**Contamination Detection, Detailed Soil Classification** - Conventional geophysical sensors offer a general “picture” of soil composition, but cannot provide detailed information. VERTEK’s Video Cone provides a high resolution view of the soil in real time, allowing the operator to visually detect or confirm the presence of non-aqueous phase liquid contaminants, such as creosote, coal tar, and gasoline. The Video Cone also shows soil texture, grain size, color, and other features, reducing the need for expensive and time-consuming soil sampling.

**Video Cone System Description** - The Video Cone integrates a miniature color video camera, an LED light source, micro-optic components, and a durable, scratch-resistant sapphire window into a standard CPT rod housing. A cable pass-through channel allows a standard CPT cone or other modules to be configured ahead of the video unit.

Video and camera control signals are delivered from the cone to the DataPack 2000V via Vertek’s standard 10 conductor cable.

The Text Inserter Module is incorporated into the DataPack 2000V. The inserter places a depth “stamp”, communicated from the DAS or computer, on the video images as they are recorded. The operator can write additional information, such as the date and test identification number, on the videotape by simply reprogramming the inserter with a computer keyboard. A color television, digital camcorder, VCR, or other devices connected to the DataPack 2000V output provide real time monitoring and recording of the video images.
VIDEO CONE SPECIFICATIONS

System Components:

CPT Camera Module
Video-CPT Cable (user specified length)
VERTEK Standard 10-pin connector and cable
Text Inserter/ Camera Control Unit with Cables
VERTEK DAS Software Upgrade

Camera:

768 x 494 picture elements, automatic gain control
9mm x 6mm field-of-view, 11 mm resolution
(other magnifications available)

Illumination Source:

High brightness white LEDs (4)

Power:

120 VAC

Camera Housing:

1.93-in diameter rod, 24-in length
Replaceable sapphire window

Video Options:

TV Monitor, VCR, or Digital Camcorder

Optional Coating:

Thermal sprayed tungsten carbide
70 – 80 per Rockwell Hardness

Vertek - Hogentogler Cone Penetrometer Products

Please Contact Us at (802) 728-4588 or visit our website at www.vertek.ara.com