

An Anonymous Seismic Test Area (Preliminary Results from First 24 Records)

Choon B. Park, Ph.D.



Disclaimer

Park Seismic LLC does not guarantee this report to be free from errors or inaccuracies and disclaims any responsibility or liability for decisions made based on the information provided in this report.

Report To

Geophysical Survey Company

Street Address

City, State Zip

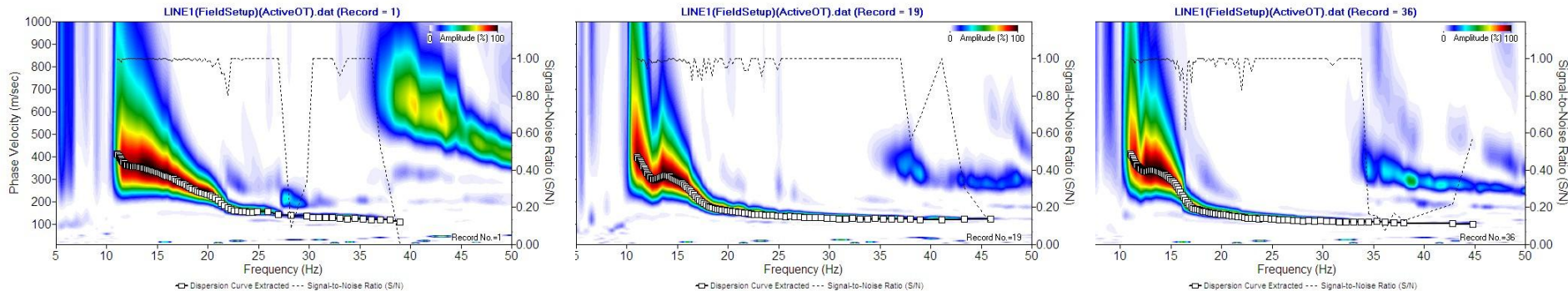
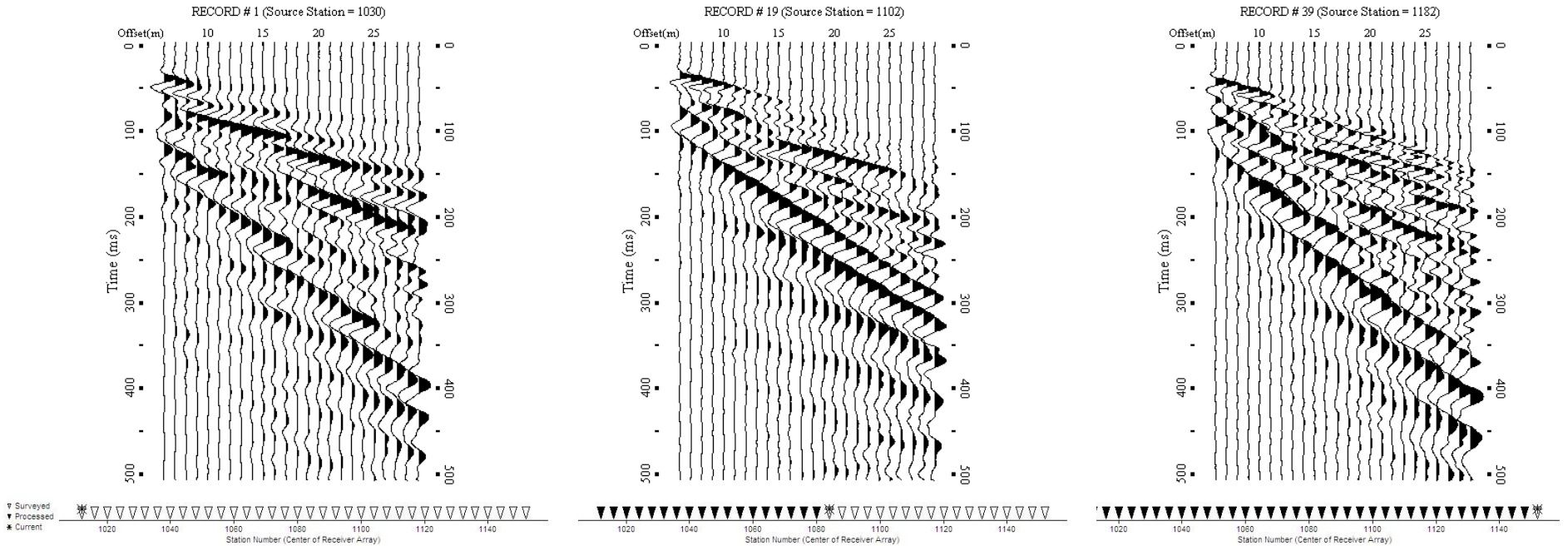
Date of Reporting

Summary

- Preliminary 2D shear-velocity (V_s) results from first 24 records collected on the first day of the survey are shown for evaluation and possible adjustment of acquisition parameters.
- Field records show an excellent quality with very high signal-to-noise ratio (S/N) with little influence from ambient noise.
- Processed dispersion images indicate the lowest frequencies of recorded surface waves are close to the frequency of geophones used (10 Hz).
- Processed 2-D shear-velocity (V_s) map indicates the maximum investigation depth (Z_{max}) is approximately 17 m.
- If a deeper investigation ($Z_{max} \geq 17$ m) is sought, lower-frequency geophones (e.g., 4.5-Hz phones) along with a longer receiver spacing (e.g., 1.5 m instead of 1 m) will have to be used.

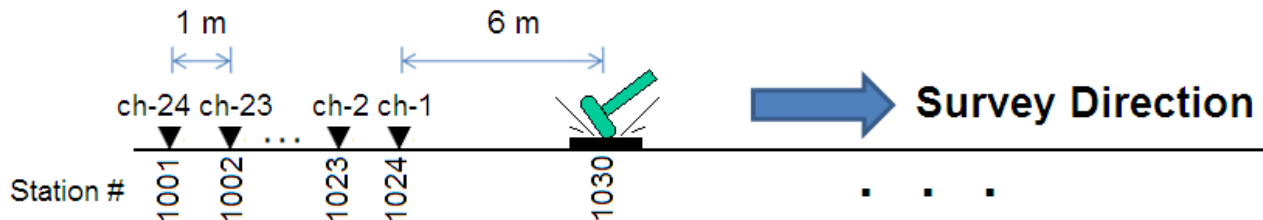
Data Quality

Overall quality of data judged from field records and dispersion images was EXCELLENT. Three field records (top row) selected at beginning, middle, and end of the line show strong source generated surface waves with little ambient noise, and corresponding dispersion images (bottom row) show well-defined fundamental mode (M0) surface waves whose low frequency end gets close to the geophone frequency of 10 Hz.



Preliminary Results from Inversion

- Diagram below shows format of station numbering encoded in the seismic data set; last channel (24th channel) for the first field record (1.sg2) was placed at station 1001, the next channel (23rd channel) at station 1002, and so on.



- 2-D Vs map below shows a maximum investigation depth (Z_{max}) of about 17 m.

