

September 18, 2012

Summit, LLC
1335 North 5900 East
Eden, Utah 84310

Attention: Mr. Ryan Bradley, PE
Ryan.Bradley1313@gmail.com

**SUBJECT: Geophysical ReMi® Investigation
Powder Mountain Resort, Phase 1A
Weber County, Utah
PSI Project No. 0710375**

Professional Service Industries, Inc. (PSI) is pleased to submit results for the geophysical Refraction Microtremor (ReMi®) investigation for the above-referenced project to be located at Powder Mountain in Weber County, Utah. The approximate location of the site is shown conceptually on a site plan prepared by Langvardt Design Group (No Scale, Dated 8/23/2012). This scope of work was performed in general accordance with the Project Services Agreement dated September 6, 2012 and authorized by Mr. Ryan Bradley of Summit, LLC.

BACKGROUND

PSI was contacted to perform ReMi® geophysical surveys along the section lines at Powder Mountain Resort in Weber County, Utah. The intent of the ReMi® surveys is to help identify the competent bedrock interface in the vicinity of future development. Locations of the ReMi® geophysical lines were provided to PSI by IGES (subconsultant to Summit). End points of the lines were surveyed by others on September 7, 2012.

FIELD MEASUREMENTS

The ReMi® field measurements were completed on September 10, 2012. PSI was requested to perform the five (5) ReMi® survey lines to develop average shear wave velocity profiles with an emphasis on estimating depth to bedrock across the site. Three (3) individual arrays were combined to develop Line 3 and two (2) arrays were combined for Line 4. Line 3 and 4 start locations are shown on Figure 1. Line 1 and 2 were omitted by IGES and Summit from the current scope of work.

The ReMi® method uses standard seismic refraction equipment and records microtremors (or background noise) in the area to generate an average shear wave profile of the site. PSI performed ReMi® surveys using a (DAQLink II, Seismic Source) 24-bit seismograph. Ambient background noise generates surface waves (including Rayleigh wave energy) that are detected and recorded by

the twenty-four (24) channel geophone array. Due to the remote nature of the location there were minimal amounts of ambient noise. To provide additional "noise" crew members walked along the line in addition to using a 10 pound sledgehammer. Pounding the sledgehammer along the array provided adequate noise in developing the overburden/rock interface. Collected data is processed and reduced using the Optim SeisOpt Remi[®] Version 4.0 software package. The interpretation yields an average shear wave velocity profile for the site at different points in the array. The shear wave velocity profiles can give insight into how the subsurface profile varies across the site with an emphasis on the interface between the overburden soil and competent bedrock. In general, soil consisting of silt, clay, sand, gravel, cobbles, and boulders have a shear wave velocity of less than 2,500 feet per second. Competent bedrock will have a shear wave velocity of approximately 2,500 feet per second and above.

RESULTS

Results for the ReMi[®] survey are included in the attached Figures 2 and 3 are shown in the form of a two-dimensional (2-D) shear wave velocity profiles. We understand that test pit explorations in the area were terminated at approximately 10 feet below the ground surface with no identification of bedrock. The ReMi[®] survey profiles indicate that depth to competent bedrock ranges from approximately 25 feet at the beginning of each of the arrays and upwards of 40 to 50 feet as the array traverses down the slope.

LIMITATIONS

The ReMi[®] method is intended to produce average shear wave velocity profiles interpolated along a selected line of deployed geophones along the ground surface. The results also provide general depth intervals relative shear wave velocity layers. The accuracy of the depth and thickness of individual layers is subject to many site-specific factors, including contrast of shear wave velocities between layers, thickness and depth of the layers, surface topography and others. PSI recommends that the subsurface soil and bedrock layers suggested by the results of the ReMi[®] geophysical survey be confirmed with physical exploration methods such as drilling or excavation. This data report has been prepared for the exclusive use of Summit, LLC, and their respective successors and assigns for the specific application to the proposed development located at the Powder Mountain Resort in Weber County, Utah.

It has been a pleasure serving you on this project. Please call us if you have any questions or need additional information.

Respectfully submitted,
PROFESSIONAL SERVICE INDUSTRIES, INC.



TYLER K. BERNIUS
Project Manager



CHRIS T. GARRIS, PE
Vice President/Principal Consultant

TKB/ctg

Attachments: Appendix (ReMi Results)

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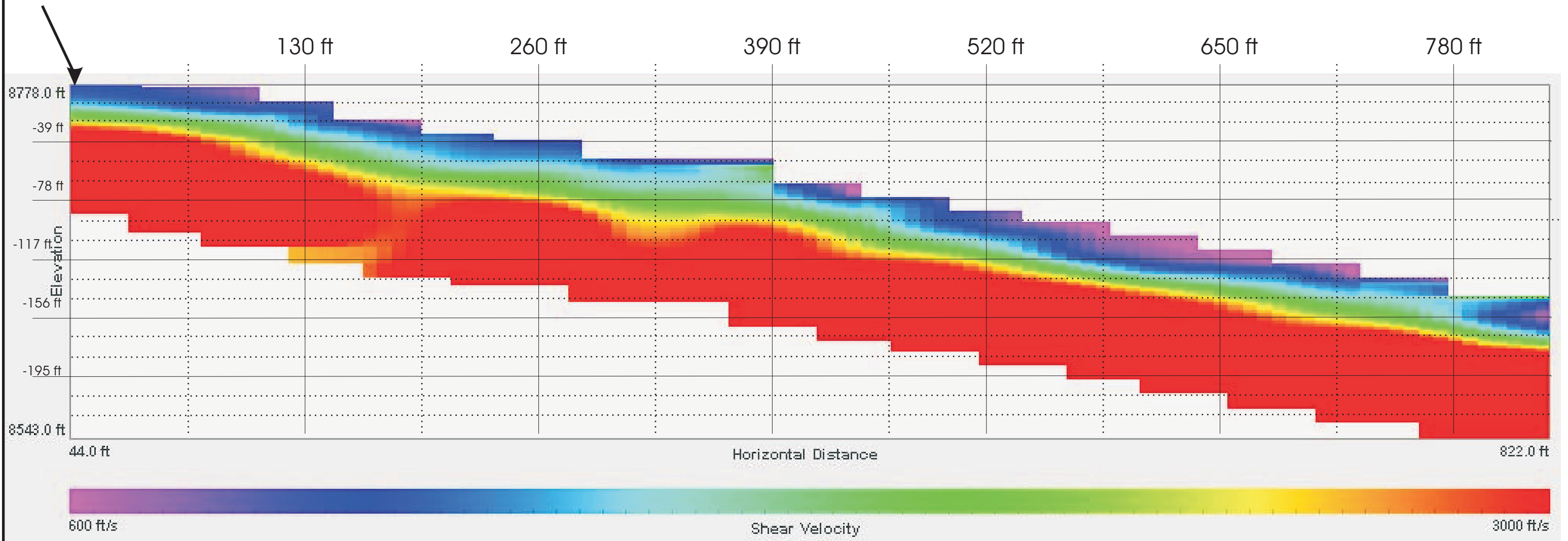
APPENDIX

ReMi © Results



Line 3 Results Powder Mountain Resort

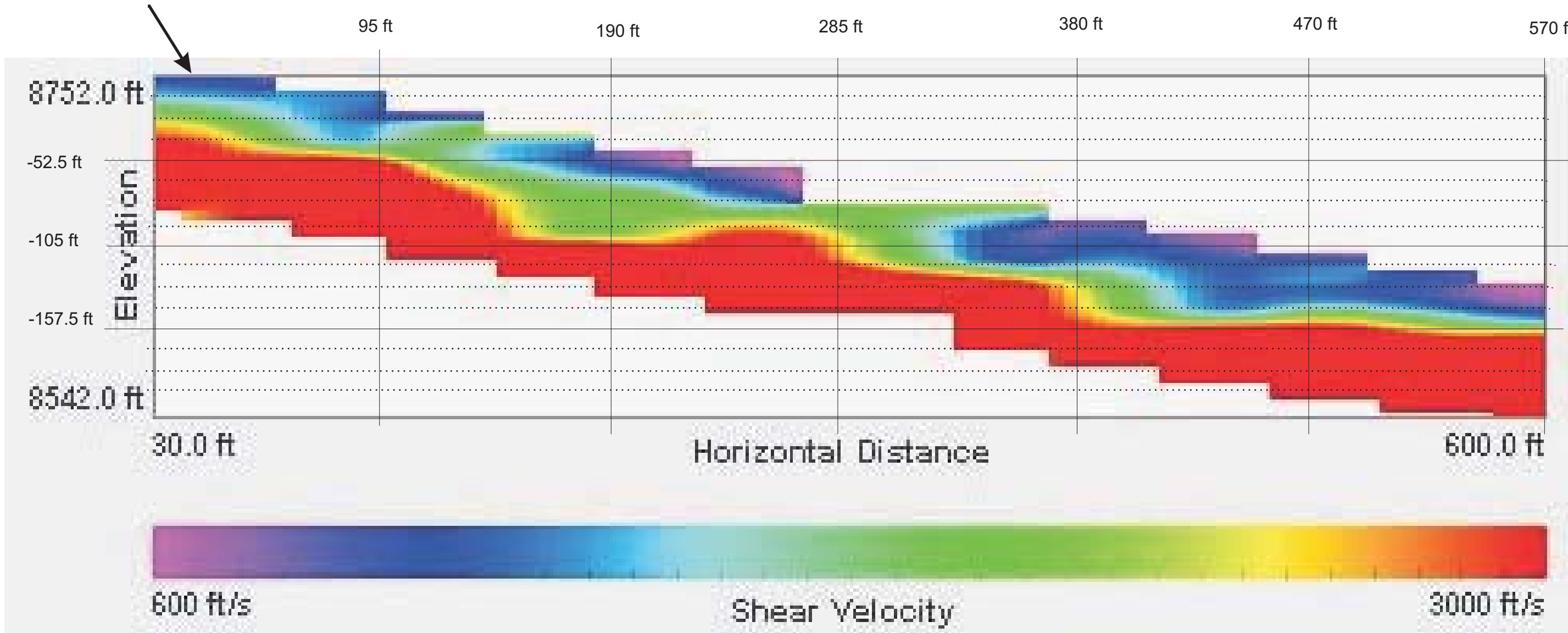
Seismic Line 3 Start - Provided by IGES



* Rock Interface is interpreted as shear wave velocity of approximately 2,500 feet per second (Yellow).

Line 4 Results Powder Mountain Resorts

Seismic Line 4 Start Provided by IGES



* Rock Interface is interpreted as shear wave velocity of approximately 2,500 feet per second (Yellow).



Project:
 Powder Mountain Resort
 Geophysical Data Report
 Weber County, Utah
 Project No.: 710375

Report Date: 9/17/2012

Figure 3