

VIII. CARBONATE CONTENT, CARBONATE MINERALOGY, AND BULK MINERALOGY OF DSDP LEG 42A SAMPLES

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For the determination of total carbonate and for x-ray diffraction analysis samples were dried (40°C) and ground to a size of less than $40\ \mu\text{m}$.

Inorganic carbon was analyzed volumetrically with a LECO-analyzer. Accuracy of this method is $\pm 1\%$ (See Sigl, this volume).

X-ray analysis was made with unoriented powder specimens with a scanning speed of $1^{\circ} 2\theta/\text{min}$; when Mg-calcite (>4 mol-% MgCO_3) was present, scanning speed was reduced to $1/2^{\circ} 2\theta/\text{min}$ to obtain better resolution. The ratios of aragonite, calcite, and Mg-calcite were determined by measuring peak areas of the different carbonate minerals and calculated using calibration curves published elsewhere (Müller and Müller, 1967; Müller, 1969). The calcite-dolomite ratio was determined after the method described by Tenant and Berger (1957). The proportions of carbonate minerals were calculated using the inorganic carbon determined by the LECO-method and by the ratios obtained by X-ray diffraction. The precision of this method is $\pm 5\%$ by weight.

The MgCO_3 -content of the Mg-calcite and the composition of the dolomite were determined by the shift of the (104) peak of calcite and of dolomite, respectively (Goldsmith and Graf, 1958; Füchtbauer and Goldschmidt, 1965) using the position of the (101) peak of quartz as an internal standard. Many samples contain both stoichiometric dolomite ($\text{Ca}_{50}\text{Mg}_{50}$) and Ca-dolomite (usually $\text{Ca}_{54}\text{Mg}_{46}$), the latter being more frequent and abundant.

The proportions of quartz, K-feldspar, plagioclase, gypsum, anhydrite, and pyrite were estimated by their peak heights assigning arbitrary symbols for their abundance. The respective symbols cover the following ranges (Table 1¹):

+	=	<5%
+	+	= 5-10%
+	+	= 10-20%
+	+	= 20-50%
+	+	= >50%

With the exception of the samples from the "evaporites" of Site 374 (Core 17 to Core 21), halite has not been listed though present since in most cases it

formed during the drying of samples from the entrapped interstitial water. In some instances ("bomb" samples) bassanite ($\text{CaSO}_4 \times 1/2 \text{H}_2\text{O}$) was noted. It is assumed that it originated by drying "bomb" samples containing gypsum at elevated temperatures ($>60^{\circ}\text{C}$) on shipboard. Bassanite was therefore listed as gypsum.

Since no oriented powder specimens were run, no attempt has been made to quantify clay minerals, they were only recorded (with the exception of mixed-layers and smectite) when distinct reflections were noted on the diffractogram.

In the sections between Cores 12 and 15 of Site 374 occur small white nodules which were identified as lüneburgite [$\text{Mg}_3(\text{PO}_4)_2\text{B}_2\text{O}(\text{OH})_4 \times 6 \text{H}_2\text{O}$], they are described in more detail by Müller and Fabricius (this volume).

X-ray diffractograms from Samples 374-11-2, 120-121 cm, and 374-17-1, 67-68 cm, contain a number of reflections which were tentatively ascribed to bischoffite ($\text{MgCl}_2 \times 6 \text{H}_2\text{O}$), the latter sample contains additional peaks which could not be identified, they are probably related to MgSO_4 .

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REFERENCES

- Füchtbauer, H. and Goldschmidt, H., 1965. Beziehung zwischen Calciumgehalt und Bildungsbedingungen der Dolomite: *Geol. Rundschau*, v. 55, p. 29-40.
Goldsmith, J. R. and Graf, D. L., 1958. Relation between lattice constants and composition of Ca-Mg carbonates. *Am. Mineralogist*, v. 43, p. 84-101.
Müller, G. and Müller, J., 1967. Mineralogisch-sedimentpetrographische und chemische Untersuchungen an einem Bank-Sediment (Cross Bank) der Florida Bay (USA): *N.Jb. Miner. Abhandlungen*, v. 106, p. 257-286.
Müller, J., 1969. Mineralogisch-sedimentpetrographische Untersuchungen an Karbonatsedimenten aus dem Schelfbereich um Fuerteventura und Lanzarote (Kanarische Inseln): Dissertation, University Heidelberg, p. 99.
Tenant, C. B. and Berger, R. W., 1957. X-ray determination of dolomite-calcite ratios of carbonate rocks: *Am. Mineralogist*, v. 42, p. 23-29.

¹A to abbreviations used in Table 1 appear on its last section.

TABLE 1
Carbonate and Bulk Mineralogy of DSDP Leg 42A Samples

Sample (Interval in cm)	Tot. Carb.	Calc. (%)	MgC. (%)	Mol-% MgCO ₃	Dol. (%)	Mol-% Ca/Mg	Arga. (%)	Magn. (%)	Quar.	K-Fel.	Plag.	Gyps.	Anhy.	Pyr.	Others
Site 371															
1-1, 100-150	28	27	-	-	1	50/50 54/46	-	-	+++	-	+	-	-	-	IL, CH, KA
4-2, 13	30	29	-	-	1	50/50 54/46	-	-	+++	+	+	-	-	-	IL, CH, KA
4-2, 15	34	34	-	-	-	-	-	-	+++	+	+	-	-	-	IL, CH, KA
4-2, 130	32	37	-	-	1	50/50 54/46	-	-	+++	-	+	-	-	-	IL, CH, KA
8-2, 116-118	20	-	-	-	20	54/46	-	-	++++	+	++	-	-	-	IL, CH, KA
8, CC	21	14	-	-	7	50/50 54/46	-	-	++++	+	++	-	-	-	IL, CH, KA
Site 372															
3-3, 78-80	43	39	+?	-	4	50/50 54/46	-	-	+++	+	+	-	-	-	IL, CH
4-2, 70-72	41	37	-	-	4	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH
5-1, 140	36	N.D.-													
6-1, 140-141	21	N.D.-													
9-1, 112-113(A)	27	26	-	-	1	50/50 54/46	-	-	++	+	+	-	-	-	-
9-1, 112-113(B)	39	32	-	-	7	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH
9-3, 10-12	41	34	-	-	7	50/50	-	-	++	+	+	-	-	-	IL, CH
12-4, 134-135	52	46	-	-	6	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH
44, CC	57	+	-	-	57	54/46	-	-	+++	-	+	-	-	-	IL, CH
Hole 373A															
1-2, 5-6	22	21	-	-	1	50/50 54/46	-	-	++	+	+	+	-	-	IL, CH, KA
1-2, 12-14A	20	19	-	-	1	50/50 54/46	-	-	++	+	+	+	-	-	IL, CH, KA
1-2, 12-14B	28	27	-	-	1	50/50	-	-	++	+	+	-	-	-	IL, CH, KA
1-2, 24-25	32	31	-	-	1	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH, KA
Site 374															
1-1, 65-66	49	10	18	12	9	50/50 54/46	12	-	+++	+	+	-	-	-	IL, CH, KA, HO?
1-1, 123-124	40	13	13	10	9	50/50 54/46	5	-	+++	+	++	-	-	-	IL, CH, KA, HO
1-1, 136-138	29	23	2	10	4	50/50 54/46	+	-	+++	+	++	-	-	-	IL, CH, KA, HO
1-1, 144-146	43	23	4	12	9	50/50 54/46	7	-	+++	++	++	-	-	-	IL, CH, KA, HO?
1-2, 17-19	46	6	14	10	19	50/50 54/46	7	-	++++	++	++	-	-	-	IL, CH, KA, HO?
1-2, 145-147	47	9	16	9	9	50/50 54/46	13	-	++++	+++	++	-	-	-	IL, CH, KA, HO?
1, CC	45	11	17	10	2	54/46	15	-	++++	+++	+++	-	-	-	IL, CH, KA, HO?, A?
2-1, 57-59	13	13	-	-	+	-	-	-	+++	+	++	-	-	-	IL, CH, KA
2-1, 121-123	13	13	-	-	+	-	-	-	+++	+	+	-	-	-	IL, CH, KA
2-2, 3-4	15	15	-	-	+	-	-	-	++++	++	+++	-	-	-	IL, CH, KA
2-2, 22-23	17	17	-	-	+	-	-	-	+++	+	++	-	-	-	IL, CH, KA
2-3, 21-22	20	18	-	-	2	50/50	-	-	+++	+	++	-	-	-	IL, CH, KA
2-3, 123-124	28	28	-	-	+	-	-	-	++	+	+	+	-	-	IL, CH, KA
2, CC (A)	44	14	12	9	11	50/50	7	-	+++	++	+	-	-	-	IL
2, CC (B)	38	37	-	-	1	-	-	-	++	+	+	+	-	-	IL, CH, KA
2, CC (C)	22	20	-	-	2	50/50 54/46	-	-	+++	+	+	-	-	-	IL, CH, KA
3-1, 103-104	33	33	-	-	+	-	-	-	++	+	+	+	-	-	IL
3-1, 104-105	45	45	-	-	+	-	-	-	++	+	+	+	-	-	IL, CH, KA
3-1, 122-123	34	31	-	-	3	50/50	-	-	++	+	+	+	-	-	IL, CH, KA
3-1, 126-127	37	33	-	-	4	50/50	-	-	+++	+	++	-	-	-	IL, CH, KA, HO
3-1, 127-128	39	36	-	-	3	50/50	-	-	++	+	+	+	-	-	IL, CH, KA
3-1, 129-130	15	15	-	-	+	-	-	-	++	+	++	+	-	-	IL, CH, KA
3-1, 141-142	23	23	-	-	+	-	-	-	+++	+	++	+	-	-	IL, CH, KA
3-1, 143-144	19	15	-	-	4	50/50	-	-	+++	+	++	+	-	-	IL, CH, KA
3, CC	23	19	-	-	4	50/50	-	-	+++	+	++	-	-	-	IL, CH, KA
4-2, 55-56	15	13	-	-	2	50/50 54/46	-	-	+++	+	++	-	-	-	IL, CH, KA
4-2, 56-57	38	38	-	-	+	-	-	-	++	+	+	+	-	-	IL, CH, KA
4-2, 57-58	41	41	-	-	-	-	-	-	++	+	+	+	-	-	IL, CH, KA
4-2, 58-59	49	49	-	-	-	-	-	-	++	+	+	+	-	-	IL, CH, KA
4-2, 59.5-60.5	30	30	-	-	+	-	-	-	+++	+	+	+	-	-	IL, CH, KA

TABLE 1 - *Continued*

Sample (Interval in cm)	Tot. Carb.	Calc. (%)	MgC. (%)	Mol-% MgCO ₃	Dol. (%)	Mol-% Ca/Mg	Arag. (%)	Magn. (%)	Quar.	K-Fel.	Plag.	Gyps.	Anhy.	Pyr.	Others
4-3, 2-4	22	18	-	-	4	50/50 54/46	-	-	+++	+	+	-	-	-	IL, CH, KA
4-3, 77-79	31	27	-	-	4	50/50 54/46	-	-	+++	+	++	-	-	-	IL, CH, KA
4-3, 79-81	29	27	-	-	2	50/50 54/46	-	-	+++	+	+	-	-	-	IL, CH, KA
4-3, 95-97	23	21	-	-	2	50/50 54/46	-	-	+++	+	+	-	-	-	IL, CH, KA
4-3, 115-116	21	19	-	-	2	50/50 54/46	-	-	++++	+	+++	-	-	-	IL, CH, KA
4-4, 75-76	25	24	-	-	1	50/50 54/46	-	-	+++	+	+	-	-	-	IL, CH, KA
4-4, 85-86	29	23	-	-	6	50/50	-	-	++++	++	+++	-	-	-	IL, CH, KA, HO?
4, CC	28	26	+	-	2	54/46	+	-	+++	+	+	-	-	-	IL, CH, KA
4, CC (A)	34	11	9	10	8	50/50 54/46	6	-	++++	++	+	-	-	-	IL
4, CC (B)	32	21	3	10	4	50/50 54/46	4	-	+++	+	++	-	-	-	IL, CH, KA
4, CC (C)	39	36	+	-	3	50/50	+	-	++	+	+	+	-	+	IL, CH, KA
4, CC (D)	21	19	+	-	2	50/50	+	-	+++	+	+	-	-	-	IL, CH, KA
5-1, 96-97	53	7	10	10	12	50/50	24	-	++++	+	++	-	-	-	IL, CH, KA
5-1, 138-139	51	12	13	10	8	50/50 54/46	18	-	++	+	+	-	-	-	IL
5-2, 32-34	34	18	-	-	16	50/50 54/46	-	-	++++	+	+	+	-	+	IL, CH, KA
5-2, 35-36	49	46	-	-	3	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH, KA
5-2, 39-40	36	31	-	-	5	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH, KA
5-2, 47-48	40	36	-	-	4	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH, KA
5-2, 83-84	61	61	-	-	+	-	-	-	+	+	+	-	-	-	IL
5-2, 121-122	49	49	-	-	+	-	-	-	+	+	+	-	-	+	IL, CH, KA
5-2, 124.5-125.5	61	59	-	-	2	50/50	-	-	+	+	+	-	-	-	IL, CH, KA
5-3, 9-10	29	26	-	-	3	50/50	-	-	++	+	+	-	-	+	IL, CH, KA
5-3, 10-11	42	40	-	-	2	50/50	-	-	++	+	+	-	-	+	IL, CH, KA
5-3, 48-49	31	27	-	-	4	50/50 54/46	-	-	++	+	+	-	-	+	IL, CH, KA
5-3, 49-50	6	6	-	-	+	-	-	-	+++	+	++	+	-	+	IL, CH, KA
5-3, 50-51	+	+	-	-	+	-	-	-	+++	+	+	+	-	++	IL, CH, KA
5-3, 51-52	26	26	-	-	+	-	-	-	++	+	+	+	-	++	IL, CH, KA
5-3, 52-53	31	29	-	-	2	50/50	-	-	++	+	+	+	-	++	IL, CH, KA
5-3, 53-54	44	44	-	-	+	-	-	-	++	+	+	+	-	+	IL
5-3, 64-66	42	38	-	-	4	50/50 54/46	-	-	++	+	+	-	-	-	IL
5-4, 28.3-29	58	58	-	-	+	-	-	-	+	+	+	-	-	-	IL
5-4, 25.7-26.5	46	42	-	-	4	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH, KA
5-4, 24-25	35	31	-	-	4	54/46	-	-	++	+	+	-	-	-	IL, CH, KA
5-4, 87-89	51	46	-	-	5	54/46	-	-	++	+	+	-	-	-	IL, CH, KA
5-5, 76-78	59	59	-	-	+	-	-	-	+	+	+	-	-	-	IL
5, CC (A)	49	46	-	-	3	54/46	-	-	++	-	+	-	-	-	IL
5, CC (B)	50	50	-	-	+	-	-	-	+	-	+	-	-	-	IL
6-1, 4-5	51	39	-	-	12	54/46	-	-	++	+	+	-	-	-	IL
6-1, 29-30	56	41	-	-	15	54/46	-	-	++	+	+	-	-	-	IL
6-1, 40-41	43	39	-	-	4	54/46	-	-	++	+	+	-	-	-	IL
6-1, 99-101	57	57	-	-	-	-	-	-	+	+	+	-	-	-	IL
6-2, 40-41	36	36	-	-	+	-	-	-	+	+	+	-	-	+	IL, CH, KA
6-2, 41-42	26	25	-	-	1	54/46	-	-	++	+	+	-	-	+	IL, CH, KA
6-2, 42-43	48	48	-	-	+	-	-	-	++	-	+	++	-	++	IL
6-2, 82-83	66	66	-	-	-	-	-	-	+	-	+	-	-	-	IL
6-2, 97-98	43	40	-	-	3	50/50 54/46	-	-	++	+	++	++	-	++	IL
6-2, 130-131	50	48	-	-	2	50/50	-	-	+	+	+	-	-	-	IL, CH, KA
6-3, 7-8	46	46	-	-	+	-	-	-	+	+	+	-	-	-	IL
6-3, 9-9.8	59	59	-	-	+	-	-	-	+	-	+	-	-	-	IL
6-3, 10.9-11.7	62	62	-	-	+	-	-	-	+	+	+	-	-	-	IL
6-3, 12.5-13.3	64	64	-	-	-	-	-	-	+	+	+	-	-	-	IL
6-3, 62.5-63.2	36	36	-	-	+	-	-	-	++	+	+	-	-	-	IL
6-3, 63.5-64.6	33	33	-	-	+	-	-	-	++	+	+	+	-	+	IL, KA
6-3, 64.6-65.8	46	46	-	-	+	-	-	-	+	+	+	+	-	+	IL
6-3, 65.8-66.7	42	40	-	-	2	50/50	-	-	+	+	+	+	-	+	IL, CH, KA
6-3, 67-68	59	59	-	-	-	-	-	-	+	+	+	+	-	+	IL
6-3, 124-125a	43	41	-	-	2	54/46	-	-	++	+	+	+	-	-	IL, CH, KA

TABLE 1 - *Continued*

Sample (Interval in cm)	Tot. Carb.	Calc. (%)	MgC. (%)	Mol-% MgCO ₃	Dol. (%)	Mol-% Ca/Mg	Arag. (%)	Magn. (%)	Quar.	K-Fel.	Plag.	Gyps.	Anhy.	Pyr.	Others
6-3, 124-125b	29	27	-	-	2	54/46	-	-	++	+	+	+	-	+	IL, CH, KA
6-3, 125-126	49	49	-	-	+ -	-	-	-	+	+	+	+	-	+	IL
6-4, 99-100	60	60	-	-	+ -	-	-	-	+	-	+	-	-	-	IL
6-5, 40-42	56	56	-	-	+ -	-	-	-	+	+	+	-	-	-	IL, CH, KA
6-5, 46-48	59	55	-	-	4 -	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH, KA
6-5, 57-59	56	56	-	-	+ -	-	-	-	+	+	+	-	-	-	IL
6-5, 63-65	60	60	-	-	+ -	-	-	-	+	+	+	-	-	-	IL, CH, KA
6-5, 67-68	56	47	-	-	9 -	50/50 54/46	-	-	++	+	-	-	-	-	IL
6-5, 68-69	56	51	-	-	5 -	50/50 54/46	-	-	+	+	+	-	-	-	IL
6-5, 69-70	55	47	-	-	8 -	50/50 54/46	-	-	++	+	+	-	-	-	IL
6-5, 70-71	62	54	-	-	8 -	54/46	-	-	++	+	+	-	-	-	IL
6-6, 10.7-11.3	58	54	-	-	4 -	50/50 54/46	-	-	+	-	+	-	-	-	IL
6-6, 11.3-12.4	44	40	-	-	4 -	50/50 54/46	-	-	++	-	+	-	-	-	IL
6-6, 14-15.2	69	63	-	-	6 -	50/50 54/46	-	-	++	+	+	-	-	-	IL
6-6, 15.2-16	65	65	-	-	+ -	-	-	-	+	-	+	-	-	-	IL
6-6, 84-86	59	59	-	-	+ -	-	-	-	+	-	+	-	-	-	IL, KA
6, CC (A)	62	55	-	-	7 -	54/46	-	-	+	+	+	-	-	-	IL
6, CC (B)	59	59	-	-	+ -	-	-	-	+	+	+	-	-	-	IL
7-1, 83-88	46	41	-	-	5 -	54/46	-	-	+	+	+	-	-	-	IL
7-2, 68-73	46	41	-	-	5 -	54/46	-	-	+	+	+	-	-	-	IL
7-3, 72-77	44	38	-	-	6 -	54/46	-	-	+	+	+	-	-	-	IL
7-4, 83-88	41	36	-	-	5 -	50/50 54/46	-	-	+	+	+	-	-	-	IL
7-5, 53-58	59	53	-	-	6 -	54/46	-	-	+	+	+	-	-	-	IL
7-5, 71-76	52	44	-	-	8 -	50/50 54/46	-	-	+	+	+	-	-	-	IL
7-6, 52-57	54	48	-	-	6 -	54/46	-	-	+	+	+	-	-	-	IL
8-1, 115-116	67	55	-	-	12 -	54/46	-	-	+	+	+	-	-	-	IL
8-2, 24-26	52	43	-	-	9 -	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH, KA
8-2, 63-64	62	55	-	-	7 -	54/46	-	-	+	-	+	-	-	-	IL
8-3, 98-99	62	56	-	-	6 -	54/46	-	-	+	-	+	-	-	-	IL
9-1, 150-151	53	50	-	-	3 -	54/46	-	-	+	+	+	-	-	-	IL
9-3, 15-16	63	59	-	-	4 -	54/46	-	-	+	-	+	-	-	-	IL
9-3, 72-77	67	60	-	-	7 -	54/46	-	-	+	-	+	-	-	-	IL
11-2, 112	79	-	-	-	79 -	55/45	-	-	+	-	+	-	-	-	IL, CH, KA
11-2, 120-121	78	-	-	-	78 -	55/45	-	-	+	-	-	-	-	-	IL, BI?
11-2, 147-149	75	-	-	-	75 -	55/45	-	-	+	+	+	-	-	+	IL, CH, KA
11, CC (A)	77	-	-	-	77 -	55/45	-	-	+	+	+	-	-	+	IL
11, CC (B)	78	-	-	-	78 -	55/45	-	-	+	+	+	-	-	+	IL
11, CC (C)	69	-	-	-	69 -	55/45	-	-	+	-	+	-	-	+	IL, KA
11, CC (D)	n.d.	-	-	-	- -	-	-	-	-	-	-	-	-	+++++	-
12-2, 99-100	21	-	-	-	21 -	55/45	-	-	+++	+	+++	+++	-	+	?
13-1, 133-135	20	-	-	-	20 -	55/45	-	-	+++	+	+	-	-	-	IL, L
14-1, TOP- WASTE	21	-	-	-	21 -	55/45	-	-	+++	+	++	-	-	-	IL, CH, KA
14-1, 100-102	19	-	-	-	19 -	55/45	-	-	+++	+	++	-	-	-	IL, CH, KA, L
15-1, 69-70	25	-	-	-	25 -	55/45	-	-	+++	+	++	-	-	+	IL, CH, KA, L
15-1, 100-102	24	-	-	-	24 -	55/45	-	-	+++	+	++	-	-	+	IL, CH, KA, L
15-2, 79-81	23	-	-	-	23 -	55/45	-	-	+++	+	++	-	-	+	IL, CH, KA
17-1, 62-63	16	?	-	-	16 -	55/45	-	-	+	-	-	+++	-	-	IL, HA
17-1, 67-68	36	-	-	-	36 -	55/45	-	+	++	-	-	++	-	-	IL, BI?, HA, U
17-1, 80-81	37	?	-	-	37 -	55/45	-	+	-	-	+++	++	-	-	IL, HA
19-1, 28-29	51	?	-	-	51 -	55/45	-	+	+	-	-	+++	++	-	IL, HA
19-1, 52-53	28	-	-	-	28 -	55/45	-	-	++	-	-	+++	+	-	IL, HA
20-1, 24-25	11	-	-	-	11 -	55/45	-	-	++	-	+	+++	+	+	IL, HA, KA, CH
21-1, 105-108	22	-	-	-	- -	-	-	-	22	+	-	-	+++++	-	HA
25-SIDE WALL 1	71	-	-	-	71 -	55/45	-	-	+	-	+	-	-	-	IL
25-SIDE WALL 2	N.D.	++++	-	-	+++ -	55/45	-	-	+	-	-	-	-	-	IL, BI?
26-SIDE WALL	64	51	-	-	13 -	55/45	-	-	+	-	+	++	-	-	IL
Site 375															
1-1, 50-51	37	36	-	-	1 -	54/46	-	-	++	+	+	-	-	-	-
1-1, 123-125	23	18	-	-	5 -	50/50 54/46	-	-	+++	+	++	+	-	-	-

TABLE 1 - *Continued*

Sample (Interval in cm)	Tot. Carb.	Calc. (%)	MgC. (%)	Mol-% MgCO ₃	Dol. (%)	Mol-% Ca/Mg	Arag. (%)	Magn. (%)	Quar.	K-Fel.	Plag.	Gyps.	Anhy.	Pyr.	Others
2-2, 39-40	22	19	-	-	3	50/50 54/46	-	-	++	+	+	+	-	-	-
2-3, 65-66	14	12	-	-	2	54/46	-	-	++	-	++	++++	-	-	IL
2-3, 96-100	15	15	-	-	-	-	-	-	++	+	++	++++	-	-	IL
2-3, 144-150	44	44	-	-	-	-	-	-	+	-	+	+	-	-	IL
2-4, 23-24	27	22	-	-	5	50/50 54/46	-	-	++	+	+	+	-	-	IL
4-1, 26-27	33	23	-	-	10	50/50 54/46	-	-	++	+	++	+	-	+	IL, CH
4-2, 70-71	40	32	-	-	8	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH
4-3, 79-80	27	22	-	-	5	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH
4-4, 37-38	36	32	-	-	4	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH
4-4, 39-40	35	32	-	-	3	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH
4-4, 40-40.5	12	9	-	-	3	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH
4-4, 40.5-42	20	20	-	-	+	-	-	-	++	+	+	+	-	+	IL, CH
4-4, 42-43	32	32	+	-	-	-	+	-	++	+	+	+	-	+	IL, CH
4-4, 43-44	35	33	2	9	+	-	-	-	++	+	+	+	-	+	IL, CH
4-4, 44-45	52	52	+	-	+	-	-	-	++	-	+	+	-	+	IL, CH
4-4, 45-46	9	6	3	9	+	-	+	-	+++	++	++	+	-	+	IL, CH
4-4, 46-47	34	31	2	9	1	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH
4-4, 47-48	45	41	3	9	1	50/50 54/46	-	-	+	+	+	+	-	+	IL
4-4, 48-49	50	48	2	9	+	-	-	-	+	+	+	+	-	+	IL
4-4, 49-50	36	31	3	9	2	50/50	-	-	+	-	+	+	-	+	IL
4-4, 50-51	42	37	4	9	1	50/50	-	-	+	-	+	+	-	+	IL
4-4, 51-52	45	39	5	9	1	50/50	-	-	+	-	+	-	-	+	IL
4-4, 52-52.5	47	43	3	10	1	50/50	-	-	+	-	+	-	-	+	IL
4-4, 53-54	34	31	2	9	1	50/50	+	-	+	-	+	+	-	+	IL
4-4, 54-55	36	33	3	9	+	-	+	-	+	+	+	+	-	+	IL
4-4, 55-56	48	43	2	9	3	54/46	-	-	+	+	+	+	-	+	IL
4-4, 56-57	44	42	2	10	+	-	-	-	+	-	+	+	-	+	IL
4-4, 57-58	57	57	+	-	+	-	-	-	+	-	+	+	-	+	IL
4-4, 58-58.5	69	68	+	-	1	50/50	-	-	+	-	-	+	-	+	IL
4-4, 59-61	41	35	-	-	6	50/50	-	-	+	+	+	+	-	+	IL
4-4, 61-62	35	30	-	-	5	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH, KA
4-4, 62-63	30	24	-	-	6	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH
4-4, 63-64	30	24	-	-	6	50/50 54/46	-	-	++	+	+	+	-	-	IL, CH, KA
4-5, 88-89	27	23	-	-	4	50/50 54/46	-	-	++	+	+	-	-	+	IL, CH, KA
4, CC	45	30	-	-	15	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH
5-1, 74-75	46	26	-	-	11	50/50	9	--	+++	+	++	-	-	+	IL, CH
5-1, 81-83	54	31	-	-	19	54/46	4	-	++	-	+	-	-	-	IL, CH
5-3, 96-97	12	9	-	-	3	50/50	-	-	++	-	+	-	-	-	IL, CH
5-5, 36-38	39	35	-	-	4	50/50 54/46	-	-	++	+	+	+	-	+	IL, CH
5-5, 47-48	35	30	-	-	5	54/46	-	-	++	+	+	-	-	-	IL, CH, KA
5-5, 139-141	17	14	-	-	3	50/50	-	-	++	+	+	-	-	+	IL, CH, KA
5, CC	27	22	-	-	5	50/50	-	-	++	+	+	-	-	+	IL, CH, KA
6-2, 105-106	22	16	-	-	6	50/50	-	-	+++	++	+++	-	-	-	IL, CH, KA, HO
6-3, 53-55	21	14	-	-	7	50/50	-	-	+++	+	++	-	-	-	IL, CH
6-3, 91-92	25	21	-	-	4	50/50	-	-	+++	+	++	-	-	-	IL, CH
6-5, 48-50	26	22	-	-	4	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH
6, CC	22	21	-	-	1	54/46	-	-	++	+	+	-	-	-	IL, CH
7-1, 51-52	42	32	-	-	6	50/50	4	-	+++	+	++	-	-	-	IL
7-3, 46-47	22	18	-	-	4	50/50 54/46	--	-	++	+	++	-	-	-	IL, CH, KA, HO?, SE?
7-5, 51-52	29	22	-	-	7	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH
7, CC	41	40	-	-	1	50/50	-	-	++	+	+	+	-	+	IL
8-1, 83-84	49	49	-	-	+	-	-	-	++	+	+	+	-	-	IL

TABLE 1 - *Continued*

Sample (Interval in cm)	Tot. Carb.	Calc. (%)	MgC. (%)	Mol-% MgCO ₃	Dol. (%)	Mol-% Ca/Mg	Arag. (%)	Magn. (%)	Quar.	K-Fel.	Plag.	Gyps.	Anhy.	Pyr.	Others
8-1, 103-104	48	48	-	-	+	-	-	-	+	-	+	-	-	-	IL, CH, KA
8-3, 39-40	12	8	-	-	4	50/50 54/46	-	-	+++	+	++	-	-	-	IL, CH, KA
8-3, 90-91	44	44	-	-	+	-	-	-	++	+	+	-	-	-	IL
8-4, 109-110	45	45	-	-	+	-	-	-	+	+	+	-	-	-	IL
8-6, 93-94	9	N.D.-	-	-	-	-	-	-	-	-	-	-	-	-	-
8, CC	41	41	-	-	+	-	-	-	+	+	+	-	-	-	IL
9-1, 36-37	23	20	-	-	3	50/50 54/46	-	-	+++	+	++	-	-	-	IL, CH, SE?
9-3, 41-42	9	6	-	-	3	50/50 54/46	-	-	+++	+	++	-	-	-	IL, CH, SE?
9-6, 63-69	23	18	-	-	5	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH
9, CC	38	37	-	-	1	54/46	-	-	+	+	+	-	-	-	IL
10-2, 22-24	43	40	-	-	3	54/46	-	-	++	+	+	-	-	-	IL
10-2, 24-25	53	51	-	-	2	54/46	-	-	+	+	+	-	-	-	IL, CH, KA
11-1, 132-134	61	60	-	-	1	50/50 54/46	-	-	+	-	-	-	-	-	-
11-2, 55-57	44	24	-	-	20	54/46	-	-	+	-	+	-	-	-	IL
11-2, 157-158	52	47	-	-	5	50/50 54/46	-	-	+	-	+	-	-	-	IL
12, CC	54	48	-	-	6	54/46	-	-	+	-	+	-	-	-	IL
13, CC	8	8	-	-	-	-	-	-	++	+	+	-	-	-	IL, KA
Site 376															
1-1, 38-39	41	35	4	12	2	50/50 54/46	+	-	++	+	++	-	-	-	IL
1-1, 124-125	31	19	7	10	5	50/50 52/48	+	-	+++	+	++	-	-	-	IL, CH, KA
1-2, 115-116	35	31	2	11	2	50/50 54/46	+	-	++	+	+	+	-	+	IL
1-3, 10-12	29	25	3	11	1	50/50	+	-	++	+	+	-	-	+	IL
1-3, 13-15	36	34	1	-	1	50/50	+	-	++	+	+	+	-	+	IL
1-3, 18-20	35	33	1	-	1	50/50	+	-	++	+	+	+	-	+	IL
1-3, 24-26	39	39	-	-	-	-	-	-	+	+	+	+	-	+	IL
1-3, 31-33	35	33	+	-	2	50/50	+	-	++	+	+	+	-	+	IL
1-4, 65-66	30	29	+	-	1	50/50	-	-	++	+	+	+	-	+	IL
1-4, 88-89	31	28	2	10	1	50/50 54/46	+	-	++	+	+	+	-	+	IL
1-5, 119-120	30	22	3	10	5	50/50 54/46	+	-	++	+	+	-	-	-	IL
1, CC	23	17	3	10	3	50/50 54/46	+	-	++	+	++	-	-	-	IL
2-1, 87-88	39	25	8	10	6	50/50 54/46	-	-	++	++	++	-	-	-	IL, CH
2-2, 144-145	38	37	+	-	1	50/50	-	-	++	+	+	-	-	-	IL, CH
2-3, 0-1	31	26	3	11	2	50/50 54/46	-	-	+++	+	++	-	-	-	IL, CH, KA, HO?
2-3, 8-9	37	33	2	11	2	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH
2-3, 147-148	37	32	3	12	2	50/50 54/46	-	-	++	-	+	-	-	-	IL, CH
2-4, 30-31	56	51	2	10	3	50/50 54/46	+	-	++	+	+	+	-	+	IL, CH, KA
2-4, 54-55	42	36	4	9	2	50/50 54/46	-	-	++	+	+	+	-	-	IL, CH, KA
2, CC	34	28	3	10	3	50/50 54/46	+	-	++	+	++	-	-	-	IL, CH, KA, HO, SE
3-1, 135-136	30	24	3	11	3	50/50	-	-	++	+	++	-	-	-	IL, CH
3-2, 38-39	43	31	8	12	1	50/50	3	-	++	+	+	-	-	+	IL, CH
3-2, 89-90	48	45	2	11	+	-	1	-	++	+	+	-	-	-	IL, CH
3-2, 115-116	43	41	-	-	2	50/50 55/45	-	-	++	+	+	-	-	-	IL, CH, HO
3-3, 79	36	27	3	12	4	50/50 52/48	2	-	++	+	+	-	-	-	IL
3-5, 137-138	54	52	-	-	2	50/50 55/45	-	-	++	-	+	-	-	-	IL
3, CC	38	33	3	11	2	50/50 53/47	+	-	++	+	++	-	-	-	IL, CH, HO
4-1, 80-81	38	38	+	-	+	-	-	-	++	-	+	-	-	-	IL, CH
4, CC	37	N.D.-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-1, 103-104	35	29	3	12	3	50/50 52/48	+	-	++	-	++	-	-	-	IL
5-2, 72-73	37	34	-	-	3	52/48	-	-	++	+	+	-	-	-	IL
5-2, 115-116	32	32	-	-	-	-	-	-	+	+	+	+	-	+	IL

TABLE 1 - *Continued*

Sample (Interval in cm)	Tot. Carb.	Calc. (%)	MgC. (%)	Mol-% MgCO ₃	Dol. (%)	Mol-% Ca/Mg	Arag. (%)	Magn. (%)	Quar.	K-Fel.	Plag.	Gyps.	Anhy.	Pyr.	Others
5-3, 60-61	51	47	-	-	4	50/50 55/45	-	-	++	-	+	-	-	-	IL
5-4, 38-39	48	45	-	-	3	50/50 54/46	-	-	+	+	+	-	-	-	IL
5-4, 64-65	43	40	-	-	3	50/50 55/45	-	-	++	+	+	-	-	-	IL
5-4, 105-106	28	28	-	-	+	-	-	-	+	+	+	+	-	-	IL
5-5, 95-96	28	26	-	-	2	54/46	-	-	++	+	+	-	-	-	IL
5, CC	36	17	-	-	19	50/50 55/45	-	-	++	++	++	-	-	-	IL, CH, HO
6-1, 133-134	36	34	-	-	2	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH, KA
6-2, 83-84	42	37	-	-	5	50/50 55/45	-	-	++	+	+	-	-	-	IL, CH, HO
6-3, 94-95	9	9	-	-	+	-	-	-	++	+	+	-	-	-	IL, CH, KA
6-4, 50-51	64	57	-	-	7	55/45	-	-	+	+	+	-	-	-	IL
6-4, 56-57	57	50	-	-	7	55/45	-	-	+	-	+	-	-	-	IL
6-4, 57-58	58	52	-	-	6	55/45	-	-	+	-	+	-	-	-	IL
6-4, 58-59	64	58	-	-	6	55/45	-	-	+	-	+	-	-	-	IL
6-4, 60-61	63	59	-	-	4	54/46	-	-	+	+	+	+	-	-	IL, CH
6-4, 61-62	68	61	-	-	7	54/46	-	-	+	+	+	+	-	-	IL
6-4, 63-64	51	45	-	-	6	54/46	-	-	+	+	+	-	-	-	IL
6-4, 64-65	57	50	-	-	7	50/50 54/46	-	-	+	+	+	-	-	-	IL
6-4, 66-67	51	45	-	-	6	54/46	-	-	+	+	+	+	-	-	IL
6-4, 68-69	50	43	-	-	7	54/46	-	-	+	+	+	+	-	-	IL, CH, KA
6-4, 70-71	60	54	-	-	6	54/46	-	-	+	+	+	+	-	-	IL
6-4, 72-73	62	57	-	-	5	54/46	-	-	+	+	+	+	-	-	IL
6-4, 74-75	77	71	-	-	6	54/46	-	-	+	+	+	+	-	-	IL, CH
6-4, 75-76	68	64	-	-	4	54/46	-	-	+	+	+	-	-	-	IL, CH, KA
6-4, 77-78	63	57	-	-	6	50/50 54/46	-	-	+	-	+	+	-	-	IL
6-4, 78-79	59	51	-	-	8	54/46	-	-	+	+	+	-	-	-	IL
6-4, 81-82	61	52	-	-	9	54/46	-	-	+	-	-	+	-	-	IL
7-1, 59-60	29	10	-	-	19	50/50 54/46	-	-	++	+	++	-	-	-	IL
7-2, 51-52	30	10	-	-	20	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH, KA
7, CC	35	22	-	-	13	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH, HO
8-1, 140-141	31	20	-	-	11	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH, HO
8-2, 69-70	41	24	-	-	17	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH
8-3, 17-18	33	21	-	-	12	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH, KA
8-3, 31-32	32	24	-	-	8	50/50 54/46	-	-	++	+	++	-	-	-	IL
8-3, 36-37	28	15	-	-	13	50/50 54/46	-	-	++	++	++	-	-	-	IL, CH, HO
8, CC	37	N.D.-→	-	-	-	-	-	-	-	-	-	-	-	-	-
9-1, 50-51	35	18	-	-	17	50/50 54/46	-	-	+++	++	++	-	-	-	IL, CH
9-1, 81-83	35	27	-	-	8	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH
9-2, 70-71	29	23	-	-	6	54/46	-	-	++	+	+	-	-	-	IL, CH
9-3, 70-71	29	25	-	-	4	54/46	-	-	+++	++	++	-	-	-	IL, CH, HO
9-4, 4-5	36	25	-	-	11	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH
9-4, 80-81	38	19	-	-	19	50/50 54/46	-	-	+++	+	+++	-	-	-	IL, CH
9, CC	28	24	-	-	4	50/50 54/46	-	-	++	+	+	-	-	-	IL, HO
10-1, 101-102	39	27	-	-	12	50/50 54/46	-	-	+++	+	++	-	-	-	IL, CH
10-3, 100-101	35	27	-	-	8	50/50 54/46	-	-	++	+	+	-	-	-	IL, CH, KA
10, CC	37	27	-	-	10	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH, KA
11-1, 139-140	39	26	-	-	13	50/50 54/46	-	-	++	+	++	-	-	-	IL, CH
11-2, 130-131	71	71	-	-	+	-	-	-	+	+	+	-	-	-	IL
11-2, 133-136	45	45	-	-	-	-	-	-	+	-	-	-	-	-	IL
11, CC	70	69	-	-	1	55/45	-	-	+	+	+	-	-	-	IL
12-1, 22-28	60	59	-	-	1	55/45	-	-	+	+	+	-	-	-	IL, CH

TABLE 1 - *Continued*

Sample (Interval in cm)	Tot. Carb.	Calc. (%)	MgC. (%)	Mol-% MgCO ₃	Dol. (%)	Mol-% Ca/Mg	Arag. (%)	Magn. (%)	Quar.	K-Fel.	Plag.	Gyps.	Anhy.	Pyr.	Others
12-1, 40-42	37	37	-	-	+	-	-	-	++	+	+	-	-	-	IL
12-2, 49-51	36	35	-	-	1	55/45	-	-	+	+	+	+	-	-	IL, CH
12-2, 70-71	23	N.D.→	-	-	-	-	-	-	-	-	-	-	-	-	-
12-2, 90-91	37	33	-	-	4	50/50	-	-	+	+	+	-	-	+	IL, CH
						54/46									
12-3, 130-131	56	53	-	-	3	50/50	-	-	+	-	+	-	-	-	IL
						54/46									
12-4, 70-71	23	23	-	-	+	-	-	-	++	+	+	-	-	-	IL
12-5, 130-131	38	38	-	-	+	-	-	-	++	+	++	-	-	-	IL
12, CC	39	39	-	-	+	-	-	-	++	+	+	-	-	-	IL
13-1, 114-115	66	66	-	-	+	-	-	-	+	-	+	-	-	-	IL
13-2, 71-72	32	32	-	-	+	-	-	-	++	+	+	-	-	-	IL
13-4, 101-102	25	25	-	-	+	-	-	-	+++	+	++	-	-	-	IL, CH
13, CC	21	21	-	-	+	-	-	-	+++	+	++	-	-	-	IL, CH
14, CC	24	24	-	-	+	-	-	-	+++	+	++	-	-	-	IL
15-1, 137-138	45	45	-	-	-	-	-	-	+	+	+	-	-	-	IL
15-2, 35-36	47	47	-	-	-	-	-	-	+	-	-	+++	-	-	IL
15-2, 125-126	36	29	-	-	7	50/50	-	-	++	+	+	-	-	-	IL
						52/48									
15-3, 2-3	44	41	-	-	3	50/50	-	-	++	+	+	-	-	-	IL, CH
						52/48									
15, CC	41	41	-	-	+	-	-	-	++	+	+	+++	-	-	IL
17-1, 45-47	37	36	-	-	1	54/46	-	-	+	-	+?	+++	-	-	-
Site 377															
1-1, 65-67	51	47	3	10	1	50/50	+	-	++	+	+	-	-	-	IL, CH, KA
						54/46									
1-1, 104-106	68	63	4	10	1	50/50	+	-	++	+	+	-	-	-	IL
						54/46									
1-1, 149-150	50	49	-	-	1	50/50	-	-	++	+	+	+	-	+	IL
						54/46									
1-2, 10-11	34	32	-	-	2	50/50	-	-	++	+	+	-	-	+	IL, CH, KA
						54/46									
1-2, 28-29	36	25	-	-	11	50/50	-	-	++	+	+	-	-	+	IL
						54/46									
1-2, 97-98	46	42	3	10	1	50/50	-	-	++	+	+	+	-	++	IL
						54/46									
1-2, 109-111	50	45	4	9	1	50/50	+?	-	++	+	+	-	-	-	IL
						54/46									
2-1, 105-106	52	51	-	-	1	50/50	-	-	++	+	+	-	-	-	IL, CH, KA
						54/46									
3-2, 19-23	23	23	-	-	-	-	-	-	+++	+	+	-	-	-	IL, CH, KA
4-3, 140-142	13	13	-	-	+	-	-	-	+++	+	+	+	-	+	IL, CH, KA
Hole 378															
1-1, 133-134	55	50	-	-	5	50/50	-	-	++	-	+	++	-	+	IL, CH
						54/46									
1-2, 64-65 A	46	42	-	-	4	50/50	-	-	++	+	+	+	-	-	IL, CH
						54/46									
1-2, 64-65 B	41	38	-	-	3	54/46	-	-	++	+	+	+	-	+	IL, CH
1-2, 65-66	43	39	-	-	4	54/46	-	-	++	+	+	++	-	+	IL, CH
1-2, 66-67	33	30	-	-	3	50/50	-	-	++	+	+	+	-	+	IL, CH
						54/46									
1-2, 67-68	49	45	-	-	3	50/50	-	-	++	+	+	+	-	+	IL, CH
						54/46									
1-2, 69-70	48	46	-	-	2	54/46	-	-	++	+	+	+	-	+	IL, CH
1-2, 71-72	62	60	-	-	2	54/46	-	-	+	-	+	-	-	-	IL
3-3, 122-123	35	30	+	-	2	50/50	3	-	++	-	+	+	-	+	IL, CH
						54/46									
6-2, 18-19	37	36	-	-	1	50/50	-	-	++	+	+	+	-	+	IL
						54/46									
6-3, 84-85	48	42	-	-	6	50/50	-	-	++	-	+	+	-	+	IL, CH
						54/46									
6-3, 95-96	52	44	-	-	8	50/50	-	-	++	+	+	+	-	-	IL, CH
						54/46									
7-4, 71-72	38	37	-	-	1	50/50	-	-	+	+	+	+	-	+	IL
8-1, 124-125	51	50	-	-	1	50/50	-	-	+	+	+	+	-	+	IL
						54/46									
8-2, 2-3	34	31	-	-	3	54/46	-	-	++	+	+	+	-	+	IL
8-2, 13-14	34	33	-	-	1	50/50	-	-	++	+	+	+	-	+	IL
						54/46									
8-2, 31-35	33	N.D.→	-	-	-	-	-	-	-	-	-	-	-	-	-
8-2, 45-46	27	27	-	-	+	-	-	-	++	+	+	-	-	-	IL, CH
8-2, 47-48	35	N.D.→	-	-	-	-	-	-	-	-	-	-	-	-	-
8-2, 59-60	24	21	-	-	3	54/46	-	-	++	-	++	+	-	+	IL

TABLE 1 - *Continued*

Sample (Interval in cm)	Tot. Carb.	Calc. (%)	MgC. (%)	Mol-% $MgCO_3$	Dol. (%)	Mol-% Ca/Mg	Arag. (%)	Magn. (%)	Quar.	K-Fel.	Plag.	Gyps.	Anhy.	Pyr.	Others
8-2, 70-71	43	N.D.→	—	—	—	—	—	—	—	—	—	—	—	—	—
11-1, 148-149	41	37	—	—	4	50/50 54/46	—	—	++	+	+	+	—	—	IL, CH
11-2, 1-2	38	37	—	—	1	50/50	—	—	++	+	+	+	—	—	IL, CH
11-2, 28-29	40	36	—	—	4	50/50 54/46	—	—	++	—	+	+	—	+	IL, CH
11-2, 73-74	54	52	—	—	2	50/50 54/46	—	—	++	—	+	—	—	—	IL, CH
11-2, 98-99	42	40	—	—	2	50/50 54/46	—	—	++	—	++	+	—	+	IL
11-2, 136-137	45	44	—	—	1	50/50 54/46	—	—	++	+	+	+	—	+	IL, CH
11-4, 9-10	24	23	—	—	1	50/50 54/46	—	—	++	+	+	+	—	+	IL, CH
11-4, 22-23	34	32	—	—	2	50/50 54/46	—	—	++	—	+	+	—	+	IL, CH
11-4, 37-38	31	29	—	—	2	54/46	—	—	++	+	+	—	—	+	IL
11-4, 48-49	27	25	—	—	2	50/50 54/46	—	—	++	—	+	—	—	+	IL, CH
11-4, 64-65	33	33	—	—	—	—	—	—	++	—	+	+	—	+	IL, CH
11-4, 130-131	30	21	—	—	9	50/50 54/46	—	—	++	—	++	—	—	+	IL
Hole 378A															
1-2, 20-21	34	27	—	—	7	50/50 54/46	—	—	++	+	+	+	—	+	IL
1-3, 14-15	43	43	—	—	—	—	—	—	++	+	+	—	—	—	IL
1-3, 143-145	49	44	—	—	5	54/46	—	—	+	+	+	—	—	—	—

List of abbreviations used in the table:

Tot. Carb. = total carbonate

Calc. = calcite

MgC. = Mg-calcite

Dol. = dolomite

Arag. = aragonite

Magn. = magnesite

Quar. = quartz

N.D. = not determined

J

K-Fel. = K-feldspar

Plag. = plagioclase

Gyps. = gypsum (incl.

(bassanite))

Anhy. = anhydrite

Pyr. = pyrite

IL = illite

CH = chlorite

KA = kaolinite

A = attapulgite

HO = hornblende

SE = serpentine

HA = halite

BI = bischoffite

L = lueneburgite

U = unidentified

(MgSO₄?)