

18 August 2022

Dan Negut, M.Sc
President & CTO
Z-Terra North Inc.
2510, 715 - 5 Avenue SW Calgary, AB T2P 2X6

Dear Dan,

We would like to express our gratitude to you and your team at Z-terra North for the excellent results obtained during the execution of the PUT-8-3D-Merge PSTM & PSDM Seismic Processing Project.

The project carried out a significant challenge for the merging and imaging of 4 vintage surveys for nearly 300 sq. km. because of the necessity of getting the best image possible from both, structural and stratigraphic targets in different positions of the stratigraphic record in the Putumayo Basin (Colombia).

The surveys were acquired with different acquisition parameters, orientations, sources, recording equipment, etc. which added to the project complexity. Minimizing differences across the different surveys in terms of signal to noise level, frequency content, wavelet phases and statics as well as the preservation of relative amplitudes to generate a seamless PSTM and PSDM volumes was the main goal. The careful and targeted processing sequence was very successful in addressing all these issues.

The resulting volumes (PSTM & PSDM) have a very good image, signal to noise ratio and allow us to interpret in a very good way the structural (faults and folds) and the stratigraphic traps (sand lenticular bodies) we are looking for. The merged volume also helped us in understanding a more integrated regional geological framework, such as fault trend continuity, basement structuration, and unit pinch-outs hard to visualize using the individual surveys.

We also appreciate the opportunity you provided us to collaborate with your highly skilled team of seismic analysts to ensure that the main goals of the project were well understood and guided the decisions in terms of parameter selection and fine-tuning of the processing sequence. We credit the excellent professional relationship generated between our G&G group, our seismic processing advisor, and your team, as an important contributing factor for the very good results of this Project

Sincerely,



Yucet Fечи
Geology & Geophysics Manager Putumayo Basin
GeoPark - Colombia