

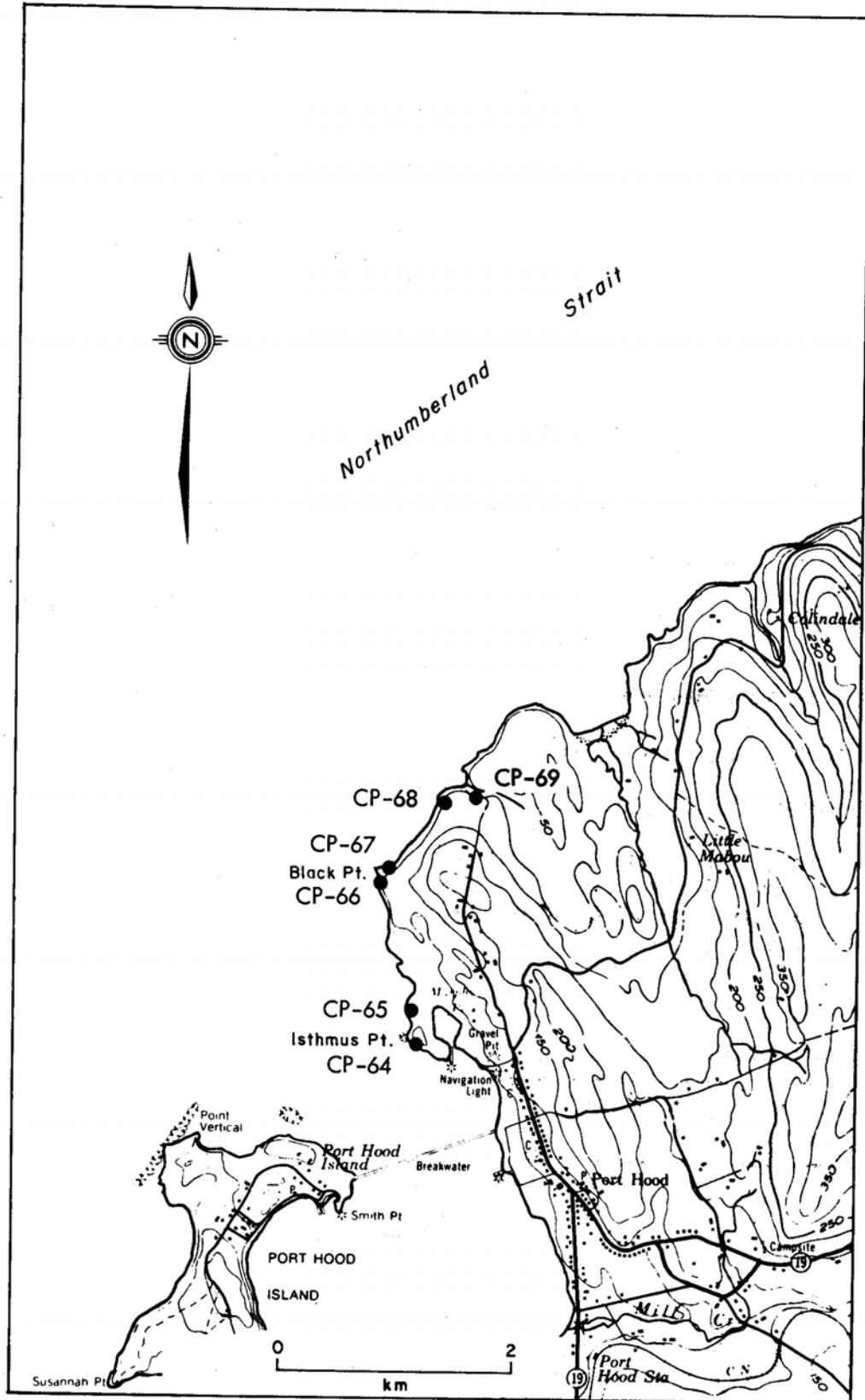
INVERNESS COUNTY

Sample Number
CP-64

TOPOGRAPHICAL SHEET: 11K/04**LOCATION:** The shale occurs approximately 1 km north of the breakwater wharf at Port Hood (Fig. 45).**UTM:** 612300 E
5097910 N**GEOLOGICAL UNIT:** Riversdale Group, Pennsylvanian age**DESCRIPTION:** Interbedded red and grey shale. Highly fissile and thinly bedded. The outcrop is 4.6 m thick and extends over a distance of approximately 18 m.**SAMPLE INTERVAL:** Channel sample across the lower 1.8 m of the exposure.**TYPE OF MATERIAL:** Shale**UNFIRED CHARACTERISTICS:** Pale red, slightly calcareous shale. Good workability. Very plastic. Water of plasticity 18.0%. Safe drying. Air shrinkage 5.5%. Modulus of rupture 145 p.s.i. Benzidine test negative.**P.C.E.:** 4-**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	4.05	6.25	Moderate reddish orange	Steel hard
04	5.46	4.21	Moderate reddish brown	Steel hard
02	6.38	1.96	Moderate reddish brown	Steel hard

POTENTIAL USES: Earthenware, artware and structural products



Ref. Map 11-K-4
Figure 45. Location map for samples CP-64-69 (Port Hood, Cape Breton Island)

INVERNESS COUNTY

Sample Number
CP-65

TOPOGRAPHICAL SHEET: 11K/04

LOCATION: Approximately 1 1/2 km north of the breakwater wharf at Port Hood. The outcrop forms the side of a 12 m bluff, approximately 18 m from shore (Fig. 45).

UTM: 612220 E
5098220 N

GEOLOGICAL UNIT: Pleistocene clay, Quaternary age

DESCRIPTION: At this site there are 3 horizons of clay which comprise a minimum total thickness of 41 cm. The top 10 cm is medium grey clay. It is underlain by 10 cm of yellowish-brown clay which in turn is underlain by bluish-grey clay more than 20 cm thick. All of the clays contain carbonaceous material and stones 2-8 cm in diameter, and show extensive iron carbonate stains, especially in the lower layer. Weathered surfaces of the clay are medium to dark grey in colour.

ATTITUDE OF BEDDING: Essentially horizontal**SAMPLE INTERVAL:** 41 cm channel sample**TYPE OF MATERIAL:** Clay

UNFIRED CHARACTERISTICS: Brownish-grey, nonclacareous clay containing shale and coal. Good workability. Highly plastic. Water of plasticity 28.8%. Safe drying. Air shrinkage 6.3%. Modulus of rupture 178 p.s.i. Benzidine test negative.

P.C.E.: 15**FIRED CHARACTERISTICS:**

Temp °F	Fired Shrinkage %	Absorption %	Colour	Hardness
1740	7.18	16.42	Moderate reddish brown	Very hard
1815	9.22	10.52	Moderate reddish brown	Steel hard
1875	9.03	7.60	Moderate reddish brown	Steel hard
1940	11.61	4.02	Dark reddish brown	Steel hard
2000	11.31	3.03	Dark reddish brown	Steel hard
2050	11.64	2.82	Dark reddish brown	Steel hard
2100	9.53	3.33	Dark reddish brown	Steel hard
2150	7.11	3.37	Dark reddish brown	Steel hard

Temp °F	Fired Shrinkage %	Absorption %	Colour	Hardness
2195	4.37	4.59	Dark reddish brown	Steel hard
2225	2.02	5.71	Dark reddish brown	Steel hard
2255	0.54	5.68	Dark reddish brown	Steel hard
2280	+0.97	5.54	Dark reddish brown	Steel hard
2295	+1.54	5.83	Dark reddish brown	Steel hard

POTENTIAL USES: Brick

INVERNESS COUNTY

Sample Number
CP-66

TOPOGRAPHICAL SHEET: 11K/O4

LOCATION: Midway up the face of a 30 m bluff, at Black Point (Fig. 45).

UTM: 611940 E
5099320 N

GEOLOGICAL UNIT: Riversdale Group, Pennsylvanian age

DESCRIPTION: Medium grey, thinly bedded shale. The shale is micaceous, friable and interbedded with massive sandstone.

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Shale

UNFIRED CHARACTERISTICS: Brownish-grey, very slightly calcareous shale. Poor workability. Plastic. Water of plasticity 20.0%. Safe drying. Air shrinkage 4.1%. Modulus of rupture 102 p.s.i. Benzidine test negative.

P.C.E.: 3+

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	2.26	10.96	Light moderate reddish brown	Hard
04	4.50	7.76	Moderate reddish brown	Hard
02	8.02	2.14	Dark moderate reddish brown	Steel hard

REMARKS: Short firing range

POTENTIAL USES: None

INVERNESS COUNTY**Sample Number**

CP-67

TOPOGRAPHICAL SHEET: 11K/04**LOCATION:** At Black Point on the Northumberland Strait (Fig. 45).**UTM:** 612000 E
5099440 N**GEOLOGICAL UNIT:** Riversdale Group, Pennsylvanian age**DESCRIPTION:** Thinly bedded, highly fissile, medium grey shale grading down into black carbonaceous shale. The shale shows iron carbonate stains. The total thickness is over 4.6 m.**ATTITUDE OF BEDDING:** 275° /20° SW**SAMPLE INTERVAL:** Channel sample across the top 1.8 m of the shale**TYPE OF MATERIAL:** Shale**UNFIRED CHARACTERISTICS:** Brownish-grey, highly calcareous (sulphide smell) shale. Fair workability. Fairly plastic. Water of plasticity 18.8%. Safe drying. Air shrinkage 4.3%. Benzidine test negative.**P.C.E.:** 3+**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	0.35	14.95	Pale orange	Hard
1	0.18	14.42	Pale orange	Very hard
3	3.50	6.85	Moderate brown	Steel hard

POTENTIAL USES: Face brick

INVERNESS COUNTY

Sample Number
CP-68

TOPOGRAPHICAL SHEET: 11K/04

LOCATION: The occurrence is north of Black Point along the side of a 23 m bluff (Fig. 45).

UTM: 612440 E
5099970 N

GEOLOGICAL UNIT: Riversdale Group, Pennsylvanian age

DESCRIPTION: Thinly bedded, highly fissile, red shale. Bed approximately 6 m thick.

SAMPLE INTERVAL: 1.2 m channel sample

TYPE OF MATERIAL: Shale

UNFIRED CHARACTERISTICS: Reddish-brown, slightly calcareous shale. Good workability. Plastic. Water of plasticity 21.0%. Safe drying. Air shrinkage 6.6%. Modulus of rupture 170 p.s.i. Benzidine test negative.

P.C.E.: 14+

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	2.85	8.50	Light moderate reddish brown	Hard
04	4.30	6.02	Moderate reddish brown	Very hard
02	6.05	3.57	Moderate reddish brown	Steel hard

POTENTIAL USES: Structural products

INVERNESS COUNTY**Sample Number**

CP-69

TOPOGRAPHICAL SHEET: 11K/04**LOCATION:** At the southern end of a quarry approximately 1.2 km northeast of Black Point (Fig. 45).**UTM:** 612770 E
5100100 N**GEOLOGICAL UNIT:** Riversdale Group, Pennsylvanian age**DESCRIPTION:** Mottled red and grey shale overlain by medium grey clay-shale. Both exhibit extensive iron carbonate stains. The entire unit is approximately 1 m thick and extends for 30 m along the top of the quarry's southern wall.**ATTITUDE OF BEDDING:** Essentially horizontal**SAMPLE INTERVAL:** Grab sample**TYPE OF MATERIAL:** Clay-shale**UNFIRED CHARACTERISTICS:** Light brownish-grey, noncalcareous clay and shale. Very good workability. Very plastic. Water of plasticity 24.0%. Safe drying. Air shrinkage 6.3%. Scum at top edges of drying. Modulus of rupture 214 p.s.i. Benzidine test positive.**P.C.E.:** 16**FIRED CHARACTERISTICS:**

Temp °F	Fired Shrinkage %	Absorption %	Colour	Hardness
1790	2.73	12.43	Moderate reddish orange	Hard
1860	4.12	8.44	Moderate reddish orange	Very hard
1930	5.24	6.37	Moderate reddish brown	Very hard
2000	5.96	5.06	Moderate reddish brown	Very hard
2050	6.22	3.41	Moderate reddish brown	Steel hard
2110	6.16	2.77	Moderate reddish brown	Steel hard
2160	5.08	3.31	Yellowish grey	Steel hard
2205	1.20	4.74	Yellowish grey	Steel hard
2235	+1.02	5.78	Yellowish grey	Steel hard
2265	+3.91	7.57	Moderate yellowish brown	Steel hard
2295	+5.54	8.48	Moderate yellowish brown	Steel hard
2315	+8.29	9.32	Moderate yellowish brown	Steel hard

POTENTIAL USES: Earthenware, artware and structural products.

INVERNESS COUNTY

Sample Number
CP-70

TOPOGRAPHICAL SHEET: 11F/13

LOCATION: Along the shore of the Northumberland Strait, 1.7 km south of the beach at Port Hood Mines (Fig. 46).

UTM: 613640 E
5092430 N

GEOLOGICAL UNIT: Riversdale Group, Pennsylvanian age

DESCRIPTION: Medium grey clay-shale underlying a 30 cm thick seam of coal. The clay-shale shows extensive iron carbonate stains, is 1.8 m thick, and near the top contains carbonaceous material. Upon weathering it becomes light grey in colour.

ATTITUDE OF BEDDING: 015°/68° NW

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Clay-shale

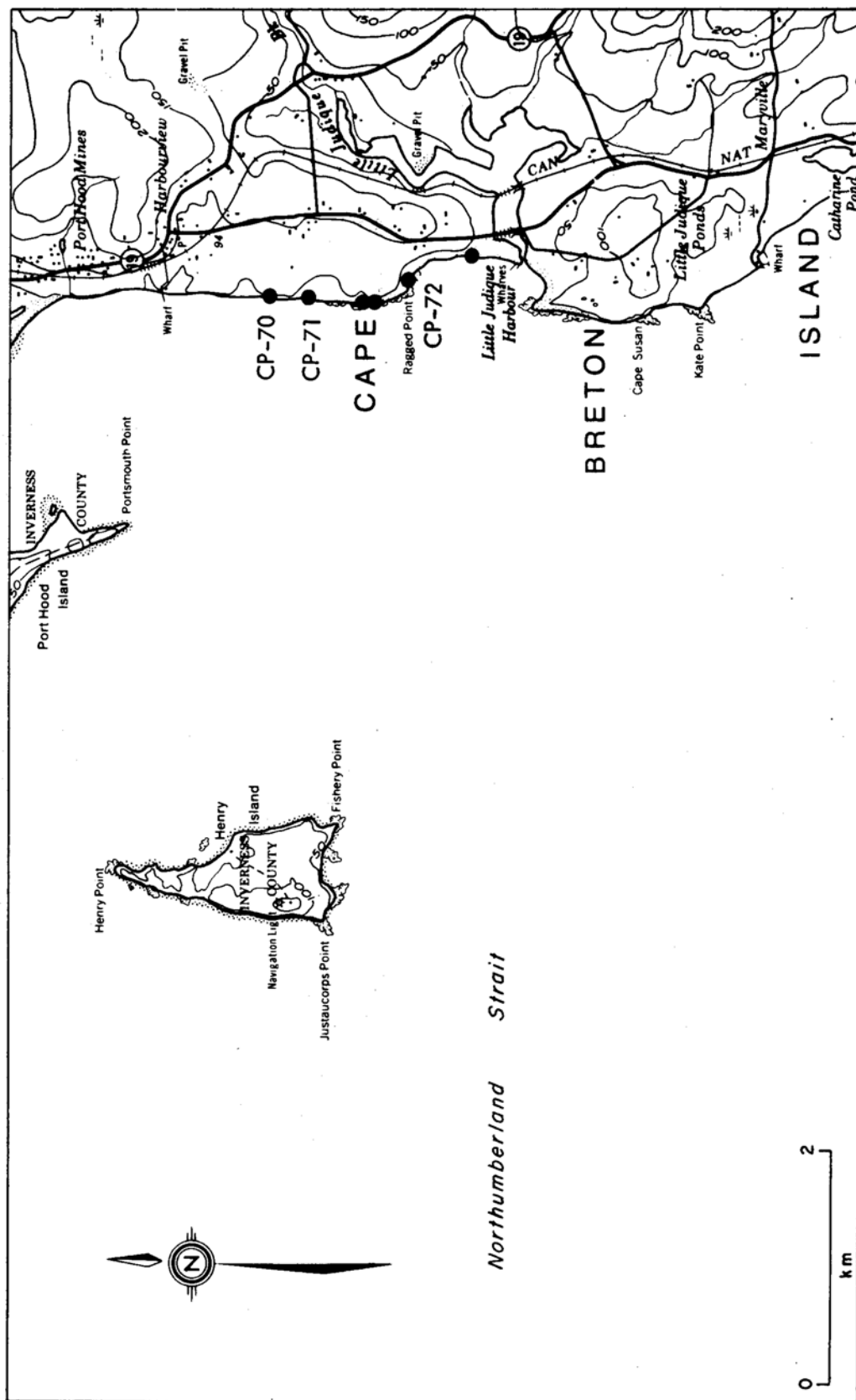
UNFIRED CHARACTERISTICS: Light greenish-grey, noncalcareous shale and clay. Good workability. Plastic. Water of plasticity 26.4%. Safe drying. Air shrinkage 6.3%. Modulus of rupture 243 p.s.i. Benzidine test positive. Scumming on drying.

P.C.E.: 8

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	3.20	12.77	Moderate reddish orange	Hard
04	4.62	10.36	Pale reddish brown	Hard to very hard
02	8.38	3.50	Light moderate reddish brown	Steel hard

POTENTIAL USES: None



Ref. Map 11-F-13
Figure 46. Location map for samples CP-70-72 (Little Judique Harbour, Cape Breton Island)

INVERNESS COUNTY

Sample Number
CP-71

TOPOGRAPHICAL SHEET: 11F/13

LOCATION: Along the shoreline of the Northumberland Strait, 2.1 km south of the beach at Port Hood Mines (Fig. 46).

UTM: 613640 E
5092170 N

GEOLOGICAL UNIT: Riversdale Group, Pennsylvanian age

DESCRIPTION: Grey, thinly bedded, very friable shale which outcrops for approximately 46 m along the shore of the Northumberland Strait.

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Shale

UNFIRED CHARACTERISTICS: Pale brown, noncalcareous shale. Fair workability. Plastic. Water of plasticity 20.8%. Safe drying. Air shrinkage 4.5%. Modulus of rupture 101 p.s.i. Benzidine test negative.

P.C.E.: 7-8

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	2.65	9.75	Moderate reddish orange	Hard
04	4.90	7.09	Pale reddish brown	Very hard
02	7.15	2.32	Moderate reddish brown	Steel hard

POTENTIAL USES: Structural products

INVERNESS COUNTY**Sample Number**

CP-72

TOPOGRAPHICAL SHEET: 11F/13**LOCATION:** Along the shore of the Northumberland Strait, approximately 2.7 km south of the beach at Port Hood Mines (Fig. 46).**UTM:** 613760 E
5091260 N**GEOLOGICAL UNIT:** Riversdale Group, Pennsylvanian age**DESCRIPTION:** Interbedded red shale and grey clay-shale. The red shale is thinly bedded and very friable. The clay-shale shows iron carbonate staining and contains carbonaceous material.**ATTITUDE OF BEDDING:** 195° /173° SE**SAMPLE INTERVAL:** Grab sample**TYPE OF MATERIAL:** Shale**UNFIRED CHARACTERISTICS:** Moderate reddish-brown, highly calcareous shale. Poor workability. poorly plastic. Water of plasticity 20.4%. Safe drying. Air shrinkage 3.8%. Benzidine test negative.**P.C.E.:** 3**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	1.05	12.71	Light moderate reddish brown	Hard
04	1.45	11.96	Moderate reddish brown	Hard
02	5.20	4.63	Moderate reddish brown	Steel hard

POTENTIAL USES: None

INVERNESS COUNTY

Sample Number
CP-75

TOPOGRAPHICAL SHEET: 11K/03

LOCATION: The exposure is 727 m south of the church at East Lake Ainslie on the shore of Lake Ainslie (Fig. 47).

UTM: 643110 E
5110270 N

GEOLOGICAL UNIT: Clay, Quaternary age

DESCRIPTION: Medium grey clay containing small flecks of pyrite. The clay is over 2.4 m thick and is overlain by a red clay.

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Clay

UNFIRED CHARACTERISTICS: Medium light grey, highly calcareous clay. Very good workability. Plastic. Water of plasticity 24.0%. Safe drying. Air shrinkage 6.8%. Modulus of rupture 168 p.s.i. Benzidine test positive.

P.C.E.: 4-

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	4.00	7.59	Light brown	Very hard
04	4.50	6.37	Light brown	Very hard
02	6.85	2.90	Light brown	Very hard

POTENTIAL USES: Structural products



Ref. Map II-K-3

Figure 47. Location map for samples CP-75, 76 (Lake Ainslie, Cape Breton Island)

INVERNESS COUNTY

Sample Number
CP-76

TOPOGRAPHICAL SHEET: 11K/03

LOCATION: Exposure 727 m south of the church at East Lake Ainslie along the shore of Lake Ainslie on the northern side of Howard MacLeans Point (Fig. 47).

UTM: 643110 E
5110270 N

GEOLOGICAL UNIT: Pleistocene clay, Quaternary age

DESCRIPTION: Red clay containing small patches of soil material. It ranges in thickness from 61-91 cm.

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Clay

UNFIRED CHARACTERISTICS: Moderate reddish-brown, calcareous clay containing a few stones. Very good workability. Very plastic. Water of plasticity 30.8%. Safe drying. Air shrinkage 7.3%. Modulus of rupture 327 p.s.i. Benzidine test negative.

P.C.E.: 3

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	5.40	5.19	Moderate reddish brown	Steel hard
04	7.80	0.34	Moderate reddish brown	Steel hard
02	4.15	0.41	Dark reddish brown	Steel hard

POTENTIAL USES: Earthenware, artware, common brick, hollow tile and drain tile.

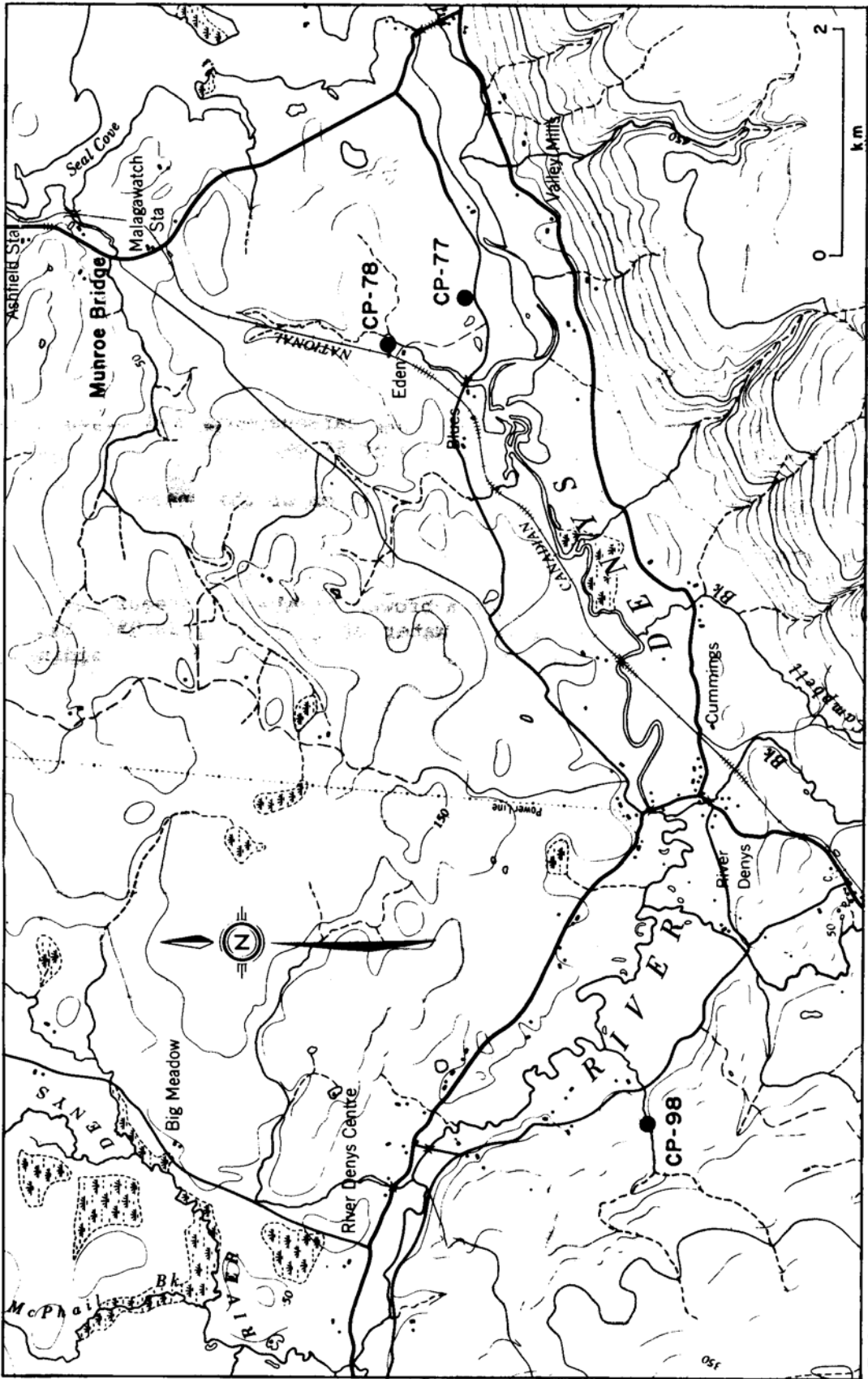
INVERNESS COUNTY**Sample Number**

CP-77

TOPOGRAPHICAL SHEET: 11F/14**LOCATION:** Approximately 750 m east of Blues, and 800 m southeast of Eden (Fig. 48).**UTM:** 645980 E
5078980 N**GEOLOGICAL UNIT:** Pleistocene clay, Quaternary age**DESCRIPTION:** Light grey clay, 15 cm thick. The clay contains organic matter and exhibits iron carbonate stains. Underlying this is a reddish-brown clay which has a thickness in excess of 61 cm.**SAMPLE INTERVAL:** Channel sample across the upper 30 cm of thickness.**TYPE OF MATERIAL:** Clay**UNFIRED CHARACTERISTICS:** Pale reddish-brown, noncalcareous clay. Very good workability. Highly plastic. Water of plasticity 26.8%. Safe drying. Air shrinkage 7.2%. Modulus of rupture 395 p.s.i. Benzidine test negative.**P.C.B.:** 3+**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	7.25	3.30	Moderate reddish brown	Steel hard
04	7.85	0.79	Dark reddish brown	Steel hard
02	0.90	0.49	Dark reddish brown	Steel hard

POTENTIAL USES: Earthenware, artware and structural products



Ref. Map II-F-14

Figure 48. Location map for samples CP-77, 78, 98 (River Denys, Cape Breton Island)

INVERNESS COUNTY**Sample Number**

CP-78

TOPOGRAPHICAL SHEET: 11F/14**LOCATION:** Eden, on the property of Mr. Walter Miller. The clay was exposed by digging in a field east of Mr. Miller's house (Fig. 48).**UTM:** 645580 E
5079680 N**GEOLOGICAL UNIT:** Clay, Quaternary age**DESCRIPTION:** Reddish-brown clay containing carbonaceous and organic material. The clay has a thickness in excess of 61 cm.**SAMPLE INTERVAL:** Channel sample across top 30 cm of thickness**TYPE OF MATERIAL:** Clay**UNFIRED CHARACTERISTICS:** Pale reddish-brown, highly calcareous clay. Very good workability. Highly plastic. Water of plasticity 28.0%. Safe drying. Air shrinkage 8.1%. Modulus of rupture 383 p.s.i. Benzidine test negative.**P.C.E.:** 3+**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	1.70	12.92	Moderate reddish orange	Very hard
04	2.20	11.66	Moderate reddish orange	Very hard
02	6.90	0.09	Dark reddish brown	Steel hard

POTENTIAL USES: Artware and brick.

INVERNESS COUNTY

Sample Number
CP-79

TOPOGRAPHICAL SHEET: 11K/03

LOCATION: On Highway 19 about 457 m north of the large oil tanks at Inverness there is a road going to the shore of the Northumberland Strait. The exposure is on the shore, about 215 m northeast of the point where this road intersects the shore (Fig. 49).

UTM: 630610 E
5121960 N

GEOLOGICAL UNIT: Clay, Quaternary age

DESCRIPTION: Mottled, light grey to medium grey clay showing extensive iron carbonate stains. The outcrop is approximately 1 m.

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Clay

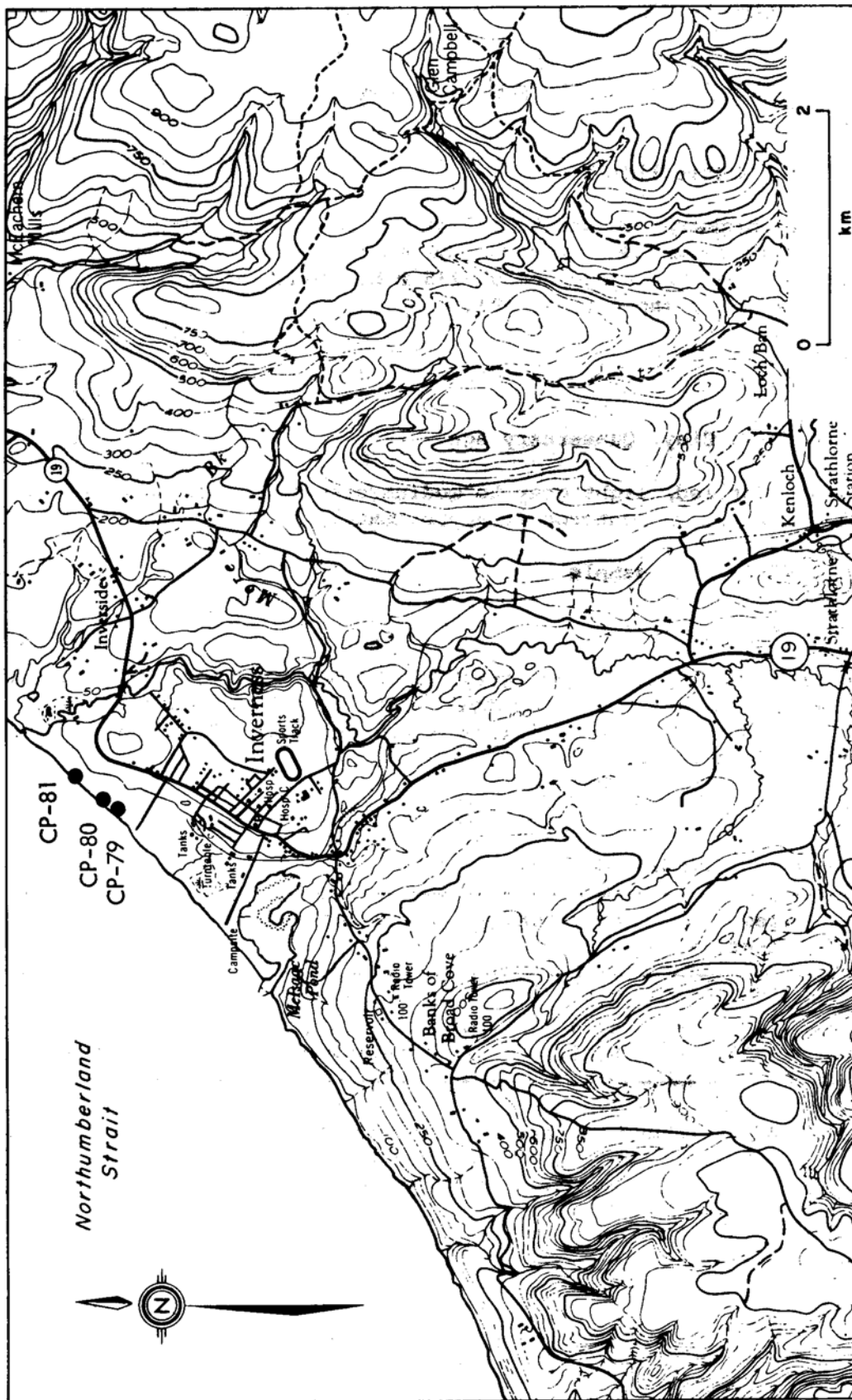
UNFIRED CHARACTERISTICS: Light grey, slightly calcareous clay containing some stones. Very good workability. Highly plastic. Water of plasticity 27.2%. Safe drying. Air shrinkage 5.9%. Modulus of rupture 232 p.s.i. Benzidine test negative.

P.C.E.: 15-

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	5.25	7.68	Greyish orange	Steel hard
04	6.95	4.23	Greyish orange	Steel hard
02	9.25	0.09	Pale yellowish brown	Steel hard

POTENTIAL USES: Earthenware, artware and structural products



Ref. Map 11-K-3
Figure 49. Location map for samples CP-79-81 (Inverness, Cape Breton Island)

INVERNESS COUNTY

Sample Number
CP-80

TOPOGRAPHICAL SHEET: 11K/03

LOCATION: On Highway 19 about 457 m north of the large oil tanks at Inverness there is a road going to the shore of the Northumberland Strait. The exposure is found along the shore 324 m northeast of the point where this road intersects the shore (Fig. 49).

UTM: 630690 E
5122020 N

GEOLOGICAL UNIT: Pictou Group, Pennsylvanian age

DESCRIPTION: Red shale exposed in the bed of an intermittent stream

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Shale

UNFIRED CHARACTERISTICS: Dark moderate reddish-brown, calcareous shale and siltstone. Poor workability. Fairly plastic. Water of plasticity 19.2%. Safe drying. Air shrinkage 5.4%. Benzidine test negative.

P.C.E.: 3+

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	5.30	4.95	Moderate reddish brown	Steel hard
04	6.60	3.10	Moderate reddish brown	Steel hard
02	7.95	0.85	Dark moderate reddish brown	Steel hard

POTENTIAL USES: Brick

INVERNESS COUNTY**Sample Number**

CP-81

TOPOGRAPHICAL SHEET: 11K/03

LOCATION: On Highway 19, about 457 m north of the large oil tanks at Inverness there is a road going to the shore of the Northumberland Strait. The outcrop is along the shore, 686 m northeast of the point where this road intersects the shoreline (Fig. 49).

UTM: 630910 E
5122310 N

GEOLOGICAL UNIT: Pictou Group, Pennsylvanian age

DESCRIPTION: Grey, fissile, weathered shale which exhibits extensive iron carbonate stains. The shale has a thickness in excess of 61 cm.

ATTITUDE OF BEDDING: 290° /17° NE**SAMPLE INTERVAL:** 61 cm channel sample**TYPE OF MATERIAL:** Shale

UNFIRED CHARACTERISTICS: Greyish-yellow-green, calcareous shale. Fair workability. Fairly plastic. Water of plasticity 20.4%. Safe drying. Air shrinkage 3.6%. Benzidine test negative.

P.C.E.: 4-**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	1.45	14.15	Moderate reddish orange	Hard
04	2.00	13.10	Pale reddish brown	Very hard
02	5.40	6.61	Moderate reddish brown	Steel hard

POTENTIAL USES: None

INVERNESS COUNTY

Sample Number
CP-82

TOPOGRAPHICAL SHEET: 11K/06

LOCATION: Broad Cove. On Highway 19 about 457 m north of the large oil tanks at Inverness there is a road going to the shore of the Northumberland Strait. The exposure is along the shore, approximately 2.7 km northeast of the point where this road intersects the shore (Fig. 50).

UTM: 632270 E
5123850 N

GEOLOGICAL UNIT: Clay, Quaternary age

DESCRIPTION: Red clay of undetermined thickness

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Clay

UNFIRED CHARACTERISTICS: Pale reddish-brown, highly calcareous clay containing a few stones. Very good workability. Very plastic. Water of plasticity 22.4%. Safe drying. Air shrinkage 6.3%. Modulus of rupture 255 p.s.i. Benzidine test negative.

P.C.E.: 3+

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	1.80	11.15	Light moderate reddish brown	Hard
04	2.00	8.34	Moderate reddish brown	Very hard
02	5.60	3.02	Moderate reddish brown	Steel hard

POTENTIAL USES: None

INVERNESS COUNTY

Sample Number

CP-84

TOPOGRAPHICAL SHEET: 11K/06

LOCATION: On a small unnamed brook approximately 1.6 km southwest of Munro Brook. The exposure is about 740 m southeast of the road going from Cranton Section to Margaree Forks (Fig. 51).

UTM: 651810 E
5132620 N

GEOLOGICAL UNIT: Windsor Group, Mississippian age

DESCRIPTION: Interbedded reddish-brown and dark grey shale, overlain by grey limestone. The outcrop ranges in thickness from 3-6 m and extends along the unnamed brook for approximately 557 m.

ATTITUDE OF BEDDING: 073° /24° SE

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Shale

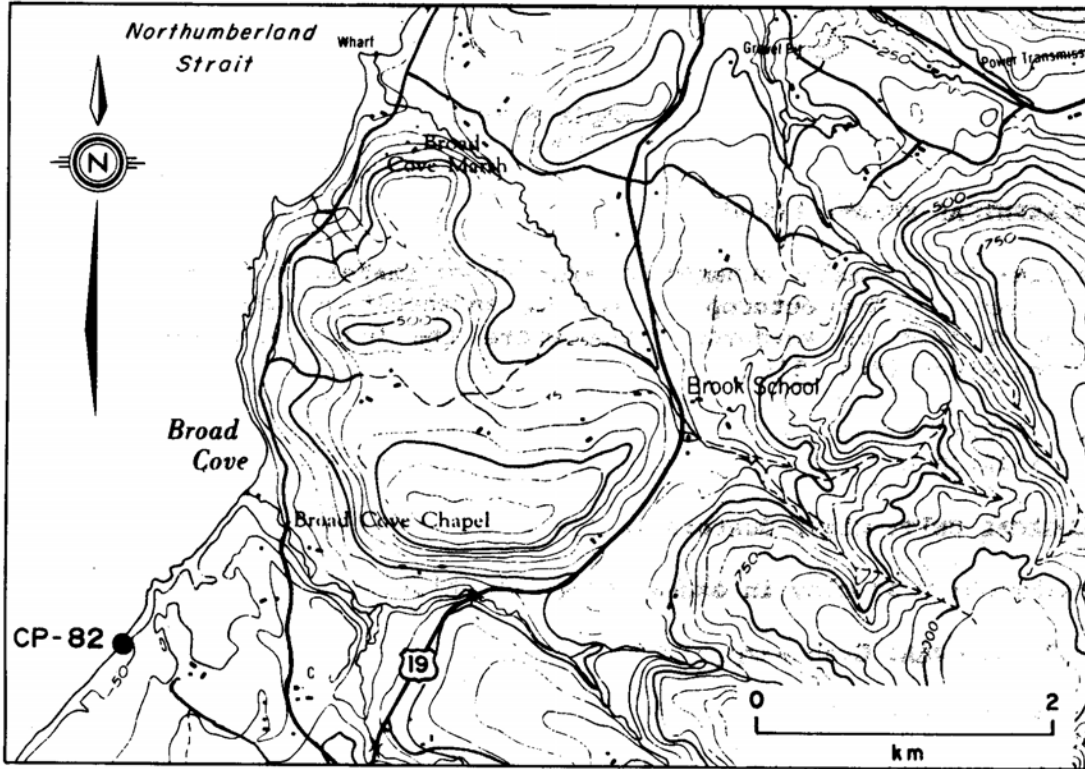
UNFIRED CHARACTERISTICS: Pale red-purple, noncalcareous shale and siltstone. Poor workability. Poorly plastic. Water of plasticity 15.2%. Safe drying. Air shrinkage 3.1%. Benzidine test negative.

P.C.E.: 5

FIRED CHARACTERISTICS:

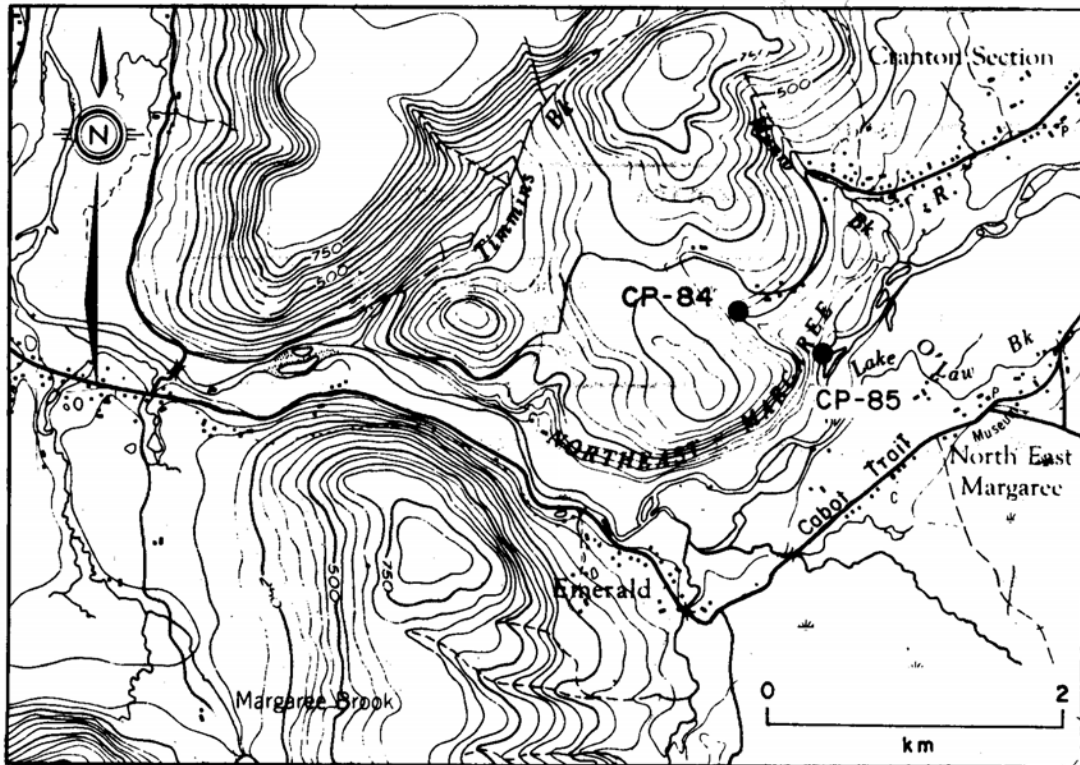
Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	1.75	9.51	Moderate reddish brown	Hard
04	2.80	7.54	Moderate reddish brown	Very hard
02	4.00	3.96	Moderate reddish brown	Steel hard

POTENTIAL USES: None



Ref. Map II-K-6

Figure 50. Location map for sample CP-82 (Broad Cove, Cape Breton Island)



Ref. Map II-K-6

Figure 51. Location map for samples CP-84, 85 (North East Margaree, Cape Breton Island)

INVERNESS COUNTY**Sample Number**

CP-85

TOPOGRAPHICAL SHEET: 11K/06

LOCATION: On a small unnamed brook, approximately 1.6 km southwest of Munro Brook. The outcrop is 1.6 km southeast of the road going from Cranton Section to Margaree Forks where the brook intersects Northeast Margaree River (Fig. 51).

UTM: 652210 E
5132430 N

GEOLOGICAL UNIT: Clay, Quaternary age**DESCRIPTION:** Grey clay in excess of 76 cm thick.**SAMPLE INTERVAL:** Grab sample**TYPE OF MATERIAL:** Clay

UNFIRED CHARACTERISTICS: Medium light grey, slightly calcareous clay containing gypsum. Very good workability. Very plastic. Water of plasticity 26.0%. Safe drying. Air shrinkage 4.4%. Modulus of rupture 140 p.s.i. Benzidine test negative.

P.C.E.: 4-**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	4.54	10.07	Moderate orange pink	Very hard
04	5.05	8.78	Greyish orange	Steel hard
02	7.20	5.15	Pale yellowish orange	Steel hard

POTENTIAL USES: Artware and structural products

INVERNESS COUNTY

Sample Number

CP-86

TOPOGRAPHICAL SHEET: 11K/07

LOCATION: Exposure on the eastern side of the road approximately 400 m south of the church at Kingross (Fig. 52).

UTM: 659590 E
5145060 N

GEOLOGICAL UNIT: Clay, Quaternary age

DESCRIPTION: Mottled greenish-grey and red clay extending along the road for about 50 m

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Clay

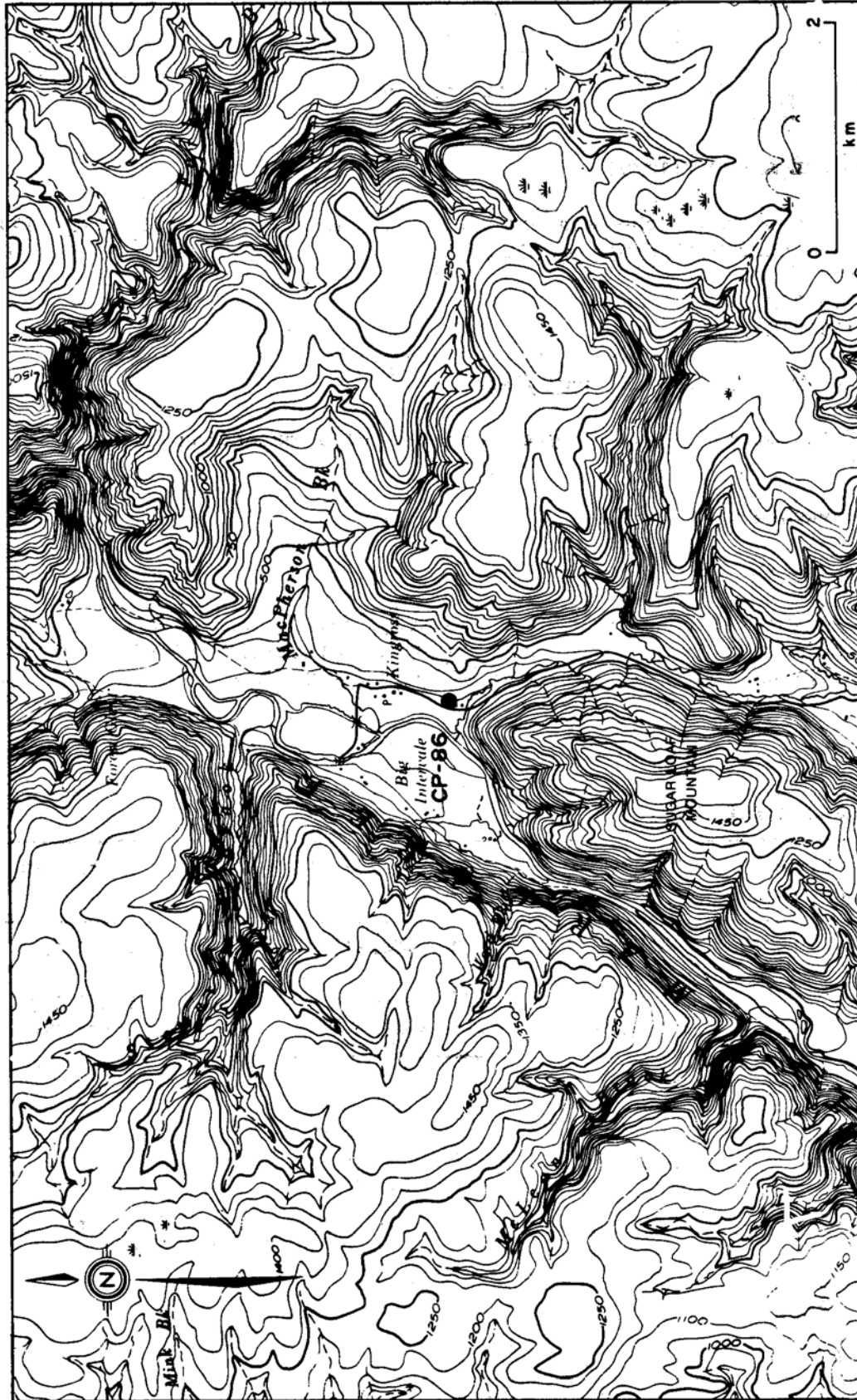
UNFIRED CHARACTERISTICS: Light greenish-grey, highly calcareous clay. Very good workability. Fairly plastic. Water of plasticity 16.0%. Safe drying. Air shrinkage 4.0%. Modulus of rupture 84 p.s.i. Benzidine test faint positive.

P.C.E.: 5

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	2.97	5.89	Light moderate reddish brown	Steel hard
04	5.03	3.64	Moderate reddish brown	Steel hard
02	7.09	0.53	Dark reddish brown	Steel hard

POTENTIAL USES: Brick



Ref. Map II-K-7

Figure 52. Location map for sample CP-86 (Kingross, Cape Breton Island)

INVERNESS COUNTY

Sample Number
CP-98

TOPOGRAPHICAL SHEET: 11F/14

LOCATION: On the southern side of the road going to River Denys from River Denys Centre. The exposure is in the first brook that crosses the road, approximately 265 m west of the bridge (Fig. 48).

UTM: 638770 E
5077240 N

GEOLOGICAL UNIT: Pleistocene clay, Quaternary age

DESCRIPTION: Red micaceous clay containing some gritty material. The out-crop extends along the southern bank of the brook for 3 m with a thickness of 30 cm.

SAMPLE INTERVAL: 30 cm channel sample

TYPE OF MATERIAL: Clay

UNFIRED CHARACTERISTICS: Pale brown, highly calcareous clay containing some sandy material. Good workability. Plastic. Water of plasticity 16.0%. Safe drying. Air shrinkage 5.9%. Modulus of rupture 214 p.s.i. Benzidine test negative.

P.C.E.: 3+

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	1.95	5.88	Pale reddish brown	Very hard
1	1.06	6.35	Pale reddish brown	Very hard
3	3.89	2.48	Dark moderate reddish brown	Steel hard

REMARKS: It appears this is a very small pocket of glacial clay overlying bedrock.

POTENTIAL USES: Common brick