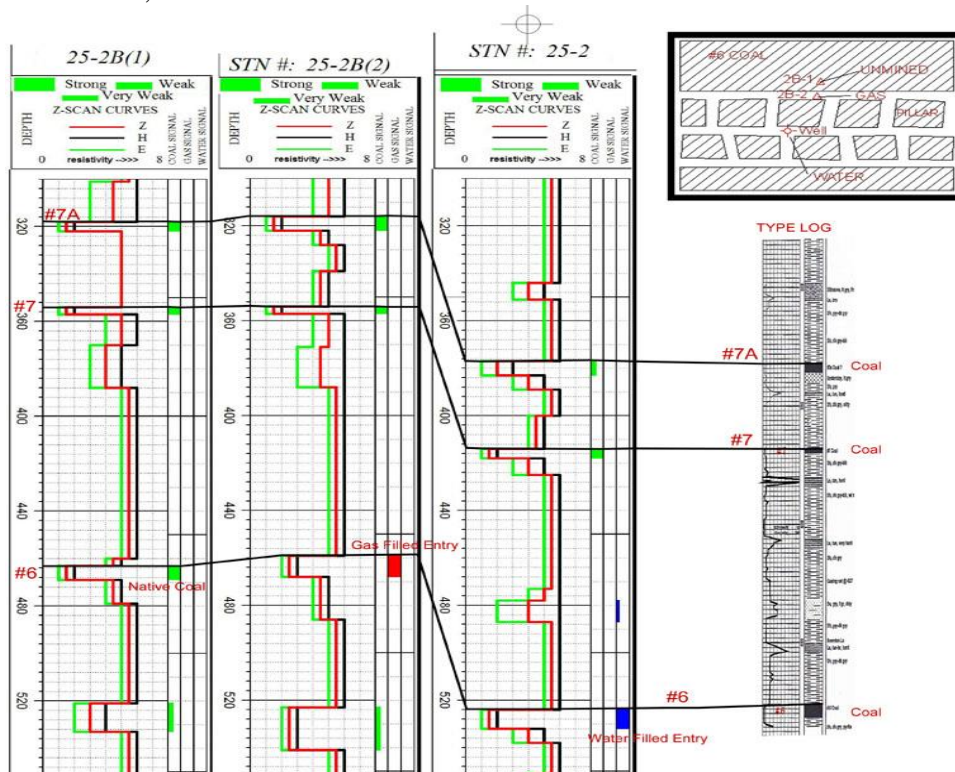


DIGITAL MAGNETOTELLURIC TECHNOLOGIES, DMT

DMT began mapping the subsurface for coal mining operations in 2000 as an extension of our petroleum exploration services which have been undertaken continuously since the late 1980s. Using our surface-based, **non-invasive portable Z-SCAN** high resolution Magnetotelluric subsurface imaging system, you can greatly enhance mining profits with detailed, precise geophysical data. We are proven experts at defining **location, trend and vertical offset of faults**, accurately delineating **coalbed thickness**, locating perilous water sands, and finding gas filled subsurface chambers. To date, we have worked for 10 coal companies in the USA and Australia, including Bowie Resources and Arch Coal.

Z-SCAN Example: Differentiation of Native Coal, Gas-filled and Water-filled Chambers in an Abandoned Mine, Illinois Basin:



Z-SCAN antennae measure the natural electromagnetic (EM) field at the surface. The Z-SCAN uses the resistivity derived from the EM data to identify relative lithology and the phase of the EM data to differentiate coal, gas and water. Our technology uses no induced currents, using receivers only. The equipment is lightweight, foot-portable for access to difficult terrain.

The methodology recommends a preliminary Z-SCAN study of borehole locations to 'fingerprint' the strata of interest which allows comparative analyses of subsequent profile stations. Z-SCAN coalbed thickness resolution is +/- 2', horizontal accuracy is .005 x Depth. Typical surveys feature profiles connecting test holes to enhance geological information ahead of mining, and reconnaissance studies ahead of land acquisition.

Please call to discuss the cost-effective Z-SCAN technology and your project needs. We will be happy to develop a plan to resolve geological questions ahead of mining.

Dan Woods, DMT Geophysicist 918-259-1863 dawoods@ix.netcom.com