



## Window Sampling

### Operating Instructions Cobra Percussion Drill & Windowless Sampler

#### TABLE OF CONTENTS



1. STEP-BY-STEP GUIDE	2
1.1 Assembling the liner pre-loader	2
1.2 Loading the liner onto the liner pre-loader	2
1.3 Preparing the windowless sampler for liner loading	3
1.4 Loading the liner into the windowless sampler	3
1.5 Loading the core catcher *OPTIONAL	3
1.6 Closing the system with the cutting shoe	3
1.7 Preparing the top end of windowless sampler	3
1.8 Prepare for drilling	4
1.9 Time to drill!	4
1.10 Assembling the sampler extraction unit	5
1.11 Extracting the windowless sampler	5
1.12 Removing the sample from windowless sampler	6
1.13 Wrapping up	6
2. ITEM OVERVIEW	7
2.1 The liner unit	7
2.2 The sampler unit	7
2.3 The drill unit	7
2.4 The sampler extractor unit	8



## Window Sampling

### 1. STEP-BY-STEP GUIDE

#### 1.1 Assembling the liner pre-loader

A)



B)



C)



#### 1.2 Loading the liner onto the liner pre-loader

D)



E)



- Ensure red arrow is as straight as possible
- Leave 'liner tip' (liner must exceed the metal casing by 1cm)

F)



G)



- Unscrew bottom and remove 'loader cylinder' to other side
- Insert 'liner guide' & push through

H)



- Fit rubber band over liner and into the groove in the liner guide



## Window Sampling

### 1.3 Preparing the windowless sampler for liner loading

I)



- Screw 'liner sampler adapter' to windowless sampler

### 1.4 Loading the liner into the windowless sampler

J)



- Insert 'liner unit' into the 'liner sampler adapter'

### 1.5 Loading the core catcher \*OPTIONAL

K)



- Insert 'core catcher' OR skip to point 1.6/L  
- Only use core catcher in very 'sloppy' conditions!

### 1.6 Closing the system with the cutting shoe

L)



- Screw 'cutting shoe' onto the end of windowless sampler

### 1.7 Preparing the top end of windowless sampler

M)



Screw in 'sampler top'  
- The windowless sampler unit is now complete!



## Window Sampling

### 1.8 Prepare for drilling



N)

- Manually jam sampler into ground (cutting shoe end)
- Screw 'coupling sleeve' into 'sampler top'
- Screw 'cobra adapter' into the other end of the 'coupling sleeve'

### 1.9 Time to drill!

O)



- Start drill on metal plate on the ground & let run 5mins & stop
- \*Note: start in 'choke' mode/drill in 'run' mode/red button = stop
- Place drill on 'cobra adapter' (Top of sampler)
- Start drill – stabilise drill with two hands and let the drill do all the work
- Stop drill when 'sampler top' reaches groundlevel
- Remove drill
- Unscrew 'cobra adapter'





## Window Sampling

### 1.10 Assembling the sampler extraction unit

P)



- Place bottom plate over sampler top
- Screw in extension rod
- Place PVC pipes into bottom plate
- Place top plate on PVC pipes

Q)



- Place rod puller w/filling ring onto top plate
- Place clamping bucket over filling ring
- Place clamping jaw around extension rod inside clamping bucket
- Place levers inside lever holes on the rod puller unit.

### 1.11 Extracting the windowless sampler

R)



- Pump levers simultaneously
- Remove extension rod halfway through pumping
- Stop pumping when the bottom of the sampler top reaches the top plate
- Disassemble sample extraction unit and remove sampler.





## Window Sampling

### 1.12 Removing the sample from windowless sampler

S)



- Place sampler on a surface above the ground and remove cutting shoe
- Gently remove the liner unit and attached sample



T)



- Gently remove liner unit from sample
- Manually remove blocked portion of sample from the metal liner casing
- Cut liner open and remove sample

### 1.13 Wrapping up

U)



- Disassemble sample and all couplings
- Thoroughly clean all threading with wire brush.





## Window Sampling

### 2. ITEM OVERVIEW

2.1 The liner unit:



2.2 The sampler unit:



A) Liner unit adaptor



B) Windowless sampler



C) Core catcher



D) Cutting shoe



E) Sampler top

2.3 The drill unit:



F) Coupling sleeve



G) Cobra adaptor



H) Cobra drill



## Window Sampling

### 2.4 The sampler extractor unit:



I) Bottom plate



J) Extension rod



K) KVC pipes



L) Top plate



M) Rod puller w/filling ring



N) Clamping bucket



O) Clamping jaw



P) Levers