



Nova Scotia

BLASTER'S LOG BOOK

Equivalent to Form 2, Appendix A of the
General Blasting Regulations made pursuant to the
Occupational Health and Safety Act

Province of Nova Scotia
Halifax, Nova Scotia
June, 2001

BLASTER'S LOG BOOK

Blaster's Name: _____

Blaster's Certificate Number: _____

Blaster's Mailing Address: _____

Telephone Numbers: Work _____ Home _____

IMPORTANT

BLASTING RECORDS

1. Subsection 8(1) of the General Blasting Regulations of the Nova Scotia Occupational Health and Safety Act requires every blaster who performs or is responsible for a blast to maintain a log book or equivalent record recording the information described in this booklet. The purpose of a log book is to record important information regarding each blasting job performed by a blaster.

2. It is also important to maintain log books, so blasters have evidence of their specific experience in blasting operations when they are seeking to obtain a blaster's certificate.

3. The General Blasting Regulations also require employers to ensure that blasters keep up-to-date records of their blasting operations. Therefore, your employer or supervisor is entitled to see your log book to ensure adequate records are being kept.

If a blaster is self-employed, this section of the General Blasting Regulations regarding log books also applies to self-employed blasters.

Blasters must keep this log book for at least three years.

Proper use of this log will provide a useful record of the exact date, time and details of all shots fired, and serve as a handy reference and constant check on proper blasting methods.

INSTRUCTIONS FOR USE OF LOG

Fill in the blaster's name and personal information on the first page. At each blast, fill in the name of company, and name of project.

Blasting area shown at top of each page should be as specific as possible. Data for each blast should be entered on separate pages, and an individual sketch made. Location of individual shots should be identified in the sketch.

"Notes" made on pages not from this book should always identify the shot to which they refer.

The blaster should sign on the line at the bottom of the page and should keep this book available for at least three years.

POWDER FACTOR CALCULATION

Road Cut or Quarry Bench

Hole Diameter	2 3/4"	Pattern	6' x 6'
Face Depth	30 feet	Sub-drill	3 feet
Hole Depth	33 feet	Collar	6 feet
Explosive Depth	27 test	Toe Load	3 feet Column - 24 feet

From Quick Facts or Blaster's Guide, select an appropriate cartridge explosive for the toe load (density of 1.20) and ANFO for the column load (density at .84).

Referring to the Quick Facts or Blaster's Guide Tables the charge weights for the toe and column loads can be calculated as follows:

TOE LOAD

(a) Loading a 2" x 16" product with a density of 1.0 into a 2 3/4" hole it should compact to 2 1/2" diameter resulting in a weight of 2.13 lbs/ft.

(b) If the product to be loaded in the bottom 3 feet has a density of 1.20, the charge weight is obtained by multiplying $1.20 \times 2.13 \times 3 \text{ feet} = 7.8 \text{ lbs}$.

COLUMN LOAD

(a) Loading a bulk product with a density of 1.0 in a 2 3/4" hole results in a charge weight of 2.57 lbs/ft.

(b) If the 24 feet column of ANFO has a density of .84 the charge weight is obtained by multiplying $.84 \times 2.57 \times 24 \text{ feet} = 51.8 \text{ lbs}$.

Calculate Cubic Yards per Hole by multiplying $\frac{\text{burden} \times \text{spacing} \times \text{depth}}{27} = \frac{6 \times 6 \times 30}{27}$

Powder Factor: $\frac{\text{Pounds/Hole}}{\text{Cu. Yds/Hole}} = \frac{59.6}{40} = 1.48 \text{ lbs/cu. yard}$

Form 2

BLASTER'S LOG

Name of Company: _____

Project: _____

Blast # _____ Date _____ Time _____

Distance from nearest residence or public or occupied structure or public road

Distance from nearest other structure _____

Drilling and Loading Data:

No. of Holes	Hole Diam.	Hole Depth	Burden	Spacing	lbs/kg Per Hole	Collar	Type of Explosives	Type of Detonator

Total Weight of Explosives in Blast Kg _____ lbs. _____

Maximum Weight of Explosives per Delay Kg _____ lbs. _____

Initiation Method: Non-Electric Electric
 _____ Safety Fuse Assembly _____ E B Detonators
 _____ Detonator Cord _____ Period Detonators
 _____ Nonel Delay _____ Series
 _____ M S Connectors _____ Sequential

Number of Detonators _____ Period Numbers _____

Resistance of Each Series in Ohms:

Series #1 _____ #2 _____ #3 _____ #4 _____ #5 _____
 #6 _____ #7 _____ #8 _____ #9 _____ #10 _____

Resistance at Blasting Machine in Ohms:

Series #1 _____ #2 _____ #3 _____ #4 _____ #5 _____
 #6 _____ #7 _____ #8 _____ #9 _____ #10 _____

Type of Warning Signal Used _____

Blasting Mats Used _____ YES _____ NO
 Warning Signs Posted _____ YES _____ NO
 Airblast Measurement _____ YES _____ NO
 Were Accesses Guarded _____ YES _____ NO
 Vibration Measurement _____ YES _____ NO

