

## PICTOU COUNTY

## Sample Number

CP-1

TOPOGRAPHICAL SHEET: 11E/10

**LOCATION:** A gravel pit adjacent to the cemetery, approximately 400 m southeast of the Aberdeen Hospital in New Glasgow (Fig. 54).

**UTM:** 527510 E  
5046010 N

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

**DESCRIPTION:** Reddish-brown clay having outcrop dimensions of 90 cm by 60 cm and a thickness of 15 cm.

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Clay

**UNFIRED CHARACTERISTICS:** Brown, noncalcareous clay containing small stones. Very good workability. Very plastic. Water of plasticity 27.5%. Good extrudability. Safe drying. Air shrinkage 5.6%. Modulus of rupture 357 p.s.i. Benzidine test negative.

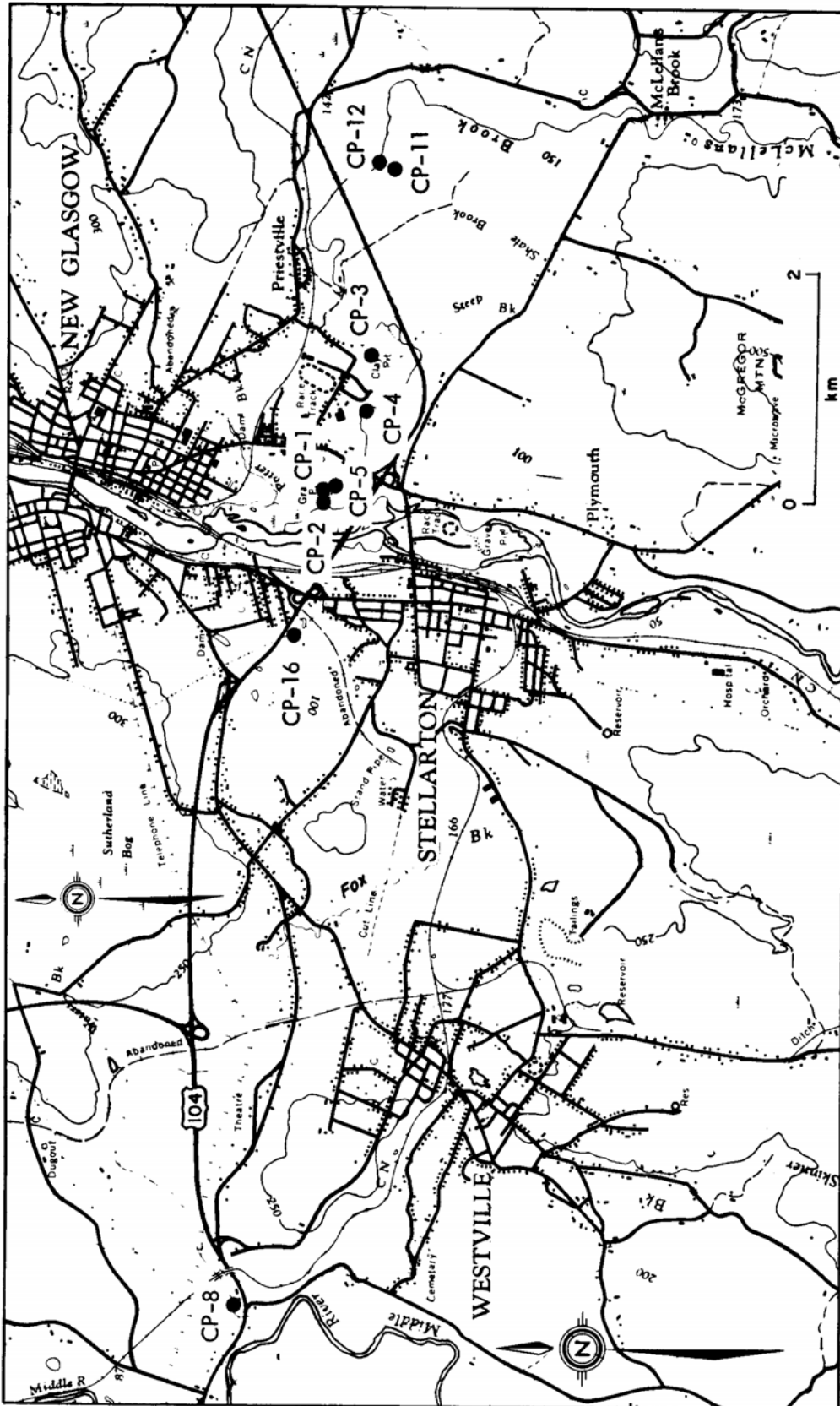
**P.C.E.:** 3+ (some bloating)

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
05	6.90	3.10	Moderate reddish brown	Steel hard
04	9.05	0.57	Moderate reddish brown	Steel hard
02	9.05	0.45	Moderate reddish brown	Steel hard

**REMARKS:** Slight scumming when fired. The extent of the occurrence appears to be small.

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



Ref. Map II-E-10

Figure 54. Location map for samples CP-1-5, 8, 11, 12, 16 (Stellarton)

**PICTOU COUNTY**

**Sample Number**

CP-2

**TOPOGRAPHICAL SHEET:** 11E/10

**LOCATION:** A gravel pit adjacent to the cemetery approximately 400 m southeast of the Aberdeen Hospital in New Glasgow (Fig. 54).

**UTM:** 527460 E  
5046010 N

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

**DESCRIPTION:** Medium grey clay containing some grit

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Clay

**UNFIRED CHARACTERISTICS:** Grey, calcareous clay containing stones. Good workability. Plastic. Water of plasticity 21.3%. Cracks with rapid drying at 85°C. Air shrinkage 4.8%. Modulus of rupture 235 p.s.i. Benzidine test faint positive.

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

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
05	4.70	6.80	Moderate reddish orange	Steel hard
04	5.78	3.83	Pale reddish brown	Steel hard
02	7.55	0.72	Pale reddish brown	Steel hard

**POTENTIAL USES:** Suitable for most structural products.

**PICTOU COUNTY**

**Sample Number**

CP-3

**TOPOGRAPHICAL SHEET:** 11E/10

**LOCATION:** A clay pit located approximately 480 m southeast of the race track in New Glasgow (Fig. 54).

**UTM:** 528450 E  
5045550 N

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

**DESCRIPTION:** Interbedded grey and brown shale

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Shale

**UNFIRED CHARACTERISTICS:** Grey, noncalcareous shale. Fair workability. Fairly plastic. Water of plasticity 17.2%. Cracks with rapid drying at 85°C. Air shrinkage 4.5%. Modulus of rupture 139 p.s.i. Benzidine test negative.

**P.C.E.:** 3+ (bloating)

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
04	5.25	6.23	Moderate brown	Very hard
02	5.24	5.09	Moderate brown	Very hard
1	6.45	4.36	Dark brown	Steel hard

**POTENTIAL USES:** Used in the manufacture of building brick.

## PICTOU COUNTY

## Sample Number

CP-4

TOPOGRAPHICAL SHEET: 11E/10

**LOCATION:** Exposure on the southern side of McLellans Brook in New Glasgow (Fig. 54).

**UTM:** 528120 E  
5045770 N

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

**DESCRIPTION:** Grey-brown clay containing grit. The outcrop is 2.4 m long, 1 m wide, and 30 cm thick.

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Clay

**UNFIRED CHARACTERISTICS:** Brown, noncalcareous clay containing sandy material and a few stones. Fair workability. Poorly plastic. Water of plasticity 23.6%. Slight cracking with rapid drying at 85°C. Air shrinkage 4.4%. Modulus of rupture 142 p.s.i. Benzidine test negative.

**P.C.E.:** 8+

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	4.70	9.24	Moderate reddish brown	Very hard
1	5.05	8.77	Moderate reddish brown	Very hard
6	8.23	2.79	Dark reddish brown	Steel hard

**POTENTIAL USES:** None

**PICTOU COUNTY**

**Sample Number**  
CP-5

**TOPOGRAPHICAL SHEET:** 11E/10

**LOCATION:** Shale forms the northeastern bank of a gravel pit adjacent to the cemetery, about 400 m southeast of Aberdeen Hospital in New Glasgow (Fig. 54).

**UTM:** 527510 E  
5045990 N

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

**DESCRIPTION:** Dark to medium grey shale

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Shale

**UNFIRED CHARACTERISTICS:** Grey, highly calcareous shale. Fair workability. Fairly plastic. Water of plasticity 14.4%. Safe drying. Air shrinkage 3.1%. Modulus of rupture 71 p.s.i. Benzidine test negative.

**P.C.E.:** 3+ (bloating)

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	1.55	11.27	Pale red	Hard to very hard
1	2.41	10.71	Pale red	Very hard
3	2.41	9.02	Pale red	Very hard

**POTENTIAL USES:** None

## PICTOU COUNTY

## Sample Number

CP-6

TOPOGRAPHICAL SHEET: 11E/10

LOCATION: McBean Coal Mine waste dump in Thorburn (Fig. 55).

UTM: 534800 E  
5044780 N

GEOLOGICAL UNIT: Stellarton Group, Pennsylvanian age

DESCRIPTION: Dark grey shale mixed with coal and unconsolidated organic material.

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Shale

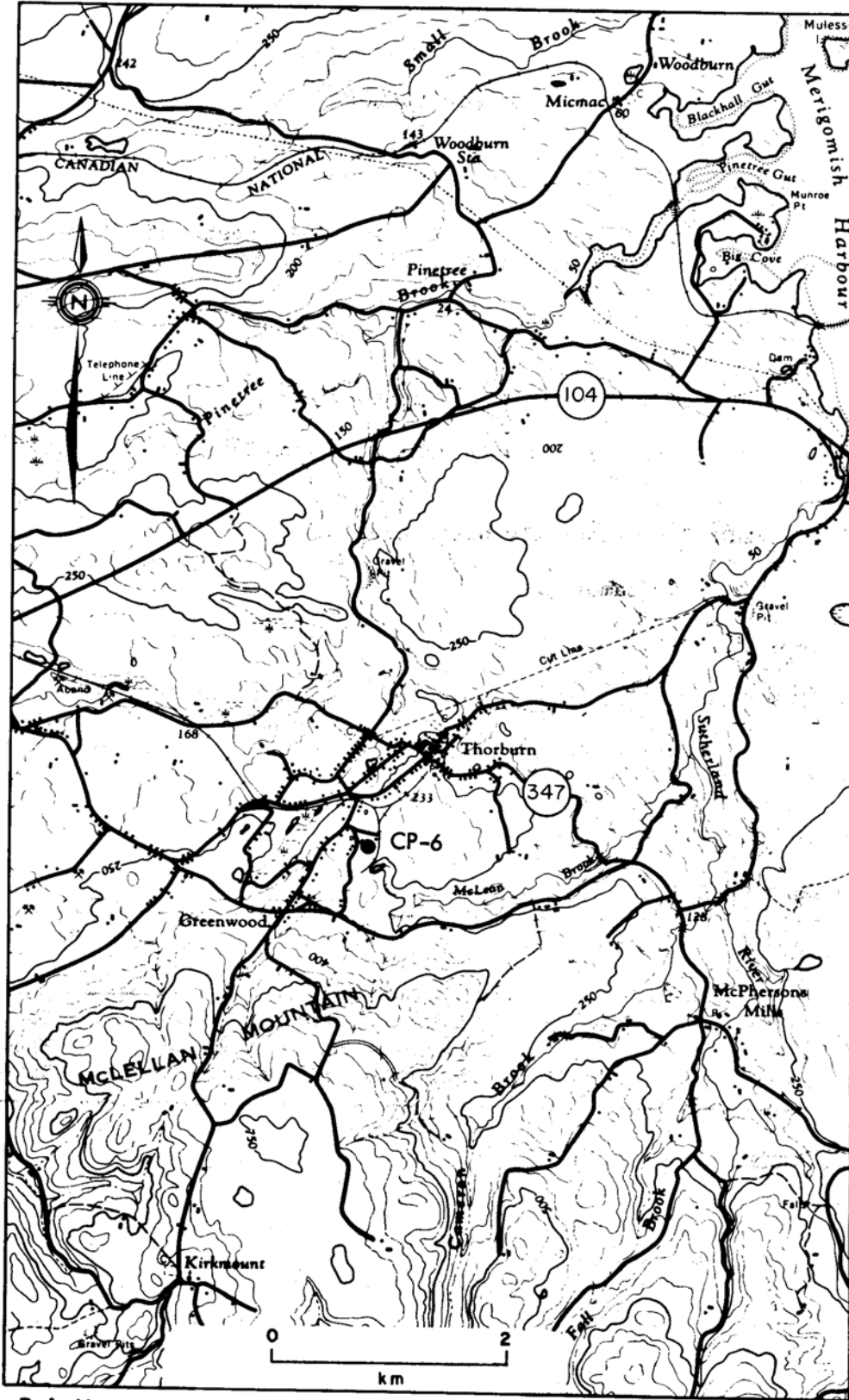
UNFIRED CHARACTERISTICS: Black, noncalcareous shale containing coal. Poor workability. Poorly plastic. Water of plasticity 16.0%. Safe drying. Air shrinkage 2.8%. Benzidine test negative.

P.C.E.: 5-6 (bloating)

## FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	3.61	13.17	Light brown	Hard to very hard
1	4.30	12.10	Brown	Very hard
3	5.64	11.16	Moderate pale reddish brown	Very hard

POTENTIAL USES: None



Ref. Map II-E-10

Figure 55. Location map for sample CP-6 (Thorburn)

**PICTOU COUNTY**

**Sample Number**

CP-8

**TOPOGRAPHICAL SHEET:** 11E/10

**LOCATION:** About 61 m north of Highway 104, east of Middle River, approximately 3.2 km northwest of Westville (Fig. 54).

**UTM:** 520310 E ,  
5046750 N

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

**DESCRIPTION:** Reddish-brown, sandy clay occurring in a thin band approximately 15 cm thick

**ATTITUDE OF BEDDING:** Essentially horizontal

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Clay

**UNFIRED CHARACTERISTICS:** Brown, noncalcareous clay containing soil material. Poor workability. Poorly plastic. Water of plasticity 24.0%. Safe drying. Air shrinkage 4.0%. Modulus of rupture 92 p.s.i. Benzidine test negative.

**P.C.E.:** 12

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	1.57	15.97	Moderate reddish orange	Soft
1	1.39	16.06	Moderate reddish orange	Hard
6	4.15	11.06	Moderate reddish brown	Hard

**POTENTIAL USES:** None

**PICTOU COUNTY**

**Sample Number**  
CP-10

**TOPOGRAPHICAL SHEET:** 11E/10

**LOCATION:** Exposure 46 m south of the Rockfield Road, on Quarry Brook. Located 2 km northwest of the intersection of Rockfield Road and Route 376, near Durham (Fig. 56).

**UTM:** 512060 E  
5051130 N

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

**DESCRIPTION:** Mottled grey-brown, sandy clay. Contains organic material and shows iron carbonate stains. Outcrop occurs intermittently along Quarry Brook for approximately 31 m.

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Clay

**UNFIRED CHARACTERISTICS:** Brown, noncalcareous clay containing sandy material. Poor workability. Poorly plastic. Water of plasticity 22.8%. Safe drying. Air shrinkage 5.4%. Benzidine test negative.

**P.C.E.:** 11-12

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	1.41	14.33	Moderate reddish orange	Hard
1	1.77	12.98	Moderate reddish brown	Hard
6	3.88	8.49	Dark moderate red	Hard

**POTENTIAL USES:** None

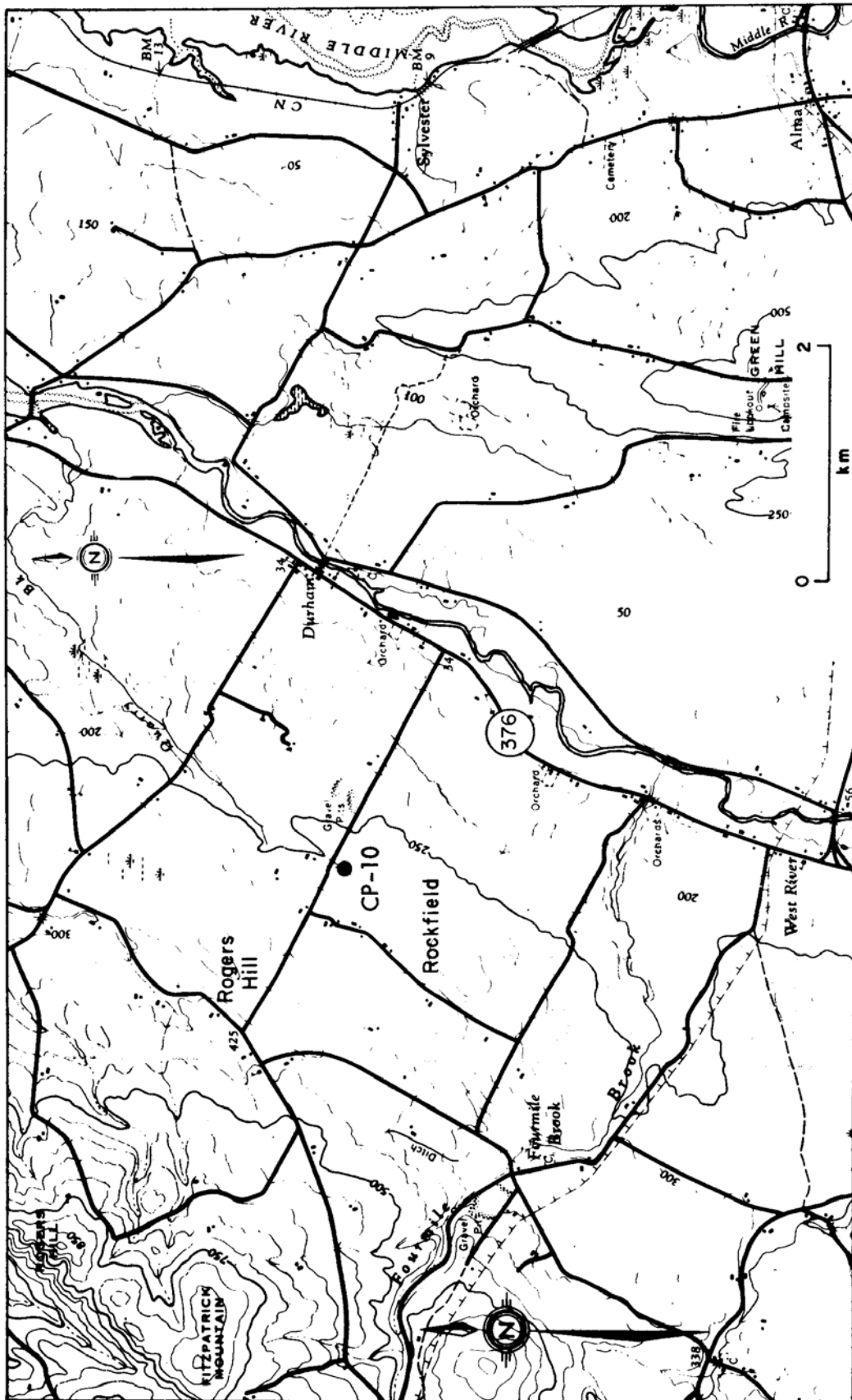


Figure 56. Location map for sample CP-10 (Durham)

Ref. Map II-E-10

**PICTOU COUNTY**

**Sample Number**  
CP-11

**TOPOGRAPHICAL SHEET:** 11E/10

**LOCATION:** Outcrop occurs along the Shale Brook about 2.2 km north of the road which goes to Stellarton from McLellans Brook (Fig. 54).

**UTM:** 530290 E  
5045560 N

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

**DESCRIPTION:** Dark grey, fossiliferous shale. Thinly to medium bedded and fissile. Outcrop is continuous for 270 m and has a visible thickness of 1.5 m.

**ATTITUDE OF BEDDING:** 045° /03° SE

**SAMPLE INTERVAL:** 1.5 m channel sample

**TYPE OF MATERIAL:** Shale

**UNFIRED CHARACTERISTICS:** Dark grey, calcareous shale. Poor workability. Poorly plastic. Water of plasticity 16.4%. Safe drying. Air shrinkage 3.3%. Benzidine test negative.

**P.C.E.:** 2+

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
04	4.64	10.53	Pale reddish brown	Hard
02	2.77	10.10	Pale reddish brown	Very hard
1	4.66	8.43	Moderate reddish brown	Very hard

**POTENTIAL USES:** None

**PICTOU COUNTY**

**Sample Number**  
CP-12

**TOPOGRAPHICAL SHEET:** 11E/10

**LOCATION:** Southeast of Priestville, at the intersection of McLellans Brook and Shale Brook (Fig. 54).

**UTM:** 530320 E  
5045660 N

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

**DESCRIPTION:** Dark blue-grey shale showing extensive iron carbonate staining in some beds. It is thinly bedded with a total thickness of 6 m.

**ATTITUDE OF BEDDING:** 044° /03° SE

**SAMPLE INTERVAL:** Channel sample across the lower 90 cm of the exposure.

**TYPE OF MATERIAL:** Shale

**UNFIRED CHARACTERISTICS:** Brownish-grey, slightly calcareous shale. Poor workability. Fairly plastic. Water of plasticity 14.4%. Safe drying. Air shrinkage 2.7%. Benzidine test negative.

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

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
04	2.75	8.81	Pale reddish brown	Hard to very hard
02	4.10	7.07	Pale reddish brown	Very hard
1	3.44	6.80	Pale reddish brown	Steel hard

**POTENTIAL USES:** Common brick and face brick.

**PICTOU COUNTY**

**Sample Number**  
CP-16

**TOPOGRAPHICAL SHEET:** 11E/10

**LOCATION:** A coal mine dump behind the Heather Motel in Stellarton (Fig. 54).

**UTM:** 526240 E  
5046330 N

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

**DESCRIPTION:** Grey to dark grey, iron stained shale. It contains carbonaceous material, pieces of coal, wood and rock.

**SAMPLE INTERVAL:** Grab sample

**TYPE OF MATERIAL:** Shale

**UNFIRED CHARACTERISTICS:** Dark grey, slightly calcareous shale. Poor workability. Poorly plastic. Water of plasticity 14.0%. Safe drying. Air shrinkage 2.1%. Benzidine test negative.

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

**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	4.44	11.08	Pale reddish brown	Hard
1	4.94	9.91	Pale reddish brown	Very hard
3	5.11	9.10	Moderate red	Very hard

**POTENTIAL USES:** None