



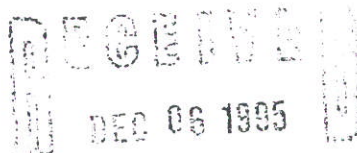
**GENZL**

7 December 1995

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**REFERENCE For MT Survey - Berlin Field, El Salvador**

**Location:** Berlin, El Salvador  
**Date:** Late February-early May 1994.  
**Client:** CEL  
**Objective:** Delineation of the Berlin geothermal resource, that had already been developed to 10MWe stage. Provide guidance for where expansion of production is most likely to be achieved.  
**Survey Type:** MT + AMT measurements using remote reference. 57 MT soundings and 43 AMT soundings were collected using the Phoenix MT system.  
**Terrain:** Mainly andesitic volcanics forming a massif rising from 500masl to 1500masl. Vegetation cover mostly pasture, coffee plantation and light forest.  
**Climate:** Dry season through most of the survey, but with thunderstorms and rain in the last 2 weeks.

In this survey, GENZL used Phoenix as a sub-contractor to undertake field data collection and basic data processing. GENZL acted as overall supervisor for the survey, liaising with the client and providing all logistical support, and performed data analysis and interpretation.

Throughout all aspects of this survey, Phoenix proved to be a very professional company. The field team had excellent support from their head office, and the personnel were well trained and very able to perform the necessary work. The team were easy to work with and very flexible in adapting the survey to meet changing conditions. Within the original budget,

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Phoenix were able to collect 14% more MT sites than originally planned by simplifying the survey methodology (on our request).

The Phoenix equipment is rugged and reasonably portable. The survey team carried a good range of spare parts and extra equipment to minimise any downtime due to equipment problems. The data collected was of a high standard, and the team made every effort in the measurement setup process at each site to ensure the best possible data was collected. Data was processed by the Phoenix crew each day and made available to us for analysis and planning the on-going survey.

The survey was very successful and resulted in the definition of some clear resistivity patterns which have been interpreted to indicate a large extension to the reservoir from the present steamfield.



Greg Ussher  
Science Manager

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