Tables 3a, b and 4a, b the asterisks on the extreme left denote specimens studied by the paleomagnetist(s) from the leg of "secondary" responsibility.

Tables 2 through 5 have identical formats; column headings are as follows:

1) Sample — location of specimen in the particular hole: core, section, depth in section in centimeters (for example, 24-4, 122-125 is a sample from the fourth section of Core 24, drilled in the interval from 122 to 125 cm down from the top of Section 4. Note: 150 cm is the maximum length of each section, and a core does not exceed 9.5 m).

2) Depth — measured from water/sediment interface (m).

3) Rock type — p = pillowed flow, m = massive flow, b_c = breccia clast, b_m = breccia matrix, and d = dike.

4) J_{NRM} — intensity of natural remanent magnetization in units of 10^{-3} Gauss (emu/cm^3). Values are bracketed when suspected of contamination by drilling and post-drilling components of remanence.

5) I_{NRM}, D_{NRM} — directions of natural remanent magnetization; I = inclination in degrees with respect to horizontal (negative values indicate that the remanence vector points up); and D = relative declination in degrees.

6) I_{STABLE}, D_{STABLE} — stable directions of remanence deduced from alternating field (AF) demagnetization; brackets indicate limited degree of reliability, and "no" indicates that no stable value is evident [consult individual reports for more precise definitions and criteria for determining "stable," ( ), and "no"].

7) MDF — median destructive field in oersteds, determined from AF demagnetizations. ( ) denote the presence of large, + of small amount of spurious components of magnetization. (+ is often related to an initial increase of magnetization during AF demagnetization.)

8) SUS — initial susceptibility in units of 10^{-3} G(emu/cm^3).

9) Q — Königsberger ratio: ratio of remanent to induced magnetization, $Q = J_{NRM}/SUS \cdot F$, where F = 0.46 Oe is the intensity of the ambient field at Sites 417 and 418.

TABLE 1
Division of Labor for Magnetic Studies

Hole	Table Where Magnetic Data Are to be Found	Total Length of Igneous Section (m)	Leg of Primary Responsibility for Magnetic Results	Leg of Secondary Responsibility for Magnetic Results
417A	2	209	51[a]	–
417D		365.5		
Cores 21-45	3a		51[a]	52[b]
Cores 48-69	3b		52[b]	51[a]
418A		544		
Cores 15-48	4a		52[b]	53[c]
Cores 49-86	4b		53[c]	52[b]
418B	5	10	53[c]	–

[a] Bleil and Smith, this volume.
[b] Levi, this volume.
[c] Rigotti, this volume.

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TABLE 2
Magnetic Results of Hole 417A

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
24-1, 75-77	218.26	p	0.423	-8.9	-35.8	249.4	270.5	(210)	0.733	1.3
24-1, 99-101	218.50	p	0.754	-22.0	-20.2	282.2	(286.5)	(195)	0.610	2.7
24-2, 113-115	220.14	p	7.00	-15.6	(-16.0)	45.8	(46.2)	330+	0.392	38.8
24-3, 21-23	220.72	p	6.93	-27.3	-25.7	348.9	349.9	265+	0.338	44.5
24-4, 18-20	222.19	p	8.29	-16.2	-15.6	194.8	196.4	385	0.329	54.7
24-5, 22-25	223.74	p	2.58	-19.6	-18.5	328.6	328.9	(390)	0.234	24.0
25-1, 82-85	227.84	p	6.98	-31.0	-30.9	347.2	346.8	285+	0.428	35.5
26-1, 64-67	237.16	p	3.90	-8.0	-9.3	111.1	105.6	195	0.503	16.9
26-2, 26-29	238.28	p	2.89	-20.5	-22.5	265.2	267.2	220	0.515	12.2
26-2, 39-42	238.41	p	2.13	-14.4	–	159.8	–	–	0.462	10.0
26-3, 137-140	240.89	p	5.35	-13.7	-15.5	92.8	91.5	230	0.561	20.7
26-4, 5-8	241.07	p	2.06	+0.9	(-2.4)	153.3	(155.0)	200	0.548	8.2
26-5, 28-30	242.79	bc	4.94	-24.2	-24.9	5.1	4.5	340+	0.404	26.6
26-6, 14-17	244.16	p	4.68	-23.8	-26.2	195.1	195.5	–	–	–
27-1, 45-48	246.47	p	7.24	-26.1	-25.9	32.0	32.2	260	0.494	31.9
28-1, 50-53	256.02	p	5.11	-22.0	–	131.7	–	–	0.595	18.7
28-1, 75-77	256.26	p	1.32	-30.5	-31.9	285.4	285.9	(355)	0.260	11.0
28-3, 103-106	259.55	p	9.73	-17.3	-18.2	259.4	259.1	315	0.552	38.3
28-4, 44-46	260.45	p	5.67	-25.4	(-17.5)	282.6	(284.0)	195	0.590	20.9
28-5, 119-121	262.70	p	11.0	-29.9	-29.9	152.5	153.6	235	0.645	37.2
29-1, 72-74	265.73	p	3.65	-23.2	-23.2	337.8	340.7	(110)	0.919	8.6
29-2, 84-87	267.36	p	6.35	-28.6	(-27.0)	61.2	(68.2)	207+	0.616	22.4
29-3, 4-6	268.05	p	6.59	-25.0	-26.3	195.0	197.0	(125)	0.917	15.6
29-6, 83-85	273.34	p	6.31	-16.3	-17.1	51.9	51.9	(125)	0.898	15.3
30-1, 44-47	274.96	bc	6.12	-19.5	-20.5	251.1	250.2	(315)	0.264	50.4
30-3, 92-95	278.44	p	10.3	-13.1	-17.4	142.2	144.8	160	0.905	24.6
30-5, 61-64	281.13	bc	15.5	-28.3	-28.6	357.2	356.3	(315)	0.454	74.3
30-5, 65-67	281.16	bc	15.6	-28.6	-29.2	2.4	2.8	–	–	–
30-5, 79-82	281.31	bc	15.6	-29.8	-30.5	352.2	351.3	223	0.533	63.7
31-1, 8-10	284.09	p	2.14	-20.5	-20.9	218.2	217.6	(185)	0.691	6.7
31-3, 117-120	288.19	p	7.70	-20.0	-20.1	349.6	349.2	240	0.446	37.5
31-5, 101-104	291.03	p	3.62	-28.8	-30.7	29.6	28.4	–	–	–
31-5, 123-126	291.25	p	2.77	-15.7	no	32.0	no	(215)	0.498	12.1
32-1, 14-17	293.66	p	8.86	-28.0	-33.0	74.4	73.3	197+	0.531	36.3
32-1, 35-38	293.87	p	6.36	-24.3	(-24.6)	44.4	(44.0)	155+	0.723	19.1
32-1, 56-59	294.08	p	9.22	-21.4	(-27.3)	143.6	no	128	0.652	30.7
32-3, 103-105	297.54	p	3.68	-24.2	-25.0	224.0	224.8	165	0.671	11.9
32-4, 54-57	298.56	p	9.86	-19.1	-11.1	234.0	246.5	163+	0.654	32.8
33-1, 26-29	303.28	p	1.76	-16.1	-20.8	117.2	110.3	–	–	–
33-3, 84-87	306.86	p	13.8	-19.2	-19.7	169.0	170.6	130	1.07	28.2
33-5, 82-85	309.84	p	8.34	-25.6	–	266.8	–	–	1.06	17.0
33-5, 90-93	309.92	p	9.92	-22.3	-21.5	265.3	266.0	120	1.42	15.2
34-1, 5-8	312.57	p	10.5	-24.3	-19.9	323.9	313.0	(160)	1.02	22.4
34-1, 28-31	312.80	p	6.83	-19.8	-20.5	37.4	40.4	(150)	1.16	12.8
34-3, 10-13	315.62	p	9.42	-22.8	-22.6	26.0	25.6	105+	1.85	11.1
34-3, 29-32	315.81	p	56.0	-21.6	-10.5	92.8	90.7	135	1.23	99.0
34-5, 40-43	318.92	p	(0.288)	+52.8	no	107.9	no	(185)	0.598	1.0
35-1, 125-128	323.27	p	5.56	-20.7	-20.5	37.0	35.5	130+	1.28	9.4
35-4, 7-9	326.58	p	7.42	-23.1	-23.0	85.4	84.6	234+	0.416	38.8
35-4, 50-53	327.02	p	7.84	-25.3	-24.8	339.2	339.3	–	–	–
35-4, 100-103	327.52	p	9.35	-26.2	-26.1	197.5	197.1	(235)	0.373	54.5
35-4, 106-109	327.58	p	6.88	-22.9	-21.9	197.7	201.3	262+	0.325	46.0
35-4, 111-113	327.62	p	5.74	-28.3	-28.7	197.1	196.4	(275)	0.387	32.2
36-1, 129-132	332.81	p	6.05	-32.8	-33.3	98.3	98.4	200	0.734	17.9
36-3, 63-65	335.14	p	2.16	-22.1	-22.7	117.9	117.0	240+	0.434	10.8
36-5, 24-27	337.76	p	9.06	-24.0	(-22.7)	325.5	(325.2)	(220)	0.669	29.4
37-1, 31-34	341.33	p	19.9	-12.2	-12.9	128.0	126.6	85	1.53	28.4
37-3, 23-25	344.24	p	6.46	-22.9	-23.6	200.5	203.6	190+	0.541	25.9
37-3, 70-73	344.72	p	6.67	-20.6	-20.4	153.4	153.6	325	0.298	48.7
37-3, 103-106	345.05	p	4.03	-24.5	-24.9	331.1	331.0	(235)	0.207	42.3
37-3, 107-110	345.09	p	2.83	-25.8	(-24.5)	338.8	no	(325)	0.185	33.3
37-5, 23-25	347.24	p	32.9	-24.1	-17.8	306.3	291.1	125	1.45	49.5
37-5, 93-96	347.95	p	4.98	-23.1	-23.0	165.3	166.0	240+	0.326	33.2
38-1, 84-87	349.15	p	5.81	-23.7	-24.8	82.9	83.2	300	0.288	43.8
38-2, 8-11	349.70	p	5.17	-23.7	-24.1	278.1	279.6	278+	0.230	48.9
38-2, 18-21	349.78	p	3.50	-23.6	-22.6	277.8	279.5	255	0.298	25.6
38-2, 28-31	349.85	p	5.32	-23.8	-24.9	273.7	277.8	226+	0.361	32.0
38-2, 38-41	349.93	p	3.36	-24.0	-24.6	273.1	275.2	265+	0.268	27.2

TABLE 2 – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
38-2, 48-51	350.00	p	2.46	-26.4	-24.4	274.3	276.4	332+	0.189	28.2
38-3, 46-49	351.11	p	24.4	-20.8	-17.1	16.6	14.4	(105)	1.87	28.4
38-4, 34-37	352.15	p	4.88	-25.3	-26.8	36.2	40.2	(250)	0.229	46.3
38-4, 49-51	352.25	p	4.00	-25.5	-27.4	35.4	35.2	190+	0.259	33.6
38-5, 122-124	353.92	p	3.00	-14.8	-15.5	265.6	270.6	225+	0.422	15.5
38-7, 35-38	355.53	p	0.876	-18.3	-19.5	115.7	115.8	340+	0.246	7.7
39-1, 37-40	357.75	p	5.32	-20.1	-20.6	182.3	182.7	(360)	0.286	40.5
39-1, 41-42	357.78	p	1.83	-16.7	-17.7	179.0	180.8	–	–	–
39-3, 109-112	361.47	p	1.84	-9.3	-9.2	113.4	113.0	265	0.452	8.8
39-4, 24-27	362.12	p	2.81	-7.5	no	245.8	no	(345)	0.230	26.6
39-4, 81-84	362.68	p	6.61	-7.1	-6.8	311.6	312.4	186+	0.488	29.4
40-1, 14-17	363.64	p	6.86	-24.5	(-26.1)	181.8	no	185	0.678	22.0
40-3, 17-19	366.33	p	16.5	-23.1	-24.2	323.9	323.8	95	1.91	18.8
40-4, 67-69	368.11	p	6.29	-27.3	-28.1	284.9	285.1	270	0.273	50.1
40-5, 26-28	369.08	p	26.0	-18.1	-17.8	141.3	141.2	170	1.29	43.8
41-1, 103-106	370.54	p	13.0	-11.8	-17.8	328.5	327.4	70	1.75	16.1
41-2, 28-30	371.29	p	6.94	-29.8	-29.7	307.7	307.9	215	0.436	34.6
41-2, 68-70	371.69	p	8.20	-24.2	-25.1	296.0	296.3	208+	0.430	41.4
41-4, 136-139	375.38	p	38.5	-24.8	-25.4	167.5	166.6	95	2.44	34.3
41-5, 144-147	376.96	p	18.3	-19.8	(-22.4)	78.9	76.5	65	1.28	31.1
42-1, 18-20	379.17	p	13.7	-18.5	-15.4	217.6	225.4	138	1.41	21.0
42-1, 63-66	379.59	p	9.61	-13.7	(-13.6)	207.0	206.7	184	0.927	22.5
42-2, 20-22	380.56	p	24.5	-18.2	-22.2	14.6	12.2	95	1.98	27.0
42-4, 103-106	384.05	p	7.23	-23.6	-22.8	322.1	319.7	245	0.451	34.8
42-6, 143-146	387.14	p	5.53	-17.9	-17.4	309.8	309.1	215+	0.411	29.2
43-1, 59-62	389.06	m	6.54	-21.0	-21.5	20.2	18.5	160	1.23	11.6
43-2, 25-28	390.13	p	5.38	-21.5	-24.8	2.9	2.3	203+	0.396	29.5
43-3, 80-83	392.01	m	20.2	-12.4	-14.7	287.0	287.3	80	1.64	26.8
43-3, 118-121	392.36	m	53.2	-8.9	-20.9	148.4	120.5	(64)	1.44	80.1
43-4, 27-30	392.91	m	21.9	-22.2	-21.5	22.0	19.7	75	1.50	31.7
43-4, 105-108	393.62	m	9.39	-16.2	-18.8	306.6	303.8	130	1.97	10.3
43-4, 132-135	393.87	m	27.7	-17.3	-17.0	324.8	268.1	(36)	2.31	26.1
43-5, 22-25	394.24	m	24.2	-25.3	-25.6	6.1	4.6	120	2.65	19.9
44-1, 12-15	394.62	m	25.7	-21.8	-22.9	102.1	101.9	150	2.10	26.6
44-1, 52-55	394.97	m	23.1	-23.4	-20.6	287.2	289.6	104	2.50	20.1
44-1, 83-86	395.24	m	16.2	-23.4	-32.0	293.5	299.3	102	2.71	13.0
44-1, 132-135	395.67	m	17.1	-27.0	-27.9	3.1	358.7	–	–	–
44-2, 69-72	396.42	m	5.03	-28.9	–	270.0	–	–	2.34	4.7
44-2, 140-143	397.04	m	4.49	-22.9	–	132.2	–	–	2.61	3.7
44-3, 8-11	397.20	m	3.60	-19.9	-30.0	0.9	357.8	65	3.31	2.4
44-3, 15-17	397.25	m	3.37	-27.6	–	357.0	–	–	2.77	2.6
44-3, 47-50	397.54	m	3.01	-21.6	–	9.5	–	–	2.79	2.3
44-3, 96-99	397.96	m	2.19	-22.8	–	10.6	–	–	2.49	1.9
46-1, 56-59	408.08	bc	6.11	-14.8	-16.1	124.2	123.0	150	1.47	7.6
46-3, 82-85	411.34	bc	1.56	-31.8	no	28.9	no	200	1.46	2.3

TABLE 3a
Magnetic Results of Hole 417D, Cores 21 through 45

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
21, CC	339.58	p	15.9	-79.2	-79.3	237.4	241.4	155	2.34	14.8
22-1, 63-67	344.65	p	26.1	-73.6	-74.1	292.5	293.3	180	1.65	34.5
*22-2, 106-109	346.6	p	12.3	-69	-69	241	239	196+	1.51	17.7
22-2, 107-110	346.59	p	22.0	-67.5	-77.4	47.7	45.2	186+	1.38	34.7
22-4, 18-21	348.70	p	10.5	-58.6	-61.5	59.3	49.7	(130)	1.98	11.5
22-5, 57-60	350.59	p	12.1	-61.4	-67.9	166.9	163.5	(135)	1.94	13.6
*22-5, 102-105	351.0	p	5.49	-62	-62	36	(25)	111+	2.02	5.9
22-6, 18-21	351.70	p	14.2	-50.1	-51.6	16.2	11.5	–	2.26	13.6
26-2, 9-12	359.08	p	16.2	-66.1	-65.8	249.7	250.5	165+	1.93	18.3
*26-2, 62-65	359.6	p	14.1	-68	-68	48	50	141	1.72	17.8
26-2, 136-139	360.32	p	14.7	-76.5	(-70.0)	253.5	259.0	160	1.12	28.6
26-3, 28-31	360.73	p	16.3	-64.9	-65.5	99.2	91.9	115	2.01	17.6
*26-4, 19-22	362.1	p	9.96	-55	-66	145	153	126+	1.91	11.3
26-4, 75-77	362.65	p	10.2	-45.2	-47.0	71.1	67.1	150+	2.12	10.4
26-6, 16-18	365.02	p	13.0	-60.2	-61.5	318.5	318.9	205+	0.868	32.5
*26-6, 106-109	365.9	p	14.3	-73	-75	137	136	104+	1.42	21.9
26-7, 6-9	366.40	p	7.76	-75.4	-77.5	352.9	345.5	212	0.871	19.4
*27-1, 11-14	366.7	p	7.65	-71	-77	293	280	111+	1.74	9.6
27-1, 85-87	367.42	p	11.0	-73.0	-71.8	342.9	341.7	270+	0.828	28.6
*27-3, 39-42	369.8	p	7.61	-77	-77	234	235	406+	0.42	39.4
27-3, 43-45	369.87	p	15.1	-77.8	-77.6	77.6	74.5	255	0.919	35.8
27-5, 25-27	372.55	p	16.6	-67.6	-66.5	286.6	290.3	110	1.96	18.5
*27-5, 48-51	372.8	p	9.29	-70	-71	-81	-75	220	0.87	23.2
27-5, 90-92	373.16	p	6.52	-75.7	no	276.3	no	–	–	–
27-6, 86-89	374.55	p	7.81	-65.9	-74.3	340.4	337.2	227	0.914	18.6
27-7, 30-33	375.45	p	9.30	-70.9	-69.5	143.8	138.8	345	0.607	33.3
28-2, 37-39	377.41	p	17.3	-71.6	-70.9	331.9	328.2	130	2.07	18.2
*28-2, 122-124	378.2	p	12.1	-72	-72	112	115	203	1.11	23.7
28-3, 6-8	378.49	p	11.1	-71.1	-72.5	358.1	354.0	280	0.558	43.2
28-4, 102-104	380.73	p	10.5	-54.8	-62.4	121.4	116.2	95	1.62	14.1
28-5, 135-138	382.41	p	7.47	-61.6	-61.8	149.3	156.6	207	0.582	27.9
28-5, 140-143	382.45	p	9.13	-62.2	-61.4	135.8	140.3	187	0.766	25.9
28-5, 145-148	382.50	p	13.0	-70.6	-67.1	173.9	180.5	155	0.905	31.1
28-6, 30-33	382.82	p	6.48	-62.5	-68.2	169.3	170.0	125	2.06	6.8
28-6, 55-58	383.04	p	14.1	-63.3	-69.4	164.8	169.4	71	1.81	16.9
*28-6, 125-127	383.7	p	6.85	-72	-71	-35	-36	205	0.77	19.3
28-7, 5-7	383.94	p	6.98	-70.0	-69.9	181.9	180.6	205	0.927	16.4
28-7, 15-18	384.04	p	4.58	-64.1	-68.8	183.9	(201.6)	(126)	1.42	7.0
28-7, 28-30	384.15	p	3.20	-69.7	-71.7	246.4	240.1	120	1.07	6.5
28-7, 42-45	384.29	p	1.35	-71.1	(-76.0)	189.8	(208.6)	114	1.81	1.6
29-2, 40-43	386.55	p	4.48	-70.5	-71.4	134.2	131.6	273	0.351	27.7
29-2, 83-86	386.95	p	11.5	-64.3	-66.5	245.0	257.0	135	1.53	15.7
29-2, 128-131	387.35	p	3.94	-69.1	-61.0	302.0	287.9	360+	0.324	26.5
*29-3, 26-29	387.8	p	6.71	-48	-67	53	66	103	1.54	9.5
29-3, 57-60	388.07	p	12.1	-70.9	-70.1	343.1	342.1	205	1.24	21.1
29-5, 9-11	390.35	p	19.4	-62.9	(-67.0)	51.7	(50.0)	124	1.42	29.8
29-5, 64-67	390.86	p	5.74	-54.7	-64.0	133.0	124.5	105	2.06	6.1
*29-6, 81-84	392.4	p	5.66	-52	-64	13	20	95+	1.58	7.8
29-7, 70-73	393.65	p	9.39	-42.5	-64.4	127.1	103.5	95	1.71	11.9
29-1, 33-36	394.18	p	5.11	-61.8	-61.7	162.0	169.0	257	0.392	28.3
*30-1, 57-60	394.4	p	8.03	-71	-71	324	322	307	1.50	11.6
30-1, 89-92	394.62	p	6.20	-63.0	-66.4	159.2	157.6	367	0.357	37.8
30-2, 36-39	395.39	p	6.45	-64.2	-63.8	301.8	313.7	(155)	1.83	7.7
*30-3, 45-48	396.6	p	9.45	-75	-76	114	93	87	1.59	12.9
30-3, 123-126	397.26	p	8.60	-68.1	-67.3	353.7	352.4	340	0.616	30.4
30-4, 57-60	397.92	p	11.4	-65.6	-65.3	340.9	342.3	150+	2.25	11.0
*30-5, 110-112	399.5	p	9.52	-63	-65	88	92	109	0.63	32.8
30-5, 135-137	399.71	p	3.26	-68.8	-68.7	168.9	173.0	500+	0.212	33.4
30-6, 45-48	400.20	p	6.55	-75.2	-72.9	338.9	343.9	320	0.878	16.2
*30-7, 7-10	401.1	p	6.06	-58	-70	-13	-7	100+	2.16	6.1
30-8, 3-6	402.23	p	7.75	-31.9	-41.0	343.5	(341.6)	325+	0.456	36.9
30-8, 70-73	402.76	p	8.80	-52.3	-55.4	271.4	267.6	285	0.724	26.4
31-1, 20-23	403.22	p	12.1	-75.1	(-75.0)	180.6	(183.0)	185	1.12	23.5
31-1, 29-31	403.30	p	12.1	-73.4	-73.3	189.6	190.8	190	1.46	18.1
*31-2, 19-22	404.7	p	6.72	-72	-70	-78	-75	131+	1.85	7.9
31-3, 95-98	406.97	p	10.5	-54.8	-57.0	5.5	4.9	120	2.27	10.1
31-4, 27-29	407.78	p	14.1	-71.0	-70.4	247.6	248.4	215	1.13	27.0
*31-4, 61-64	408.1	p	10.4	-70	-70	48	48	199	1.04	21.8
31-4, 100-102	408.51	p	11.3	-69.8	(-55.5)	212.4	(237.0)	75	2.26	10.9
31-4, 108-110	408.59	p	1.78	-66.9	(-68.5)	230.3	(231.0)	120	1.80	2.2
31-4, 115-118	408.67	p	4.98	-75.0	-81.2	314.4	299.3	125	1.09	10.0
31-4, 119-121	408.70	p	4.91	-74.2	(-74.0)	316.3	(299.1)	95	1.31	8.2
31-5, 40-42	409.41	p	9.96	-72.8	-70.4	61.2	59.7	–	0.932	23.2
32-1, 53-56	412.64	p	5.15	-68.8	-71.6	324.5	322.8	304+	0.444	25.2
32-1, 62-65	412.73	p	7.38	-70.0	-61.4	320.4	316.9	276	0.512	31.3
32-1, 69-72	412.80	p	0.731	-68.6	-69.0	346.0	329.6	373	0.098	16.2
32-1, 77-79	412.86	m	12.3	-55.0	(-56.7)	145.5	(142.5)	240+	0.738	36.4
32-1, 96-98	413.05	m	2.80	-4.2	-55.7	304.4	327.8	(210)	2.07	2.9
32-1, 111-112	413.19	m	2.49	+22.5	–	259.9	–	–	1.98	2.7
32-1, 119-121	413.20	m	1.21	+37.0	–	309.9	–	–	2.08	1.3
32-1, 137-140	413.46	m	3.77	-57.9	-65.7	326.8	331.9	(24)	2.21	3.7
32-2, 5-7	413.63	m	(4.16)	-38.3	–	188.1	–	–	2.31	3.9
32-2, 61-64	414.19	m	(0.960)	+67.7	-63.4	142.4	354.0	–	2.76	0.8
32-2, 88-91	414.45	m	(2.43)	+30.1	–	199.3	–	–	2.51	2.1
*32-2, 93-96	414.5	m	4.24	+55	-63	8	30	37	2.75	3.4
32-3, 12-14	415.17	m	(1.08)	+85.1	-62.9	189.3	320.3	(29)	2.42	1.0
32-3, 44-47	415.49	m	(1.43)	+42.1	-51.0	187.6	317.0	(23)	2.54	1.2
*32-3, 74-77	415.8	m	2.67	-62	-67	115	139	278+	2.41	2.4

TABLE 3a – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
32-3, 87-89	415.90	m	3.98	-58.3	-73.1	291.9	315.5	(188)	2.50	3.5
32-3, 99-101	416.02	m	6.93	-54.7	(-60.0)	269.3	(281.0)	84	2.62	5.7
32-4, 6-9	416.59	m	(1.41)	+0.0	-68.4	176.0	147.6	(26)	2.34	1.3
*32-4, 29-32	416.8	m	35.4	-64	-71	-52	-54	106+	1.96	39.2
32-4, 56-58	417.07	m	(4.67)	-7.7	(-62.7)	229.9	(270.0)	(90)	2.40	4.2
32-4, 113-116	417.64	m	(1.59)	+34.9	(-66.9)	175.7	(299.0)	(28)	2.37	1.5
32-5, 6-9	418.06	m	(1.57)	+63.8	-76.5	161.5	(50.5)	(37)	1.98	1.7
32-5, 57-60	418.56	m	(2.47)	+60.4	no	207.2	no	(28)	2.54	2.1
32-5, 103-106	419.01	m	(1.49)	+55.7	–	195.3	–	–	2.46	1.3
32-6, 6-9	419.53	m	(0.756)	+46.6	-69.3	198.4	326.1	(16)	2.70	0.6
32-6, 60-62	420.05	m	(1.05)	+50.9	-67.6	157.0	333.9	(20)	2.46	0.9
32-6, 83-85	420.27	m	(2.01)	+64.8	-55.9	187.7	311.5	(31)	2.63	1.7
32-6, 116-119	420.61	m	(1.15)	-11.0	(-71.7)	160.3	(141.1)	(21)	2.36	1.1
32-7, 11-14	421.05	m	(3.25)	+74.9	no	223.7	no	(20)	2.72	2.6
33-1, 41-44	421.53	m	(4.03)	+74.3	(-54.4)	191.3	(24.8)	(55)	1.75	5.0
33-1, 84-86	421.95	m	(5.19)	+46.9	(-69.9)	169.5	(191.8)	(30)	2.93	3.8
33-1, 134-137	422.46	m	(1.37)	+55.0	no	231.5	no	(25)	2.41	1.2
33-2, 55-57	423.16	m	(2.86)	+66.4	no	214.4	no	(45)	2.81	2.2
*33-2, 59-61	423.2	m	3.62	+58	no	29	no	40	2.54	3.1
33-2, 111-114	423.73	m	(3.88)	+65.5	no	139.5	no	(30)	2.59	3.2
33-3, 27-30	424.39	m	(1.76)	+62.4	(-17.4)	194.3	(333.7)	(20)	2.32	1.6
33-3, 74-77	424.86	m	(2.83)	+71.2	no	216.0	no	(20)	2.62	2.3
33-3, 128-131	425.40	m	(3.79)	+79.7	no	155.1	no	(25)	2.70	3.1
33-4, 27-30	425.89	m	1.57	+21.8	(-31.0)	121.4	(333.2)	(17)	2.43	1.4
33-4, 77-80	426.39	m	(2.75)	+54.8	no	174.0	no	(25)	2.55	2.3
*33-4, 111-113	426.7	m	1.65	+50	no	69	no	36	2.64	1.4
33-4, 132-135	426.94	m	(2.69)	+57.3	(-69.3)	164.3	(307.7)	(26)	2.57	2.3
33-5, 29-32	427.41	m	(2.97)	+64.4	–	221.8	–	–	2.39	2.7
33-5, 75-78	427.87	m	(2.71)	+60.2	no	184.3	no	(26)	2.27	2.6
33-5, 119-121	428.30	m	(1.65)	+55.5	–	161.0	–	–	2.72	1.3
33-5, 122-124	428.33	m	(1.62)	+49.6	(-62.4)	153.5	(4.0)	(30)	2.62	1.4
33-5, 126-128	428.37	m	(2.65)	+62.4	–	182.7	–	–	2.31	2.5
33-6, 22-25	428.84	m	(2.73)	+58.3	-70.7	162.0	12.4	(28)	2.43	2.4
34-1, 31-34	429.59	m	(1.11)	-7.9	-75.9	182.8	(276.1)	(29)	2.23	1.1
34-1, 106-109	430.40	m	(6.03)	+16.6	-57.7	220.9	235.7	(32)	2.16	6.1
*34-2, 12-14	430.9	m	6.09	7	-58	32	42	122	2.25	5.9
34-2, 25-28	430.97	m	2.77	-47.3	-57.1	242.0	244.3	(21)	2.39	2.5
34-2, 77-80	431.40	m	(2.63)	+70.1	-59.5	185.5	219.0	(25)	2.18	2.6
34-2, 126-129	431.81	m	(3.59)	+66.9	-64.8	191.0	(243.4)	(26)	2.15	3.6
34-3, 37-40	432.31	m	2.11	+16.4	-58.7	129.9	79.9	(285)	2.55	1.8
34-3, 84-87	432.70	m	1.71	-10.3	-69.6	102.8	79.3	(172)	1.54	2.4
34-4, 20-23	433.42	m	(1.23)	+29.7	(-71.2)	167.6	(72.0)	(31)	2.12	1.3
34-4, 65-68	433.79	m	1.75	-36.7	-65.0	248.2	246.5	(20)	1.86	2.0
*34-4, 91-93	434.0	m	1.14	+60	-60	105	33	194	2.05	1.2
34-5, 34-37	434.78	m	(1.27)	+48.3	-65.5	208.4	214.2	(25)	2.02	1.4
34-5, 83-86	435.19	m	10.1	-48.9	-56.8	214.5	220.8	125	0.770	28.5
34-5, 100-103	435.33	m	11.0	-55.3	-60.7	204.9	207.3	173	1.88	12.7
34-5, 117-121	435.47	p	12.7	-72.0	-69.5	359.0	0.7	222	0.823	33.5
34-5, 124-126	435.52	p	13.2	-78.1	-82.4	358.8	353.1	161	1.50	19.2
*34-6, 100-102	436.0	p	6.68	-57	-59	87	89	98+	2.37	6.1
*35-1, 73-75	438.4	p	5.67	-60	-62	242	221	80+	2.42	5.1
35-2, 13-15	439.10	p	12.4	-68.6	-59.7	286.1	282.4	159	1.23	21.9
35-2, 30-33	439.24	p	10.5	-67.8	-66.9	354.2	353.9	155	0.646	35.4
*35-3, 39-41	440.5	p	(0.27)	+(2)	-68	(184)	-68	(36)	2.39	(0.25)
35-4, 3-6	441.39	p	9.68	-50.3	-53.6	341.8	346.2	95	0.711	29.6
*35-5, 119-121	443.5	p	13.3	-60	-61	249	250	145+	1.75	16.6
35-6, 87-90	444.43	p	21.9	-66.8	-67.5	70.0	69.2	125	0.704	67.7
*35-7, 40-42	445.2	p	8.51	-67	-67	147	147	260+	0.72	25.7
36-1, 46-48	445.89	p	7.50	-54.7	-69.5	215.1	227.1	(120)	0.687	23.7
36-1, 138-140	446.65	p	4.64	-42.3	-57.7	256.1	305.5	(108)	1.93	5.2
*36-2, 41-43	447.1	p	13.4	-63	-64	151	150	142+	2.09	13.9
36-3, 130-132	449.08	p	15.4	-68.0	-69.7	84.8	78.6	240	0.327	102.6
*36-4, 111-113	450.2	p	11.4	-71	-75	116	115	115	1.91	12.9
*37-1, 18-20	451.1	p	29.8	-66	-66	284	278	145	1.60	40.5
37-1, 90-93	451.72	p	8.71	-50.7	-61.2	140.9	131.0	(120)	0.544	34.8
*37-3, 15-17	453.5	p	14.9	-76	-78	141	152	134+	1.55	20.9
37-3, 88-91	454.04	p	11.4	-74.5	-74.0	1.5	2.4	120	0.626	39.5
37-4, 41-44	454.85	p	18.3	-66.0	-61.5	54.6	(65.5)	138	2.18	18.8
*37-5, 88-90	456.4	p	7.99	-63	-67	82	77	96+	2.27	7.6
37-5, 116-119	456.60	p	16.7	-63.2	-63.5	19.1	16.4	125	0.784	46.4
*37-7, 11-13	458.1	p	16.1	-73	-75	189	189	147+	1.60	21.8
37-7, 21-24	458.20	p	10.6	-70.7	-71.2	145.7	141.7	262+	0.600	38.5
38-1, 38-40	458.60	p	3.33	-72.8	-74.2	93.2	94.3	420+	0.296	24.5
38-1, 129-132	459.31	p	16.9	-66.4	-71.6	155.8	153.3	110	0.658	55.8
*38-1, 144-146	459.4	p	19.3	-66	-67	322	320	128+	2.48	16.9
*38-3, 67-69	461.1	p	19.8	-70	-71	-25	-22	144	1.32	32.6
38-3, 76-79	461.21	p	31.7	-70.7	-69.2	117.0	110.5	165	0.461	149.6
38-5, 102-105	463.72	p	8.29	-40.5	-43.6	86.6	84.6	185+	0.840	21.5
38-5, 115-118	463.82	p	18.7	-60.9	-58.2	242.1	242.5	148	1.84	22.0
*38-5, 119-121	463.8	p	13.5	-64	-64	40	36	173+	1.65	17.8
38-5, 132-134	463.94	p	17.9	-50.6	-26.9	282.5	274.5	149	2.13	18.2
39-2, 35-38	466.16	p	19.2	-72.6	-72.0	111.2	110.1	185	1.29	32.4
39-2, 109-112	466.74	p	2.93	-55.6	-74.7	147.4	92.3	(128)	2.77	2.3
39-2, 115-117	466.77	p	4.24	-47.6	(-65.6)	131.7	(88.6)	(124)	2.34	3.9
*39-2, 141-143	467.0	p	4.14	+78	-85	12	74	69	3.76	2.4
39-3, 5-8	467.09	p	(1.36)	+46.5	–	232.2	–	–	3.44	0.9
39-3, 31-34	467.30	p	13.3	-55.7	-69.7	213.1	228.9	(34)	1.70	17.0
39-3, 39-42	467.36	p	7.39	-55.5	-71.8	218.7	223.2	(295)	2.57	6.3
39-3, 77-80	467.66	p	(4.08)	+51.8	–	187.7	–	–	2.80	3.2

TABLE 3a – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
39-5, 25-27	469.58	p	16.7	-63.8	-64.7	60.2	57.1	115	2.07	17.6
39-5, 48-51	469.77	p	13.7	-58.4	-69.6	65.6	71.5	198+	0.994	30.1
39-5, 57-60	469.84	p	0.030	-62.1	-61.4	75.3	78.3	447	0.055	1.2
39-5, 66-69	469.91	p	16.4	-64.9	-65.4	60.1	63.3	187	0.754	47.2
*39-5, 73-76	470.0	p	16.0	-65	-65	223	225	104	1.60	21.7
40-1, 37-40	471.39	p	8.37	-52.7	-59.8	135.9	100.0	(82)	2.03	9.0
*40-1, 54-57	471.6	p	20.5	-63	-65	293	287	136+	1.36	32.7
40-1, 101-103	472.02	p	9.53	-69.4	-66.5	94.0	95.3	204	0.763	27.2
40-1, 114-117	472.16	p	12.0	-67.2	-68.7	278.2	283.0	(140)	2.15	12.1
40-2, 124-127	473.76	p	15.9	-70.2	-69.4	294.5	150.0	150	1.92	18.0
40-2, 132-134	473.83	p	11.4	-68.3	(-64.7)	221.2	(225.7)	114	1.84	13.5
40-2, 143-145	473.94	p	9.34	-70.0	-65.0	218.9	227.6	175	0.916	22.2
*40-3, 60-63	474.6	p	7.11	-65	-65	135	133	135	1.82	8.5
*41-1, 18-21	475.8	p	11.3	-69	-68	195	193	134	1.91	12.8
41-1, 109-112	476.53	p	3.73	-66.8	-70.9	79.8	93.9	285	0.371	21.9
41-1, 144-146	476.82	p	9.59	-71.8	-73.0	102.0	97.5	140	2.25	9.3
41-3, 19-22	478.30	p	7.92	-76.2	-77.8	308.9	300.5	248	0.456	37.8
41-3, 75-78	478.77	p	14.1	-68.4	no	302.8	no	150	2.10	14.5
41-3, 102-105	478.99	p	13.2	-76.9	-77.3	174.5	176.7	140	3.12	9.2
*41-3, 108-110	479.0	p	7.85	-69	-67	57	51	119+	2.63	6.5
*41-3, 145-147	479.3	p	12.4	-73	-74	114	105	108+	2.31	11.7
41-5, 10-13	480.74	p	13.1	-65.0	(-67.9)	34.6	(40.0)	160	1.28	22.2
*41-5, 21-24	480.8	p	10.2	-67	-67	-9	-10	211	0.78	28.5
41-5, 50-52	481.07	p	8.18	-65.1	-71.2	188.1	183.2	80	1.69	10.5
41-6, 18-21	482.07	p	5.63	-66.9	-76.7	199.7	209.6	118	1.24	9.9
41-6, 137-139	483.06	p	35.3	-54.8	-55.3	137.7	133.5	114	1.14	67.5
41-7, 76-78	483.81	p	20.8	-51.4	-54.7	154.2	153.6	(145)	1.03	43.8
*41-8, 4-6	484.5	p	11.8	-33	-51	-34	-36	98+	1.30	19.8
42-1, 60-62	485.30	p	0.901	-82.2	no	298.7	no	no	0.401	4.9
42-1, 64-67	485.35	p	2.18	-80.4	-72.7	289.3	255.4	216	0.547	8.6
42-1, 86-88	485.55	p	3.04	-69.5	-73.5	13.4	11.2	(175)	0.873	7.6
42-1, 105-107	485.74	p	12.1	-68.4	-69.5	27.1	21.3	85	1.67	15.7
42-1, 126-129	485.95	p	1.61	-77.5	no	30.3	no	(380)	0.788	4.4
42-1, 131-134	486.00	p	0.581	-42.9	-68.3	347.9	357.4	(175)	1.72	0.7
42-1, 137-140	486.06	p	3.46	-73.2	-76.8	30.0	30.2	194	0.878	8.6
*42-2, 119-122	487.3	p	4.04	-67	-68	116	106	143+	1.40	6.3
42-3, 48-51	488.13	p	7.94	-44.2	-56.7	260.4	260.5	105	2.52	7.0
42-3, 125-127	488.87	p	3.17	-53.5	-61.8	190.0	190.3	80	1.90	3.7
42-4, 23-25	489.35	p	8.95	-52.3	-56.1	338.5	332.5	91	1.48	13.1
*42-4, 48-50	489.5	p	3.11	-51	-52	-82	-61	122+	1.68	4.0
42-4, 81-83	489.91	p	13.4	-43.1	-60.8	122.3	120.8	105	2.37	12.3
*42-4, 94-96	490.0	p	0.264	-32	-60	2	268	85	1.94	0.3
42-4, 102-104	490.12	p	19.6	-60.3	-68.7	79.9	79.2	105	1.86	22.9
*42-4, 108-110	490.1	p	14.1	-59	-60	104	99	104	1.59	19.3
42-4, 115-117	490.25	p	14.2	-63.5	-75.6	272.9	276.4	117	1.38	22.4
42-5, 41-43	490.99	p	4.33	-5.2	(-14.6)	234.7	(239.0)	(121)	2.24	4.2
*42-5, 45-47	491.0	p	3.66	-14	-22	60	43	133+	2.47	3.2
42-5, 69-70	491.27	p	4.64	-23.6	-45.5	249.5	251.9	112	2.32	4.3
42-5, 105-107	491.62	p	4.13	-21.3	-27.7	169.2	171.8	153	1.57	5.7
*42-6, 15-17	492.2	p	2.34	-19	-29	245	-84	72	2.38	2.1
42-6, 29-32	492.35	p	7.21	-8.7	-30.5	311.2	321.1	85	3.19	4.9
42-6, 35-37	492.42	p	3.68	-10.3	(-36.6)	313.3	(319.5)	90	2.57	3.1
42-6, 82-84	492.86	p	5.02	-24.8	-28.9	21.0	26.2	(93)	2.30	4.7
42-6, 127-130	493.31	p	30.3	-3.1	-22.7	186.8	210.9	(58)	2.32	28.4
*43-1, 17-19	494.0	p	4.79	+26	-16	0	354	79	2.54	4.1
43-1, 78-81	494.64	p	5.99	-11.3	-23.0	117.6	114.2	120	3.00	4.3
43-1, 88-91	494.74	p	7.42	-21.0	-32.7	111.5	112.0	123	1.97	8.2
43-2, 4-7	495.25	m	5.00	+0.3	-6.4	300.7	302.5	130	3.16	3.4
43-2, 140-142	496.51	m	2.79	+86.3	(-16.8)	149.5	7.7	(40)	3.00	2.0
43-3, 21-24	496.80	m	(1.77)	+63.9	–	196.2	–	–	3.07	1.3
43-3, 63-66	497.19	m	(5.21)	-3.3	-27.3	175.7	336.7	(39)	2.57	4.4
*43-3, 71-73	497.3	m	0.22	-46	-28	147	157	22	2.66	0.2
43-3, 93-96	497.47	m	(1.45)	+22.1	(-18.2)	229.9	(295.1)	(28)	2.67	1.2
43-4, 48-51	498.45	m	4.73	+24.3	-14.1	163.6	159.2	(49)	2.83	3.6
43-3, 130-132	499.20	m	2.27	+59.0	-25.4	304.5	314.0	(75)	3.09	1.6
43-5, 93-95	500.25	m	5.37	+75.2	-33.9	183.0	145.5	(50)	3.21	3.6
43-6, 13-15	500.91	p	4.79	+3.2	(-6.0)	129.0	(126.5)	(80)	3.54	2.9
*43-6, 68-70	501.4	p	0.44	+15	-24	181	23	40	2.56	0.4
43-6, 92-94	501.64	p	(1.83)	-10.6	–	180.1	–	–	2.84	1.4
43-7, 10-12	502.27	p	4.82	+32.4	+43.2	248.7	254.1	149+	2.46	4.3
44-1, 4-6	502.95	p	5.58	-36.3	-45.4	88.7	87.5	143	1.87	6.5
44-1, 20-22	503.11	p	2.96	-7.6	-15.6	208.7	(222.4)	108	2.19	2.9
44-1, 28-31	503.20	p	2.49	+66.5	+58.3	205.4	226.7	75	2.82	1.9
44-1, 37-40	503.29	p	0.937	-28.7	–	120.7	–	–	2.27	0.9
44-1, 46-49	503.38	p	(21.5)	-1.4	-23.6	171.4	(87.2)	(53)	2.31	20.2
44-1, 134-136	504.25	p	(3.77)	-6.7	(-29.1)	156.0	(152.8)	122	2.31	3.5
44-2, 31-34	504.73	p	4.40	+15.6	–	125.7	–	–	2.45	3.9
*44-2, 60-62	505.0	p	6.36	-24	-27	150	150	163	2.33	5.9
44-2, 81-84	505.23	p	7.64	-18.2	-30.5	157.7	72.0	(81)	2.40	6.9
44-3, 78-81	506.70	p	2.67	+42.5	(-23.8)	259.5	(285.0)	(85)	3.13	1.9
*44-4, 61-63	508.0	p	0.96	-10	-27	188	184	36	2.83	0.74
44-4, 99-101	508.40	p	2.08	-0.7	–	329.2	–	–	2.74	1.6
44-5, 3-6	508.95	p	6.89	+33.6	+20.4	26.4	32.2	95	3.53	4.2
44-5, 14-16	509.05	p	3.23	+13.8	no	5.6	no	(92)	2.70	2.6
45-1, 27-30	512.29	p	(20.1)	-4.1	-31.7	187.6	262.6	(54)	2.26	19.3
45-1, 35-38	512.37	p	9.97	-24.6	-26.6	94.5	93.4	155	2.80	7.8
45-1, 100-102	513.01	p	8.00	-36.7	-34.0	206.7	230.0	128	1.84	9.5
45-2, 16-19	513.68	p	12.2	-27.7	-30.4	125.7	123.1	155	2.07	12.9
*45-2, 64-66	514.2	p	1.99	-6	-28	76	84	135	2.65	1.6

TABLE 3b
Magnetic Results of Hole 417D, Cores 48 through 69

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
48-5, 21-23	532.2	m	3.56	+17	-17	340	330	79	3.51	2.2
*48-5, 38-41	532.4	m	(40.8)	(+2)	–	(178)	–	–	2.81	(31.6)
48-6, 17-19	533.7	m	2.41	+85	–	-56	–	–	3.09	1.7
48-6, 96-98	534.5	m	2.62	+52	-14	14	28	43	3.19	1.8
48-7, 13-16	535.1	m	4.28	+27	-16	9	12	64	3.22	2.9
*48-7, 31-33	535.3	m	(10.1)	(+57)	(-4)	(75)	(210)	(35)	3.15	(7.0)
*49-1, 21-23	539.2	m	3.17	-14	-28	273	275	149+	2.54	2.7
49-1, 76-79	539.8	m	1.44	+71	(12)	48	(267)	65	3.31	1.0
49-1, 135-137	540.4	m	0.827	+53	–	87	–	–	2.88	0.6
49-2, 7-9	540.6	m	0.926	+28	-25	334	318	122	3.05	0.7
49-2, 56-58	541.1	m	1.85	-26	-33	79	76	104	2.81	1.4
*49-2, 72-74	541.2	m	6.90	-26	-27	293	252	218	2.28	6.6
49-3, 20-22	542.2	m	2.50	-38	-25	346	351	243+	3.18	1.7
49-3, 62-64	542.6	m	2.82	-21	-23	0	-1	172	3.15	2.0
50-1, 115-118	546.2	m	1.85	+37	(-34)	239	(228)	72	3.18	1.3
50-2, 30-32	546.8	m	1.67	+11	–	239	–	–	2.66	1.4
50-2, 65-67	547.2	m	2.27	+72	(-16)	322	(267)	41	3.81	1.3
51, CC, 10-12	548.6	m	1.54	+45	(-16)	51	(57)	86	–	–
52-1, 64-67	558.6	m	4.33	+78	-10	12	147	28	2.90	3.2
*52-1, 92-94	558.9	m	(30.7)	(+2)	-18	(179)	1	(22)	2.76	(24.2)
52-2, 144-147	560.8	m	4.06	+37	-19	34	48	76	2.65	3.3
52-3, 115-118	562.0	m	3.21	+76	–	-79	–	–	2.78	2.5
52-3, 131-133	562.1	m	3.92	+71	-9	282	208	42	3.30	2.6
52-4, 14-17	562.3	m	4.46	+25	-9	14	8	80	3.36	2.9
52-5, 8-11	563.7	p	14.2	-10	-14	10	10	130	3.48	8.9
52-5, 24-26	563.9	p	13.1	+14	+15	86	85	110	2.80	10.2
*52-6, 57-59	565.7	p	(36.9)	(-5)	-8	(190)	229	(58)	2.86	(28.1)
52-6, 69-72	565.8	p	8.73	-8	-14	183	188	109	3.10	6.1
52-7, 10-13	566.7	p	17.3	-11	-16	322	320	79	3.12	12.1
53-1, 73-75	568.2	p	12.5	-21	-24	19	20	133	2.67	10.2
53-2, 8-10	569.1	p	13.2	-20	-22	212	211	113	3.00	9.5
54-1, 144-146	578.5	p	25.6	-21	-22	193	192	180+	1.88	29.6
54-2, 49-51	579.0	p	17.8	-15	-17	135	134	103	2.73	14.2
*54-2, 135	579.8	p	33.2	-16	-18	335	323	95	2.47	29.3
54-3, 92-94	580.9	p	15.2	6	13	46	50	64	2.71	12.2
54-3, 127-129	581.3	p	14.6	-9	-17	-60	-62	89	2.26	14.1
*54-4, 55	582.0	p	(48.2)	(-4)	-16	(190)	223	(48)	1.99	(52.6)
54-5, 58-60	583.6	p	19.3	-0	-21	188	187	98+	2.06	20.4
54-6, 49-51	585.0	p	34.5	-16	-19	270	270	134	2.42	31.0
55-1, 88-86	587.4	p	17.9	-14	-17	142	145	148+	2.91	13.4
*55-2, 16-18	588.2	p	25.6	-17	-14	262	284	110	2.56	21.8
55-2, 86-89	588.9	p	19.6	-3	-22	112	121	74	2.74	15.6
55-2, 113-116	589.1	p	30.7	-20	-24	206	207	90	2.39	27.9
55-3, 67-70	590.2	p	16.8	+3	-11	85	86	60	3.29	11.1
55-4, 28-31	591.3	p	12.5	-4	-22	141	146	86	3.01	9.0
*55-4, 87-89	592.8	p	(73)	(+18)	–	(179)	–	–	2.32	(68.5)
55-5, 24-27	593.8	p	21.4	-21	-24	37	39	127	2.91	16.0
*57-1, 79-82	606.3	p	12.1	-25	-28	265	234	107+	2.82	9.4
57-1, 101-103	606.5	p	22.5	-13	-15	16	17	114	2.95	16.6
*57-2, 16-19	607.2	b_c?	21.0	-7	-8	206	205	91	2.44	18.8
57-2, 29-32	607.3	b_c	12.1	-72	-72	133	140	137	2.23	11.8
57-3, 19-21	608.7	b_c	3.07	-22	-44	163	154	94	2.60	2.6
57-3, 67-69	609.2	b_c	14.3	-26	+27	62	297	98	2.91	10.7
57-4, 34-37	610.4	b_c	20.0	+63	+62	278	281	124	2.51	17.4
58-2, 8-10	616.6	b_c	12.5	-79	-77	146	153	165	1.53	17.8
58-2, 69-71	617.2	b_c	8.94	-56	-57	64	61	127	2.09	9.3
59-1, 106-109	625.0	b_m	0.24	-32	(-45)	133	(122)	83	1.65	0.3
59-1, 115-118	625.1	b_c	3.07	+72	(-44)	-64	(52)	69	3.34	2.0
59-4, 42-45	628.8	b_c	12.2	+75	+77	291	277	95	2.72	9.8
*59-4, 99-102	629.3	b_c/b_m	1.25	+27	+84	187	37	98	0.52	5.2
59-5, 113-115	630.9	b_c	4.41	+6	+5	258	262	108	2.74	3.5
*59-6, 33-35	631.6	b_c	17.9	+7	+35	185	292	25	3.32	11.7
59-6, 62-64	631.9	b_c	9.90	+46	+44	24	25	61	3.30	6.5
59-6, 70-73	632.0	b_m	0.646	-14	no	234	234	219	0.83	1.7
*60-1, 89-91	633.6	b_c	(19.6)	(-1)	-5	(163)	118	(36)	2.85	(14.9)
60-2, 18-21	634.2	b_c	5.12	+74	+79	350	291	41	3.32	3.5
60-2, 41-43	634.4	b_c	2.10	+60	+72	128	101	48	2.90	1.6
60-3, 128-130	636.1	b_c	3.16	+58	–	78	–	–	3.02	2.3
60-3, 137-139	636.2	b_m	1.56	+80	–	-6	–	–	2.28	1.6
60-4, 46-49	636.6	b_m	1.15	+53	+54	247	233	57	2.12	1.2

TABLE 3b – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
60-4, 59-62	636.7	b_c	7.04	-11	8	88	268	76	3.20	4.8
*61-1, 37-39	639.4	b_m/b_c	8.17	-6	-55	6	87	43	1.25	14.2
61-1, 88-90	639.9	b_c	9.71	+43	36	293	295	197	0.85	24.8
*62-1, 104-106	643.0	p	13.9	-9	-44	198	301	45	2.41	12.5
62-2, 101-103	644.2	p	1.38	-20	-19	261	261	144	1.31	2.3
62-4, 42-44	646.5	p	9.69	-18	-32	323	322	65	1.59	13.2
62-5, 26-28	647.7	p	8.41	-31	-31	254	255	224	0.71	25.8
62-5, 33-35	647.8	p	4.64	-20	-36	260	266	115	1.66	6.1
62-5, 45-47	647.9	p	3.59	-8	-30	-4	3	89	2.58	3.0
62-5, 62-67	648.0	p	1.36	-28	-38	3	-8	111	1.56	1.9
62-5, 70-72	648.1	p	3.59	-40	-43	186	193	206	0.63	12.4
62-5, 72-74	648.1	p	4.33	-39	-40	108	107	395	0.36	26.2
62-5, 78-80	648.2	p	9.70	-25	-33	106	105	142	1.17	18.0
62-5, 102-104	648.4	p	2.87	-9	-39	75	57	84	1.77	3.5
62-5, 128-130	648.6	p	7.07	+21	-23	80	77	70	2.23	6.9
62-5, 134-136	648.7	p	6.41	+19	-26	81	74	65	2.12	6.6
62-5, 141-143	648.8	p	7.12	-6	-28	138	140	71	1.94	8.0
62-6, 13-15	649.0	p	6.06	-45	-47	-29	-28	157	0.80	16.5
62-6, 17-19	649.0	p	5.53	-46	-45	-26	-28	295	0.40	30.0
62-6, 128-130	650.0	p	4.71	-23	-32	240	234	80	3.15	3.2
*62-7, 34-37	650.5	p	10.3	-38	-29	344	346	193+	0.93	24.0
63-1, 104-106	652.0	p	8.57	+36	-34	294	275	53	2.26	8.2
*63-2, 12-14	652.6	p	(40.5)	(-6)	-28	(11)	70	(25)	1.93	(45.7)
63-3, 94-96	655.0	p	12.9	-28	-28	-23	-22	75	2.15	13.1
*63-3, 113-116	655.2	p	(81.5)	(-8)	-43	(179)	177	(42)	1.99	(89.1)
63-5, 12-15	657.1	p	22.4	-39	-40	314	314	108	2.41	20.2
*64-2, 70-72	662.2	p	13.0	-46	-49	14	12	106	1.75	16.1
64-2, 102-104	662.5	p	11.6	-26	-43	238	231	123+	1.90	13.3
*64-3, 46-48	663.5	p	13.2	-43	-40	224	232	135	1.37	21.0
64-5, 56-58	666.6	m	11.8	-38	-46	153	157	90+	2.83	9.1
64-6, 5-7	667.6	m	8.10	-35	-47	129	121	57	2.59	6.8
65-1, 138-140	670.4	m	5.58	+22	-46	328	308	76	2.77	4.4
65-2, 115-117	671.7	m	3.73	-44	-50	214	226	64	2.84	2.9
*65-3, 130-133	673.3	m	(33.6)	(-4)	-40	(355)	279	(25)	2.59	(28.2)
65-6, 75-77	677.3	m	6.45	+60	-54	19	54	30	2.97	4.7
*65-6, 79-81	677.3	m	(18.9)	(4)	-46	357	266	(18)	2.79	(14.7)
66-1, 10-13	678.1	p	5.26	-56	-59	250	260	89	2.28	5.0
*66-3, 30-32	681.3	p	(29.7)	(-3)	-46	(173)	110	(26)	2.24	(29.8)
66-3, 70-72	681.7	p	4.75	-20	-54	86	107	125	2.58	4.0
*66-4, 111-114	683.6	p	14.6	-49	-48	263	250	160	1.28	24.8
66-6, 29-31	685.8	p	0.88	-82	-81	119	123	148	0.84	2.3
66-6, 67-70	686.2	p	7.32	-51	-55	-75	-72	81	2.09	7.6
67-1, 112-114	688.0	m	2.72	55	-47	82	89	29	2.71	2.2
*67-2, 55-57	688.8	m	(43.2)	(-12)	-56	(175)	62	(26)	2.68	(35.0)
67-4, 10-12	691.1	m	5.22	-50	-58	221	238	48	2.69	4.2
*67-6, 12-14	693.9	m	(27.4)	(-2)	-61	(188)	0	(24)	2.34	(25.5)
67-6, 72-74	695.4	m	1.67	42	-56	3	344	32	3.38	1.1
68-1, 27-29	696.3	m	4.91	74	no	352	no	25	3.17	3.4
68-1, 123-125	697.2	d	13.5	-62	–	160	–	–	2.07	14.2
68-2, 11-13	697.6	d	20.1	-65	–	-43	–	–	2.52	17.4
68-2, 46-48	698.0	d	17.1	-63	-64	308	309	172	–	–
68-2, 84-86	698.4	m	2.65	58	no	22	no	22	3.11	1.8
*68-3, 64-66	699.6	m	(17.7)	(3)	-40	(181)	294	(24)	3.56	(10.8)
68-4, 19-20	700.7	d	17.5	-66	–	161	–	–	2.29	16.6
68-5, 48-51	702.5	m	1.21	32	–	184	–	–	3.33	0.8
*68-5, 89-92	702.9	m	(31.9)	(6)	no	(176)	no	(17)	3.26	(21.3)
68-6, 105-107	704 6	m	5.65	79	no	7	no	33	3.57	3.4
69-1, 12-14	705.1	m	5.44	72	(-41)	5	(309)	21	3.11	3.8
69-1, 94-96	706.0	m	2.42	71	(-58)	120	(-20)	27	2.83	1.9
*69-1, 106-108	706.1	m	(40.4)	(-6)	(-18)	(358)	(327)	(16)	2.79	(31.6)
69-1, 114-117	706.2	m	1.74	73	–	22	–	–	2.88	1.3
*69-2, 35-37	706.9	m	(38.5)	(3)	no	(180)	no	(16)	2.62	(31.9)

TABLE 4a
Magnetic Results of Hole 418A, Cores 15 through 48

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
15-1, 26-28	320.3	p	35.3	24	24	188	188	129	1.70	45.1
15-3, 133-136	324.3	p	16.5	26	26	185	185	108	1.41	25.4
15-4, 114-117	325.7	p	12.4	12	11	107	103	78	2.02	13.3
16-1, 21-23	329.7	m	6.66	14	17	195	196	75	1.55	9.3
16-2, 69-72	331.4	m	4.70	17	15	170	172	71	1.64	6.2
16-2, 84-87	331.5	m	2.08	6	15	170	172	42	1.93	2.3
16-3, 64-67	332.6	m	6.60	-5	-20	25	18	94+	2.22	6.5
*16-3, 83	332.8	m	9.09	-18	-18	319	320	–	–	–
17-1, 57-60	333.1	m	22.5	18	19	-28	-27	110	1.81	27.0
17-2, 93-95	334.9	m	10.1	20	22	334	331	67	2.08	10.6
17-4, 67-69	337.7	m	15.7	14	16	43	43	128	1.86	18.4
18-1, 61-64	339.6	m	38.7	24	24	155	155	140	1.22	68.9
18-2, 137-140	341.9	m	5.77	8	24	216	217	101	2.22	5.6
18-4, 60-63	344.1	m	16.8	25	25	145	145	75	2.14	17.0
18-5, 71-74	345.7	m	2.39	27	25	47	40	141+	1.57	3.3
18-5, 82-85	345.8	m	16.8	22	23	35	35	94	2.05	17.8
19-1, 73-76	348.7	m	13.1	25	28	111	109	83	1.46	19.5
19-3, 58-61	351.2	m	26.7	25	28	203	204	104	1.10	52.8
*19-3, 75-77	351.3	m	31.3	25	29	–	–	238	0.53	128.4
19-5, 131-134	354.4	m	16.2	16	27	42	45	91	1.62	21.8
19-7, 103-106	356.8	m	4.34	23	23	255	-87	118	2.21	4.3
20-2, 57-59	358.9	m	4.82	33	31	159	168	74	2.02	5.2
20-4, 131-134	362.2	m	3.54	21	29	229	254	66	2.12	3.6
20-5, 31-34	362.7	m	3.30	22	30	114	90	74	1.96	3.7
20-5, 58-61	362.9	m	8.35	20	26	101	91	78	2.15	8.4
20-5, 67-70	363.0	m	8.16	20	23	40	38	166+	1.96	9.0
20-6, 108-111	364.7	m	50.1	22	21	225	226	189	0.80	136.0
20-7, 24-26	365.3	m	41.7	21	22	188	188	117	1.12	80.9
21-1, 46-49	366.4	m	16.1	24	26	168	166	133	1.56	22.4
22-1, 17-20	367.2	m	15.8	25	24	81	78	100	1.91	18.0
22-1, 143-146	368.4	m	19.3	23	23	132	130	92	1.47	28.5
22-2, 19-21	368.7	m	48.2	25	26	114	114	174+	0.81	129.5
22-2, 38-41	368.9	m	16.5	24	26	203	204	176	0.59	60.9
23-1, 8-11	375.6	m	17.5	31	31	52	53	248+	0.71	53.6
24-1, 14-17	376.2	m	17.3	29	29	126	124	144	1.55	24.2
24-1, 134-137	377.4	p	10.7	29	30	138	138	122	1.63	14.3
24-2, 39-42	377.9	p	15.4	29	26	144	145	94+	1.51	22.2
24-2, 115-117	378.7	p	14.6	33	32	137	137	113+	1.70	18.7
25-1, 47-49	381.9	p	13.7	32	35	210	211	104	1.47	20.2
*25-1, 97-99	382.3	p	12.8	31	37	–	–	72	2.11	13.2
25-2, 125-128	383.9	m	12.0	34	35	164	164	126	2.07	12.6
25-2, 142-144	384.0	m	9.49	26	33	164	163	89	2.02	10.2
25-3, 12-15	384.2	m	6.86	34	32	-34	-28	82	2.02	7.4
26-1, 8-11	384.6	m	4.80	20	26	207	222	69	1.76	5.9
26-2, 3-6	386.0	m	12.0	17	23	309	310	86	1.63	16.0
26-2, 120-123	387.2	p	6.77	33	34	112	107	136+	1.34	11.0
26-3, 120-123	388.7	p	12.3	34	34	88	86	99	2.03	13.2
26-4, 41-44	389.4	p	17.6	26	26	220	220	139	1.91	20.0
26-4, 55-58	389.6	p	7.01	26	26	212	214	99	1.52	10.0
27-1, 31-34	393.8	p	12.5	20	23	168	169	110	2.24	12.1
27-1, 78-81	394.3	b_c?	5.96	55	55	332	335	187	0.51	25.4
27-1, 102-105	394.5	p	9.28	36	36	194	196	153	0.96	21.0
27-2, 67-70	395.7	p	20.2	36	37	284	283	156	1.86	23.6
27-2, 117-120	396.2	p	12.6	30	29	-44	-42	111	1.95	14.0
28-1, 11-13	402.6	b_m	0.04	-29	-35	98	99	46	0.09	1.0
28-1, 42-45	402.9	b_m	0.87	23	23	163	162	201	0.12	15.8
28-1, 48-51	403.0	b_c	16.7	21	21	160	159	155	1.60	22.7
28-1, 90-93	403.4	p	13.4	24	25	123	120	94	1.98	14.7
28-2, 16-19	404.2	p	11.8	26	24	-51	-49	105+	1.91	13.5
28-4, 49-52	407.5	b_m/b_c	2.41	13	13	146	142	111	0.91	5.8
28-4, 130-132	408.3	p	20.8	21	22	90	90	149+	1.54	29.4
28-5, 22-25	408.7	p	15.8	25	23	-75	-72	110+	2.07	16.6
29-1, 30-33	411.8	p	13.9	21	20	-14	-13	128+	1.75	17.2
29-1, 106-108	412.6	p	19.2	12	12	64	64	135	1.97	21.2
29-2, 55-58	413.6	p	7.49	23	23	264	268	122+	1.93	8.44
30-1, 20-23	414.7	p	20.5	19	19	128	126	111	1.76	25.3
*30-2, 100-102	417.0	p	19.5	21	27	172	–	85	2.14	19.8
30-2, 139-141	417.4	p	29.2	17	17	247	247	168	1.79	35.4

TABLE 4a – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
30-3, 49-52	418.0	p	11.6	21	22	155	152	84	2.15	11.7
31-1, 5-8	422.1	p	18.0	35	35	-74	-74	147+	1.60	24.4
31-1, 129-131	423.3	p	20.6	34	35	123	136	156+	1.80	24.8
31-2, 33-36	423.8	b_m/b_c	1.32	26	26	172	171	254+	0.20	14.4
31-2, 75-78	424.3	b_m	0.0013	54	69	216	265	354+	0.06	0.05
31-3, 35-37	425.4	b_c	7.86	27	28	186	186	209+	0.61	28.0
33-1, 88-91	440.8	p	8.43	21	22	-90	-88	108+	1.87	9.8
33-2, 97-99	442.3	p	9.84	28	28	253	249	138+	1.80	11.9
*33-5, 72	446.3	p	12.4	19	22	207	–	83	2.18	12.4
33-5, 129-132	446.8	p	10.7	16	16	200	202	71	1.73	13.5
33-6, 110-112	448.0	p	10.7	12	13	317	315	133	2.13	10.9
34-1, 49-52	449.5	p	9.22	20	23	184	185	68	2.33	8.6
34-2, 100-102	451.5	p	15.8	20	20	115	118	100+	2.21	15.5
34-4, 99-101	454.5	p	8.79	15	15	151	152	126+	2.00	9.6
34-4, 123-126	454.7	b_m/b_c	2.51	6	–	-63	–	–	0.70	7.8
34-4, 128-131	454.8	b_c	4.81	16	–	-58	–	–	1.54	6.8
*34-6, 40	456.9	p	7.50	28	–	76	–	–	–	–
35-1, 34-36	458.4	p	6.25	15	21	29	33	79	2.52	5.4
35-2, 31-34	459.8	b_m/b_c	4.60	14	13	-24	-23	163+	1.21	8.3
35-4, 43-45	462.9	p	8.76	25	25	327	328	168	1.16	16.4
35-4, 81-84	463.3	p	13.4	19	19	27	28	107	1.60	18.3
35-5, 14-17	464.2	p	2.43	30	29	-50	47	207+	0.61	8.7
35-5, 56-59	464.6	p	6.15	30	29	-36	-34	157+	1.22	11.0
36-2, 27-30	468.8	p	4.45	23	24	164	163	191	0.70	13.8
36-2, 75-78	469.3	p	6.03	18	19	339	340	97	1.95	6.7
36-3, 139-142	471.4	p	15.2	22	19	123	129	118+	1.88	17.6
36-4, 37-40	471.9	p	25.4	22	22	181	181	113	1.65	33.5
37-1, 31-32	476.3	p	3.37	16	16	292	292	182	0.97	7.6
37-1, 35-38	476.4	p	3.66	20	20	285	284	168	0.70	11.4
37-1, 126-129	477.3	p	8.85	26	24	-49	-48	136+	1.54	12.5
37-2, 40-43	477.9	p	10.8	23	23	250	250	185	1.15	20.4
38-1, 24-27	479.8	p	3.21	29	30	168	168	199	0.62	11.3
38-1, 63-65	480.1	p	12.3	25	25	223	222	152	1.50	17.8
38-3, 34-37	482.9	p	17.0	22	22	316	315	161	1.65	22.4
38-5, 11-14	485.6	p	9.26	26	26	-39	-36	86+	1.95	10.3
39-1, 49-51	489.0	p	11.1	28	28	169	170	114	1.99	12.1
39-2, 25-28	490.3	p	10.4	24	26	130	129	98	2.22	10.2
*40-1, 16	497.5	p	15.4	28	27	11	–	110	–	–
40-1, 52-55	497.7	p	19.6	25	26	136	136	98	1.85	23.0
40-1, 128-130	497.9	p	35.6	19	20	348	348	90	2.23	34.7
40-2, 4-7	498.0	b_m/b_c	4.18	9	10	-47	-49	213+	0.70	13.0
40-2, 14-17	498.0	b_m	0.10	33	41	180	180	215	0.04	5.4
40-2, 54-57	498.1	b_c	8.27	20	20	39	38	120+	1.93	9.3
40-3, 2-5	498.4	b_c	4.53	-36	-36	211	211	176	0.63	15.6
40-3, 21-24	498.5	b_c	19.2	-73	-74	44	43	96	1.97	21.1
40-3, 44-46	498.7	b_m/b_c	1.76	-41	(-44)	9	(5)	246+	1.90	2.0
41-1, 122-125	499.7	b_c	11.1	-80	-81	290	284	258	0.67	36.2
*41-1, 142	499.9	b_m	1.14	16	–	320	–	193	–	–
41-2, 22-25	500.2	b_m/b_c	4.24	-24	-22	76	75	228+	0.58	15.9
41-2, 29-32	500.3	b_c	9.63	-27	-28	-80	-78	97	1.82	11.5
41-3, 121-124	502.7	b_c	4.09	39	40	76	77	191+	0.49	18.2
41-4, 29-32	503.3	b_c	16.8	78	77	119	114	200	1.05	34.9
42-1, 94-97	508.5	b_m/b_c	1.28	75	(67)	-44	(-25)	171	0.26	10.7
42-1, 110-112	508.6	b_m	0.87	24	37	289	298	150	0.32	5.9
42-2, 116-119	510.2	p	7.72	-33	-33	-7	-7	212+	0.67	25.0
*42-2, 120	510.2	p	9.67	-30	–	352	–	–	–	–
42-3, 90-93	511.4	p	10.8	-38	-38	255	255	329	0.55	42.7
42-4, 74-77	512.8	p	16.3	-33	-32	-52	-50	173	1.02	34.8
*42-4, 92-94	512.9	p	14.5	-26	-27	120	–	180	0.88	35.8
42-5, 76-78	514.3	p	17.2	-31	-31	65	65	262	0.75	49.8
43-1, 30-32	516.8	p	14.4	-35	-35	273	272	227	1.37	22.9
43-2, 111-114	519.1	p	21.1	-32	-32	75	74	161	0.90	51.1
43-4, 10-12	521.1	p	23.3	-31	-31	22	22	129+	1.81	27.9
*44-1, 33	525.8	p	11.0	-36	–	259	–	–	–	–
44-1, 124-127	526.8	p	17.5	-41	-42	139	139	346+	0.51	74.7
44-2, 29-32	527.3	p	21.7	-31[a]	-30[a]	256	258	137+	0.95	49.6
44-2, 99-102	528.0	p	17.2	-28[a]	-27[a]	42	43	145+	0.89	41.9
44-2, 117-120	528.2	p	14.2	-28[a]	-26[a]	34	34	93+	1.31	23.6

TABLE 4a – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
*44-3, 13	528.6	p	22.6	-26[a]	–	163	–	–	–	–
44-3, 59-62	529.1	p	14.2	-27	-26	-10	-9	140+	1.45	21.4
44-3, 67-70	529.2	p	20.6	-27	-26	-5	-4	147	1.24	36.2
*44-3, 84	529.3	p	7.09	-30	–	351	–	–	–	–
44-4, 105-108	531.1	p	26.3	-30	-29	355	356	212	1.01	56.6
44-5, 122-125	532.7	p	21.4	-36	-36	199	199	183	0.97	47.9
45-1, 53-56	535.0	p	23.0	-38	-38	24	24	269+	0.65	76.9
45-2, 4-7	536.1	p	22.4	-36	-35	30	30	213	0.93	52.4
45-3, 13-16	537.6	p	28.0	-38	-37	11	11	267+	0.41	148.7
45-5, 15-18	540.7	p	22.0	-34	-34	357	358	333+	0.62	77.0
46-1, 117-119	544.7	p	31.8	-33	-33	84	84	357+	0.56	123.6
46-3, 74-77	547.3	p	16.2	-36	-37	-87	-87	411+	0.22	159.9
46-4, 23-25	548.2	p	14.8	-34	-34	340	340	358+	0.52	62.1
46-5, 7-8	549.6	p	30.2	-29	-29	16	16	338+	0.52	126.3
47-1, 18-21	552.7	p	22.8	-30	-29	125	125	190+	1.10	45.2
47-3, 59-62	556.1	p	28.1	-32	-32	178	178	215	0.81	75.3
*47-5, 20	558.7	p	25.0	-37	-36	274	274	253	–	–
47-5, 77-80	559.3	p	14.4	-36	-30	197	195	127	1.30	24.0
48-1, 3-6	561.5	p	26.9	-29	-29	261	261	199+	0.85	68.7
*48-2, 102	564.0	p	28.5	-24	-28	224	237	–	–	–
48-2, 114-117	564.2	p	18.4	-26	-27	239	238	139+	1.22	32.7
48-3, 53-56	565.0	p	15.8	-25	-25	250	250	246	0.61	56.1
*48-5, 9	567.6	p	16.2	-31	-30	88	88	370	–	–
48-5, 84-87	568.9	p	30.1	-25	-25	64	65	253+	0.77	85.1

TABLE 4b
Magnetic Results of Hole 418A, Cores 49 through 86

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
49-1, 20	570.7	p	17.38	-28.7	–	–	–	–	–	–
49-2, 108	572.6	p	22.51	-25.9	-27.2	179.4	178.0	195	–	–
*50-1, 91-93	574.4	p	19.5	-25	-25	22	22	381+	0.46	92.2
50-2, 82	576.5	p	28.36	-22.4	-23.0	216.8	217.0	310	–	–
50-3, 57	578.1	p	24.57	-25.5	–	–	–	–	–	–
50-4, 51	580.0	p	15.43	-25.2	-25.4	10.0	10.2	352	–	–
50-5, 101	582.5	p	30.44	-26.5	–	–	–	–	–	–
*51-1, 111-113	584.0	p	15.9	-22	-23	-25	-25	366+	0.46	75.1
51-2, 73	585.5	p	13.68	-23.8	-24.2	139.5	138.8	383	–	–
51-3, 127	587.8	p	17.16	-25.6	–	–	–	–	–	–
51-4, 135	589.7	p	8.33	-27.7	–	–	–	–	–	–
51-5, 8	591.0	p	13.42	-14.3	-14.2	13.4	13.7	355	–	–
51-5, 101	592.0	p	25.58	-19.8	-19.8	49.6	50.4	141	–	–
*52-1, 82-84	593.0	p	20.9	-17	-17	-83	-82	117	1.67	27.2
52-2, 62	594.1	p	26.66	-17.3	-19.2	265.8	265.2	131	–	–
52-3, 99	595.8	p	23.88	-23.4	–	–	–	–	–	–
52-4, 96	597.1	p	24.98	-23.7	–	–	–	–	–	–
52-5, 106	598.6	p	18.99	-17.4	–	–	–	–	–	–
52-6, 80	599.7	p	18.23	-21.9	-21.8	325.7	325.5	158	–	–
*52-7, 26	600.6	p	20.8	-20	-24	-33	-32	91+	1.89	23.9
*53-1, 67-70	602.3	p	17.6	-21	-24	90	87	97	1.88	20.4
53-2, 51	605.8	p	17.30	-25.9	-26.3	68.9	69.1	152	–	–
53-3, 52	609.0	p	30.35	-17.9	-18.0	–	–	94	–	–
54-1, 4	611.2	p	27.07	-36.8	-38.2	–	–	95	–	–
54-1, 68	613.6	p	23.97	-32.7	-33.0	194.6	195.4	98	–	–
54-2, 25	617.6	p	15.05	-34.3	–	–	–	–	–	–
55-1, 62	621.0	p	6.62	-8.5	-31.0	129.5	132.1	91	–	–
*55-2, 77-79	622.5	p	28.5	-30	-31	183	181	92	2.96	20.9
55-3, 69	623.8	p	14.42	-26.6	-29.6	97.8	97.5	96	–	–
55-3, 124	624.3	p	–	-41.0	–	–	–	–	–	–
55-4, 38	624.9	p	21.03	+32.0	+34.5	–	–	85	–	–
55-5, 118	627.0	p	11.64	+43.2	+45.1	22.7	24.1	114	–	–
55-6, 6	627.3	p	21.68	+43.1	–	–	–	–	–	–
55-6, 65	627.8	p	9.50	+37.9	+39.0	–	–	81	–	–
55-6, 110	628.2	p	10.49	-42.6	-44.4	196.8	196.4	98	–	–

TABLE 4b – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
56-1, 16	629.9	p	8.03	-49.0	-49.4	128.6	127.1	81	–	–
*56-2, 92-94	632.0	m	12.2	-50	-48	123	117	78	2.52	10.5
56-3, 65	633.0	p	21.61	-53.2	–	–	–	–	–	–
56-5, 42	635.5	m	6.07	-59.9	-50.0	328.7	323.7	75	–	–
56-7, 4	637.8	p	8.36	-15.5	-21.0	324.1	322.6	77	–	–
57-1, 90	640.0	m	11.32	-17.8	-29.5	–	–	113	–	–
57-2, 114	642.1	p	22.32	-27.6	–	–	–	–	–	–
57-3, 143	644.2	p	25.45	-39.3	-39.5	205.9	206.7	115	–	–
57-5, 105	647.2	m	6.22	-25.6	-32.2	109.5	110.2	76	–	–
57-6, 37	648.2	m	23.34	-27.1	–	–	–	–	–	–
58-1, 25	648.5	p	15.47	-22.2	–	–	–	–	–	–
58-2, 47	650.8	p	11.03	-30.8	-33.9	135.4	134.7	86	–	–
59-1, 97	658.3	p	34.93	-27.2	-27.1	174.7	174.2	149	–	–
*59-3, 33-35	660.4	p	15.9	-22	-23	-73	69	112	2.24	15.4
59-4, 110	662.5	p	15.06	-15.1	-17.7	147.7	146.1	72	–	–
*59-7, 132-134	666.8	p	15.2	-22	-24	252	258	77	4.07	8.1
*60-1, 111-114	668.1	p	13.6	-21	-21	185	187	80	3.53	8.4
60-2, 52	670.1	m	7.08	-18.9	–	–	–	–	–	–
60-3, 20	671.8	m	17.10	-17.4	–	–	–	–	–	–
60-4, 74	674.1	m	8.17	-6.8	-15.1	139.4	141.9	83	–	–
60-5, 18	675.2	m	3.02	+1.5	-19.5	170.5	164.1	161	–	–
61-1, 28	676.8	m	10.07	-15.4	-18.5	200.7	194.0	75	–	–
*61-1, 47-49	677.0	m	11.6	-12	-18	-10	-9	106+	2.58	9.8
*62-1, 104-106	686.6	p	5.89	-27	-30	179	183	62	4.45	2.9
62-1, 122	686.7	p	6.73	-11.9	-14.4	186.7	185.8	90	–	–
62-2, 73	687.3	p	16.08	-23.0	-24.0	236.1	236.9	102	–	–
62-4, 9	688.7	p	17.35	-19.6	-19.0	155.4	152.7	97	–	–
*62-5, 10-12	689.6	p	16.8	-20	-21	179	180	88	3.89	9.4
62-5, 23	689.7	p	12.16	-15.8	–	–	–	–	–	–
63-1, 82	690.6	p	18.33	-23.9	-24 0	342.8	345.0	87	–	–
*63-1, 48-50	690.4	p	19.0	-26	-26	231	232	169	2.35	17.6
*63-2, 112-114	692.0	p	24.5	-40	-39	-71	-70	120	2.82	18.9
63-2, 125	692.1	p	23.58	-35.7	–	–	–	–	–	–
63-4, 31	693.7	p	12.70	-32.4	–	–	–	–	–	–
63-5, 24	694.8	p	11.94	-33.2	-33.1	187.5	187.6	89	–	–
*64-1, 21-23	695.7	p	2.63	-40	-36	244	254	108	4.40	1.3
64-1, 95	696.6	m	8.29	-28.7	–	–	–	–	–	–
*64-2, 25-27	697.3	p	3.41	-26	-35	270	-70	77	3.71	2.0
*64-4, 70-72	700.7	p	12.7	-26	-27	195	196	109	2.82	9.8
64-4, 127	701.9	p	9.04	-35.4	–	–	–	–	–	–
64-5, 53	702.8	p	5.81	-29.4	-33.5	332.5	334.6	74	–	–
64-6, 54	704.5	p	9.63	-38.7	-39.9	193.4	195.4	88	–	–
*64-6, 75-77	703.8	p	8.66	-43	-43	-80	-74	102	3.20	5.9
65-1, 13	705.2	p	14.70	-43.8	-43.4	77.5	76.1	176	–	–
65-2, 100	709.0	p	10.06	-40.2	-40.0	–	–	64	–	–
*65-3, 15-17	708.3	p	2.88	-48	-47	-23	-22	361	0.44	14.2
65-6, 13	713.6	p	7.60	-64.5	-63.2	104.9	100.5	99	–	–
66-2, 54	716.6	p	11.14	-74.5	-74.6	228.6	232.6	91	–	–
*66-3, 74-76	718.4	p	8.58	-70	-68	-67	-60	85	3.23	5.8
66-4, 7	719.2	p	20.55	-68.4	–	–	–	–	–	–
*66-5, 124-127	721.9	p	9.44	-40	-40	-82	-75	83	3.38	6.1
66-5, 128	721.9	p	10.15	-37.7	-39.0	–	–	66	–	–
66-6, 135	723.5	p	9.76	-37.2	-50.5	99.4	101.0	95	–	–
67-1, 51	724.6	p	5.34	-54.8	-55.8	142.6	144.8	85	–	–
*67-2, 21-23	725.8	p	16.2	-41	-41	118	117	113	2.07	17.1
67-2, 28	725.9	p	12.64	-45.1	-44.8	120.1	119.3	97	–	–
67-3, 53	727.6	p	6.19	-73.3	-52.4	55.8	47.4	96	–	–
*67-3, 111-114	728.2	p	14.3	-61	-58	-3	-2	115+	2.46	12.7
*68-1, 91-93	730.0	p	2.89	-76	-65	37	22	91	2.30	2.7
*68-2, 22-25	730.8	p	12.6	-59	-59	88	80	103	2.14	12.8
68-2, 43	731.4	p	12.96	-65.6	-65.0	65.0	65.3	130	–	–
68-3, 68	733.6	p	14.60	-67.5	-66.9	6.8	7.9	99	–	–
*69-1, 40-43	734.0	p	6.06	-80	-70	-81	-30	84	2.70	4.9
69-1, 46	734.1	p	9.19	-65.4	–	–	–	–	–	–
69-2, 142	736.5	p	6.23	-65.5	-62.9	215.6	221.7	88	–	–
69-4, 74	738.8	p	9.63	-53.8	–	–	–	–	–	–
*69-5, 102-105	740.5	p	3.93	-51	-47	8	-4	93+	2.80	3.0
*69-6, 77-80	741.7	p	9.98	-50	-46	67	59	86+	2.73	8.0

TABLE 4b – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
69-6, 128	742.4	p	9.28	-50.8	-51.3	191.6	189.5	93	–	–
*70-1, 95-98	744.1	p	2.39	-65	-54	148	110	90	3.50	1.5
70-2, 52	745.5	p	4.57	-62.3	-61.4	57.6	64.8	95	–	–
70-4, 85	749.4	p	3.50	-71.7	-70.4	235.4	234.8	142	–	–
70-4, 100	749.6	p	1.28	-36.0	-75.0	295.0	50.0	124	–	–
70-4, 128	749.9	p	1.30	+61.8	no	119.5	–	219+	–	–
70-4, 134	750.0	p	0.66	+33.3	no	197.9	–	–	–	–
*70-5, 30-33	749.4	p	1.64	-31	(-77)	189	(57)	91	3.20	1.1
70-5, 69	750.9	p	1.68	-83.6	-73.0	202.7	25.0	189+	–	–
70-6, 17	752.1	p	6.98	-55.8	-55.3	89.6	88.0	89	–	–
71-2, 26	754.5	p	8.36	-58.7	-60.4	287.8	292.2	98	–	–
*71-2, 124-126	755.5	p	3.41	-53	-61	132	120	80	3.88	1.9
71-3, 132	757.0	p	4.88	-80.5	-69.7	291.6	327.7	80	–	–
*71-3, 142-144	757.1	p	9.68	-62	-61	-81	-64	78	3.88	5.4
71-4, 129	758.5	p	7.93	-74.0	–	–	–	–	–	–
72-1, 120	760.0	p	20.55	-63.7	-63.8	207.8	203.8	115	–	–
72-2, 83	761.1	p	4.26	-63.4	–	–	–	–	–	–
*72-2, 106-108	761.4	p	3.59	-55	-56	120	95	84	3.48	2.2
72-3, 68	762.5	p	6.20	-58.5	-57.1	170.6	175.5	85	–	–
72-4, 111	764.4	p	9.60	-60.2	–	–	–	–	–	–
*72-4, 121-123	764.5	p	4.13	-74	-63	92	59	78	3.01	3.0
73-1, 77	765.6	p	17.43	-71.4	–	–	–	–	–	–
73-2, 35	766.6	p	9.01	-74.5	-73.1	176.0	181.8	108	–	–
*73-3, 13-15	767.9	p	18.4	-60	-61	215	211	122	1.72	23.3
*73-3, 100	768.8	p	9.48	-67	-66	61	50	98	2.47	8.3
73-4, 138	770.6	p	3.16	-68.5	–	–	–	–	–	–
73-6, 16	772.4	p	5.69	-51.2	-49.4	74.2	74.5	79	–	–
*73-6, 53-55	772.8	p	2.56	-50	-46	221	208	97+	3.63	1.5
74-1, 119	775.3	p	14.39	-55.1	–	–	–	–	–	–
*74-1, 137-139	775.4	p	6.43	-47	-51	226	232	70	2.77	5.0
74-2, 130	776.6	p	5.07	-48.0	–	–	–	–	–	–
74-3, 59	777.3	p	2.19	-20.6	-53.9	307.5	317.1	233+	–	–
74-4, 93	778.8	p	8.19	-67.5	-65.6	76.3	77.4	170	–	–
74-6, 41	780.8	p	12.16	-52.3	–	–	–	–	–	–
*74-6, 124	781.3	p	4.02	-45	-54	213	231	69	3.98	2.2
75-1, 93	782.3	p	8.43	-47.6	-46.9	49.0	50.1	69	–	–
75-2, 25	783.0	p	8.46	-52.5	–	–	–	–	–	–
75-2, 104	783.6	p	8.72	-55.2	-56.9	90.5	88.5	87	–	–
*75-2, 103-105	783.7	p	6.23	-58	-60	87	89	81	3.73	3.6
75-4, 81	785.9	p	9.08	-44.5	–	–	–	–	–	–
*76-1, 101-103	788.1	m	0.87	+9	-40	152	188	122	5.10	0.4
76-1, 127	788.8	m	0.91	+46.1	-35.9	152.6	159.7	–	–	–
76-2, 129	790.8	m	2.82	-25.0	-33.8	178.8	176.6	81	–	–
*76-3, 39-41	790.5	m	2.13	-43	-50	128	54	75	4.91	0.9
76-3, 54	791.8	m	1.41	+47.0	no	262.0	–	55	–	–
77-2, 40	795.0	m	1.64	-58.4	–	–	–	–	–	–
77-3, 75	796.9	m	2.08	-51.4	-52.2	101.4	103.1	187+	–	–
*77-3, 133-135	797.4	m	2.55	-55	-51	27	58	165	3.62	1.5
77-4, 77	798.4	m	1.81	-72.3	-53.3	359.2	357.6	191+	–	–
*77-5, 93-95	800.0	m	2.04	-68	-57	138	60	161+	3.24	1.4
77-6, 6	800.7	m	1.97	-57.1	–	–	–	–	–	–
78-1, 64	803.0	m	2.35	-22.5	-53.4	97.2	110.4	348+	–	–
78-2, 139	805.3	m	1.21	+57.5	-50.4	237.5	264.5	–	–	–
*78-3, 83-85	806.1	m	3.29	-44	-51	-35	-10	290+	3.35	2.1
78-4, 101	807.9	m	6.28	-57.9	-58.9	68.0	76.4	140	–	–
*78-5, 40-42	808.6	m	1.70	-17	-53	220	-79	98	4.08	0.9
78-7, 12	811.5	m	9.44	+83.4	no	73.9	–	17	–	–
*79-3, 40-42	815.2	m	0.73	-7	-60	94	(65)	48	3.75	0.4
79-3, 74	815.4	m	1.36	+13.1	-44.0	176.8	151.2	120	–	–
79-4, 69	816.7	d	17.70	+57.5	+58.5	312.6	314.4	146	–	–
*79-5, 27-29	817.8	m	1.31	-19	-57	42	168	307+	3.31	0.9
79-5, 96	818.4	m	11.11	+50.2	+49.7	51.9	53.7	66	–	–
79-6, 75	819.5	m	9.45	-56.9	-55.3	254.6	266.2	64	–	–
79-7, 52	820.8	m	6.13	-60.6	-56.1	135.9	126.6	89	–	–
*80-1, 38-40	821.9	m	3.38	-70	-62	267	-36	172	3.53	2.1
80-2, 60	823.6	m	11.34	+58.6	+47.2	51.4	61.3	49	–	–
80-2, 134	824.3	d	26.38	+50.1	+51.5	–	–	63	–	–
*80-3, 54-56	825.0	d	17.7	+51	–	182	–	–	2.57	15.0

TABLE 4b – *Continued*

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF	SUS	Q
80-3, 104	825.5	d	33.45	+50.1	+49.4	241.6	244.7	102	–	–
*80-3, 105-107	825.5	d	19.8	+51	+53	130	128	85	2.33	18.4
*80-4, 28-30	826.2	d	36.4	-50	–	-66	–	–	2.28	34.7
80-4, 31	826.3	d	31.56	+53.0	+51.0	–	–	78	–	–
*80-4, 71-73	826.7	d?	11.5	+47	–	110	–	–	3.46	7.2
80-4, 86	826.9	m	20.95	+53.4	+50.5	–	–	93	–	–
80-5, 52	828.0	d	25.72	+55.1	–	–	–	–	–	–
*80-5, 79-81	828.2	d	16.9	+52	–	50	–	–	2.21	16.6
*80-6, 67-69	829.6	m	9.44	+50	+47	-76	60	94	3.41	6.0
80-6, 91	829.9	m	5.94	+48.5	+18.4	213.6	225.7	42	–	–
81-1, 49	831.2	m	14.08	-68.4	-64.6	42.1	44.9	93	–	–
*81-1, 114-116	831.9	m	7.28	-63	-62	133	126	110	3.35	4.7
81-3, 103	834.3	m	5.08	-83.2	-66.1	11.6	37.7	207	–	–
*81-4, 55-57	835.0	m	4.83	-60	-63	149	85	47	3.87	2.7
81-5, 83	836.5	m	12.38	-69.3	–	–	–	–	–	–
82-1, 41	837.9	m	1.91	+66.9	-57.0	19.3	230.1	44	–	–
*82-1, 115-117	838.5	m	0.46	-7	-70	147	11	115	3.48	0.3
82-2, 129	840.0	m	11.74	-53.2	-57.5	32.9	38.5	87	–	–
83-2, 64	842.3	m	4.74	-52.2	-57.3	3.6	5.4	135+	–	–
*83-2, 70-72	842.4	m	3.99	-43	-57	185	184	122	2.48	3.5
83-3, 112	844.1	m	1.11	-36.5	no	210.5	–	–	–	–
*83-4, 75-77	845.0	m	1.20	-46	-68	151	78	103	3.71	0.7
83-4, 112	845.3	m	0.40	+9.7	no	279.8	–	–	–	–
*84-2, 64-66	847.2	m	1.90	-41	-68	182	-68	41	3.03	1.4
84-2, 97	847.3	m	1.07	-36.5	no	22.2	–	91	–	–
84-4, 62	849.3	m	4.05	-64.1	-59.7	195.9	197.4	110	–	–
*84-4, 71-73	849.5	m	3.29	-51	-63	181	193	97	2.41	3.0
85-1, 77	850.7	m	3.14	-57.4	–	–	–	–	–	–
*85-2, 69-71	852.0	m	1.38	-32	-65	143	91	94	2.87	1.0
85-3, 44	853.1	m	4.49	-61.2	-59.9	48.6	56.6	105+	–	–
85-5, 99	856.3	m	7.33	-56.1	-61.5	99.2	102.2	149+	–	–
*85-6, 96-98	857.7	m	3.10	-85	-68	245	-14	98+	3.02	2.2
85-7, 91	859.0	m	1.93	+73.9	no	274.9	–	30	–	–
86-1, 4	859.5	m	1.21	-73.3	-67.5	41.0	30.6	–	–	–
*86-4, 15-17	864.2	p	15.6	-33	-34	246	252	87	3.07	11.0
86-4, 129	865.7	p	13.31	-32.8	-33.3	127.7	125.4	83	–	–
86-5, 45	866.4	p	21.53	-42.1	-39.2	241.5	241.1	74	–	–
86-6, 25	867.7	p	5.55	-25.0	-25.8	37.2	39.2	72	–	–

TABLE 5
Magnetic Results of Hole 418B

Sample (Interval in cm)	Depth (m)	Rock Type	J_{NRM}	I_{NRM}	I_{STABLE}	D_{NRM}	D_{STABLE}	MDF
34-1, 70	311.2	p	22.22	41.6	41.9	211.5	212.5	160
35-1, 85	320.8	p	14.63	29.3	29.8	342.7	343.2	131
35-2, 144	322.9	p	19.70	34.2	34.4	44.4	44.0	274
35-3, 118	324.2	p	23.86	34.9	35.1	321.1	321.0	196