



Geophysics  
International

## **ELECTROTELLURIC SURVEY REPORT**

For

Geophysics International Case Study

“Trucking Company Example B”

San Joaquin Co., California

May 11, 1999

### CALIBRATION

The electrotelluric signal characteristics for a porous water productive zone were modeled at the ETS-9 Well (100 gpm) as Grade 6.0 to Grade 8.0 fluid responses.

The term “net porosity” is used to describe zones with the greatest potential to produce water. For the purpose of this report “net porosity” is defined as follows:

**“Net Porosity”  $\geq$  Grade 5.0**

“Trucking Company Example B”

OBSERVATIONS

Table 1 shows net porosity data for the ETS-9 calibration well and four survey stations. Of the four survey stations, station ETS-7 exhibits the highest Total Grade-Feet value (846). Station ETS-5 exhibits the lowest Total Grade-Feet value (231).

The ET data indicate that survey station ETS-7 is the best location for potential water production from the 200-600 foot interval.

**TABLE 1**  
**NET POROSITY DATA**

**“Trucking Company Example B”**

**(Net ≥ Grade 5.0)**

	<u>Vertical Interval</u>	<u>Thickness</u>		<u>Grade-Feet</u>	
		<u>Total</u>	<u>Ratio</u>	<u>Total</u>	<u>Ratio</u>
ETS-9 Well	0 – 100 (100)	21'	0.21	152	1.52
ETS-4	200 – 600 (400)	88'	0.22	595	1.49
ETS-5	200 – 600 (400)	36'	0.09	231	0.58
ETS-6	100 – 600 (500)	92'	0.18	588	1.18
ETS-7	200 – 600 (400)	105'	0.26	846	2.12

# Summary Sheet

## Geophysics International Electrotelluric Survey Case Study

### “Trucking Company Example B”

Location: San Joaquin Co., California

Survey Date: May 11, 1999

Geology: Volcaniclastic Sands and Gravels

Calibration Data: ETS-9 Well  
TD = 100', Off-Site  
Production Reported @ 100 gpm

Drillsite Data: Survey Station ETS-7  
Drilled July 14, 1999  
Production Tested @ 800 gpm

↑N

ETS-7  
▲  
846

ETS-4  
▲  
595

ETS-5  
▲  
231

ETS-6  
▲  
588

**GI CASE STUDY**

**NET POROSITY  
TOTAL GRADE-FEET**

“Trucking Company Example B”

**SAN JOAQUIN CO., CA**

1" = 100'

5-11-99