

## VICTORIA COUNTY

## Sample Number

CP-87

TOPOGRAPHICAL SHEET: 11F/15

**LOCATION:** The occurrence is along the eastern shore of St. Patricks Channel, approximately 3.2 km south of Little Narrows (Fig. 58).

**UTM:** 655700 E  
5091790 N

**GEOLOGICAL UNIT:** Windsor Group, Mississippian age

**DESCRIPTION:** Grey, thinly bedded, highly fissile, micaceous shale. On some surfaces the shale has weathered to clay. The outcrop extends for about 46 m along the shore of St. Patricks Channel.

**ATTITUDE OF BEDDING:** 125° /55° SW

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Shale

**UNFIRED CHARACTERISTICS:** Light grey, highly calcareous shale. Very good workability. Highly plastic. Water of plasticity 26.8%. Safe drying. Air shrinkage 5.5%. Modulus of rupture 197 p.s.i. Benzidine test negative.

**P.C.E.:** 2-3 (some bloating)

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	7.91	1.38	Moderate reddish brown	Steel hard
04	7.61	1.08	Dark reddish brown	Steel hard
02	+0.71	0.39	Dark reddish brown	Steel hard

**POTENTIAL USES:** None

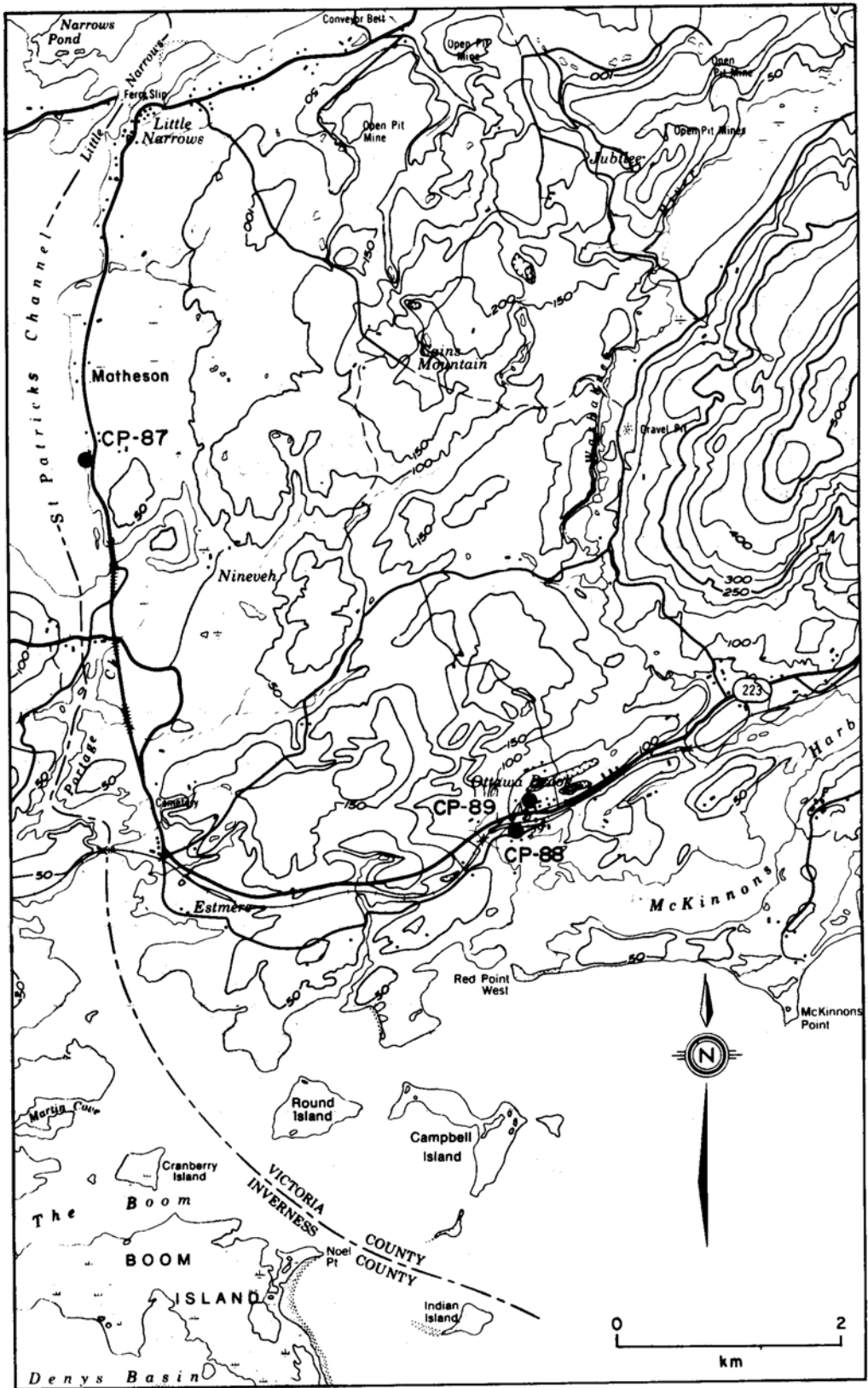


Figure 58. Location map for samples CP-87-89 (Estmere, Cape Breton Island)

**VICTORIA COUNTY**

**Sample Number**  
CP-88

**TOPOGRAPHICAL SHEET:** 11F/15

**LOCATION:** Southwest of the train overpass at Ottawa Brook, on the northern side of the road which goes to Estmere from Route 223 (Fig. 58).

**UTM:** 659540 E  
5088650 N

**GEOLOGICAL UNIT:** Clay, Quaternary age

**DESCRIPTION:** Mottled red and grey clay extending for approximately 61 m along the road.

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Clay

**UNFIRED CHARACTERISTICS:** Light brown (after grinding and mixing) , calcareous clay containing a few stones. Very good workability. Very plastic. Water of plasticity 24.8%. Safe drying. Air shrinkage 6.4%. Modulus of rupture 239 p.s.i. Benzidine test negative.

**P.C.E.:** 5

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	4.63	5.97	Moderate reddish brown	Steel hard
04	5.08	5.03	Moderate reddish brown	Steel hard
02	8.01	0.99	Dark moderate reddish brown	Steel hard

**POTENTIAL USES:** None

**VICTORIA COUNTY**

**Sample Number**

CP-89

**TOPOGRAPHICAL SHEET:** 11F/15

**LOCATION:** Exposure on the northern side of Route 223, approximately 400 m west of the school at Ottawa Brook (Fig. 58).

**UTM:** 659640 E  
5088810 N

**GEOLOGICAL UNIT:** Windsor Group, Mississippian age

**DESCRIPTION:** Grey shale containing fragments of gypsum. Upon weathering the shale breaks down to grey clayey-shale. The outcrop is discontinuous along the road for approximately 61 m.

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Shale

**UNFIRED CHARACTERISTICS:** Light grey, highly calcareous clayey-shale containing gypsum. Good workability. Plastic. Water of plasticity 24.0%. Safe drying. Air shrinkage 6.2%. Modulus of rupture 275 p.s.i. Benzidine test negative.

**P.C.E.:** 3-4

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	2.68	8.88	Moderate reddish orange	Hard to very hard
1	1.78	8.65	Moderate reddish orange	Very hard
3	6.04	3.31	Dark moderate reddish orange	Steel hard

**POTENTIAL USES:** Structural products

## VICTORIA COUNTY

## Sample Number

CP-90

TOPOGRAPHICAL SHEET: 11K/07

**LOCATION:** On the northern side of the road to Faders Point at Oyster Pond approximately 3.2 km northeast of the Englishtown Ferry (Fig. 59).

**UTM:** 691990 E  
5130610 N

**GEOLOGICAL UNIT:** Pleistocene clay, Quaternary age

**DESCRIPTION:** Micaceous, red clay containing organic and carbonaceous material. Thickness of the clay was determined to be about 15 cm.

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Clay

**UNFIRED CHARACTERISTICS:** Pale reddish-brown, noncalcareous clay containing sandy material. Very good workability. Highly plastic. Safe drying. Air shrinkage 8.3%. Modulus of rupture 324 p.s.i. Benzidine test negative.

**P.C.E.:** 2-3

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	6.72	4.75	Dark moderate reddish brown	Steel hard
04	9.01	0.13	Dark reddish brown	Steel hard
02	9.46	0.02	Dark reddish brown	Steel hard

**REMARKS:** The clay does not appear to be very extensive.

**POTENTIAL USES:** Earthenware, artware and structural products.



Ref. Map II-K-7

Figure 59. Location map for sample CP-90 (Faders Pt., Cape Breton Island)

## VICTORIA COUNTY

## Sample Number

CP-91

TOPOGRAPHICAL SHEET: 11K/08

**LOCATION:** The exposure is approximately 122 m southwest of the lighthouse at Black Rock Point (Fig. 60).

**UTM:** 700670 E  
5131060 N

**GEOLOGICAL UNIT:** Morien Group, Pennsylvanian age

**DESCRIPTION:** Grey to black shale, overlain by 20-30 cm of medium grey clay. The shale ranges in thickness from 30 cm to 3.6 m, is thinly bedded, very fissile, and shows extensive iron carbonate staining. The clay and shale are separated by a coal seam averaging 25 cm in thickness. The shale outcrops for 85 m along shore.

**ATTITUDE OF BEDDING:** Horizontal

**SAMPLE INTERVAL:** Channel sample across the top 46 cm

**TYPE OF MATERIAL:** Clay and shale

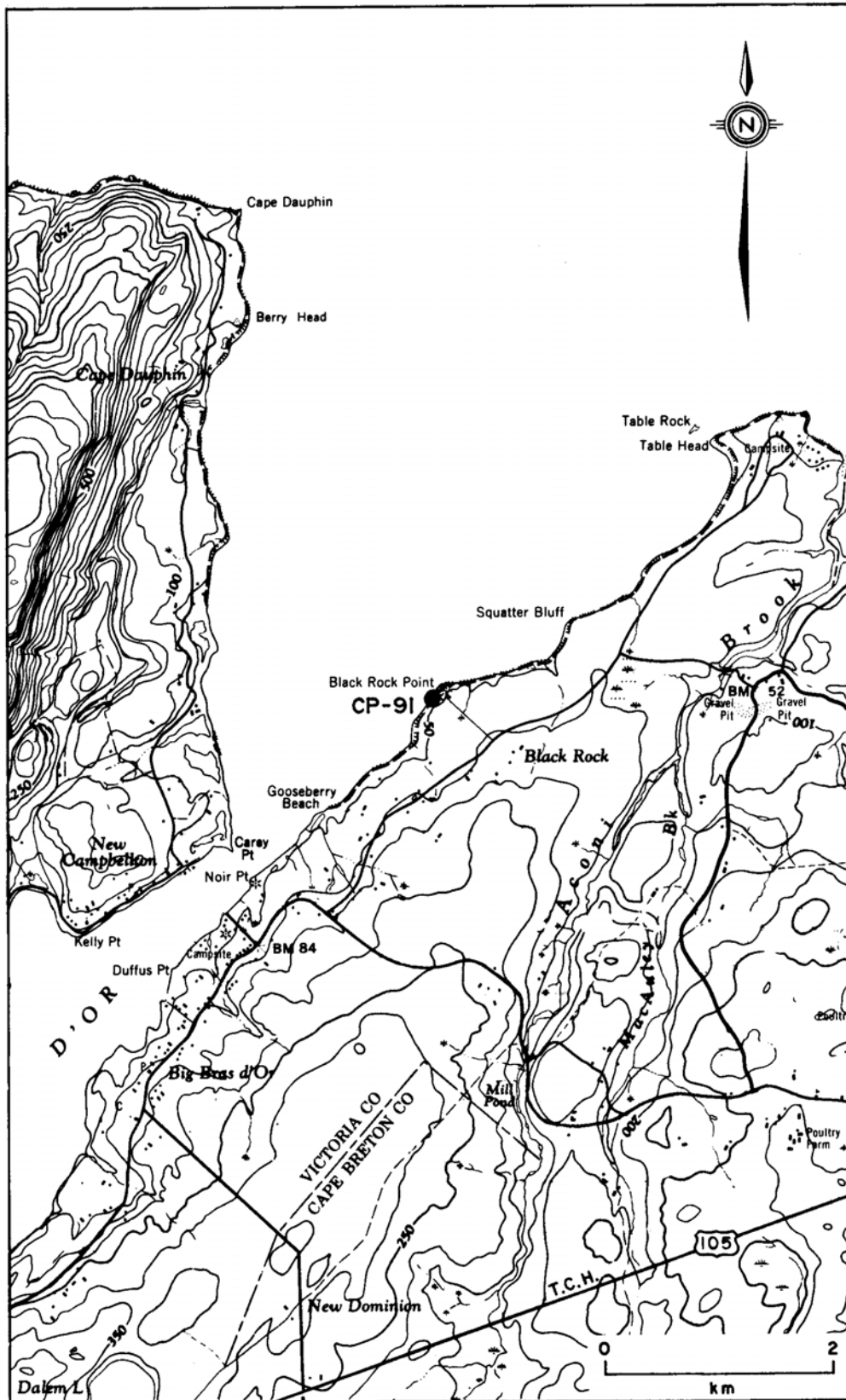
**UNFIRED CHARACTERISTICS:** Light grey, noncalcareous clay and shale. Good workability. Plastic. Water of plasticity 22.0%. Safe drying. Air shrinkage 4.6%. Modulus of rupture 131 p.s.i. Benzidine test faint positive.

**P.C.E.:** 14

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	2.62	11.00	Moderate orange pink	Hard
04	4.20	7.88	Moderate reddish orange	Very hard
02	5.25	5.13	Pale reddish brown	Steel hard

**POTENTIAL USES:** Structural products



Ref. Map II-K-8  
Figure 60. Location map for sample CP-91 (Black Rock Pt., Cape Breton Island)