



**LITHOFACIES CLASSIFICATION, STELLARTON FORMATION, STELLARTON BASIN (WEST HALF)**

LITHOFACIES CODE	LITHOLOGY	USUAL	CHARACTERISTICS	MINOR STRUCTURES AND/OR TECTONIC PROPERTIES	REMARKS
G1	Clay-supported sandstone	pale grey	- pale to medium grey	- massive or trough cross-bedded	- rare truncated lenses
G2	Matrix-supported conglomerate	pale grey	- mud to fine sand and pebbles to cobble	- matrix supported	- rare
G3	Massive sandstone	pale grey to grey-brown	- fine to medium sand	- blocky bedded sandstone	- carbonaceous shales
G4	Horizontally bedded sandstone	pale grey to grey-brown	- very fine to coarse sand	- thin bedded sandstone	- carbonaceous shales
G5	Through cross-bedded sandstone	greyish brown to grey-brown	- very fine to coarse sand	- trough cross-bedded sandstone	- carbonaceous shales and well preserved plant remains
G6	Wegged sandstone	pale grey to grey-brown	- very fine to fine sand	- ripple marks on bedding	- carbonaceous shales
G7	Interbedded sandstone and siltstone	colour-banded pale grey and dark grey	- fine sand and silt	- thin bedded (less than 1 m thick)	- carbonaceous shales
G8	Interbedded siltstone and claystone	colour-banded dark grey and pale grey	- silt and fine sand	- thin bedded (less than 1 m thick)	- carbonaceous shales
G9	Ph (clay) massive siltstone	grey to dark grey	- silt	- massive, structureless	- carbonaceous shales
G10	Ph (clay) massive claystone	bleached grey to pale grey and black	- clay to silty clay	- massive, structureless	- carbonaceous shales
G11	Laminated claystone or siltstone	colour-banded bleached grey and dark grey	- clay and silt	- complete of bleached grey claystone and dark grey claystone beds	- rare plant fragments
G12	Carbonaceous shale	dark grey	- clay to silty clay	- fissile	- plant fragments particularly <i>Trilobites</i>
G13	Flint shale	dark grey to black	- clay to silt	- fissile, non-laminated	- carbonaceous shales
G14	Massive oil shale (Cape shale)	black with a blue or grey tinge	- clay to fine sand	- massive	- carbonaceous shales
G15	Shellite (harder oil shale)	brownish black	- clay to fine sand	- powdery yellow brown streak	- plant remains
G16	Only shale and sandy coal	black	- clay and sand	- interbedded shale and coal	- carbonaceous shales
G17	Coal bright, argillaceous, bright and dull bedded, dull and bright bedded, dull	black	- w/s non-lamination	- micaceous	- carbonaceous shales
G18	Bedded dolomite	buff to tan	- w/s non-lamination	- massive, structureless (1.5 m thick)	- carbonaceous shales

- SYMBOLS**
- Bedding attitude (inclined, vertical, overturned)
  - Outcrop, limits of exposure observed
  - Outcrop/throughout, limits of exposure inferred
  - Small outcrop
  - Lithological contact, inferred, observed
  - Base of coal seam outcrop, inferred, observed
  - Inferred outcrop patterns are projected to surface from outcrop and drillhole information
  - Fault with teeth in downthrown direction, inferred, observed
  - Fault with arrows indicating direction of strike-slip movement, inferred, observed
  - Anticline axis, inferred and observed showing plunge direction and amount
  - Syncline axis, inferred and observed showing plunge direction and amount
  - Slope entrance
  - Coal exploration pit
  - Start of traverse, number and direction indicated
  - Highway exposure, number and direction of traverse where applicable indicated

**Lithologic Nomenclature**

The addition of symbols serves to modify the lithologic description of a unit.

- Indicates that the unit is comprised of interbedded lithotypes; e.g. GcShSr represents interbedded Gc Sh and Sr
- Indicates that the unit grades from one lithotype to another; e.g. Gc to Sr
- Indicates that the unit is comprised of a sequence of lithotypes listed in the order in which they were encountered along the traverse; e.g. Sr, Sh, Sr
- Indicates that the unit is rooted; i.e. Fm1 is a rooted massive mudstone/siltstone
- Indicates that the unit is bioturbated/irregular; e.g. Sr is an interbedded sandstone and siltstone lithotype in which bioturbation is ubiquitous
- Indicates section within red bed units (e.g. Skinner Brook Member) rich in carbonaceous debris
- Indicates thin coal seams or coaly laminae

- DIAMOND DRILLHOLE IDENTIFICATION**
- N.S. Dept. of Mines and Energy (Coal Inventory P-Series)
  - N.S. Dept. of Mines and Energy (N.S. Series)
  - Suncor Incorporated (AP Series)
  - Novacorp Engineering (E and P Series)
  - Acadia Coal Company (ACC Series)
  - G. Wilsney Canada Limited
  - Pioneer Coal Company

**GEOLOGICAL MAP**  
**of**  
**THE STELLARTON BASIN (WEST HALF)**  
 PICTOU COUNTY, NOVA SCOTIA  
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 1989  
 NOVA SCOTIA DEPARTMENT OF MINES AND ENERGY

Scale 1:5000

Grid shown is the (ATS) N.S. 3° MTM Projection

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