

APPENDIX B: INTERPRETATIONS OF SEISMIC REFLECTION PROFILES

Fourteen seismic reflection profiles, totaling 270 km in length, were interpreted from the southern Carson Sink within and proximal to the proposed Fallon FORGE site (Fig. B1). All interpreted profiles are shown below. Five profiles (N-1, N-3, N-4, N-5, N-6) were provided by the Navy Geothermal Program Office. The Navy profiles were originally acquired in 1994 and were reprocessed and migrated by Optim, Inc., in 2011. The Navy profiles are non-proprietary, public domain data.

The license to interpret nine additional profiles (FL1 to FL9) was acquired from Seismic Exchange, Inc. (SEI), in Houston, Texas. These profiles were originally acquired by the oil industry in the 1970s and 1980s. These data are owned and controlled by SEI, but UNR has the license to interpret the data and publish these interpretations upon review by SEI. Only scanned images of un-migrated paper plots were available for the SEI profiles, but as discussed in the text, velocity models and gravity data permitted time to depth conversions of interpreted contacts and faults. However, details on the original velocity models and processing parameters (including shotpoint locations) are proprietary for the SEI profiles. Thus, the interpreted profiles obtained from SEI are shown below without such parameters. All interpreted profiles were incorporated into the 3D geological model for the proposed Fallon FORGE site.

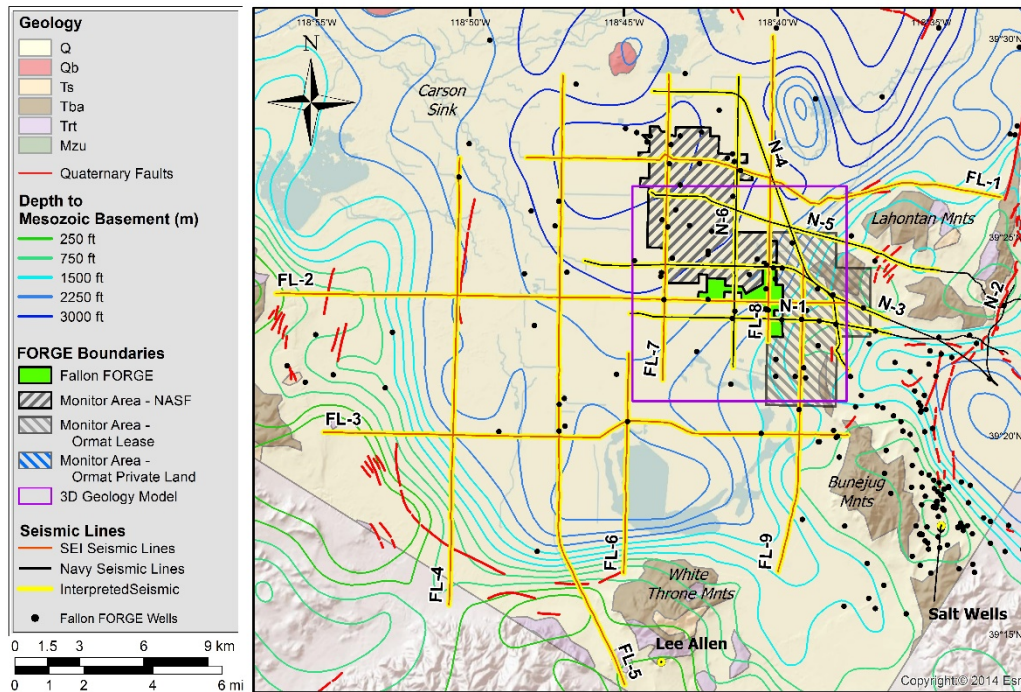
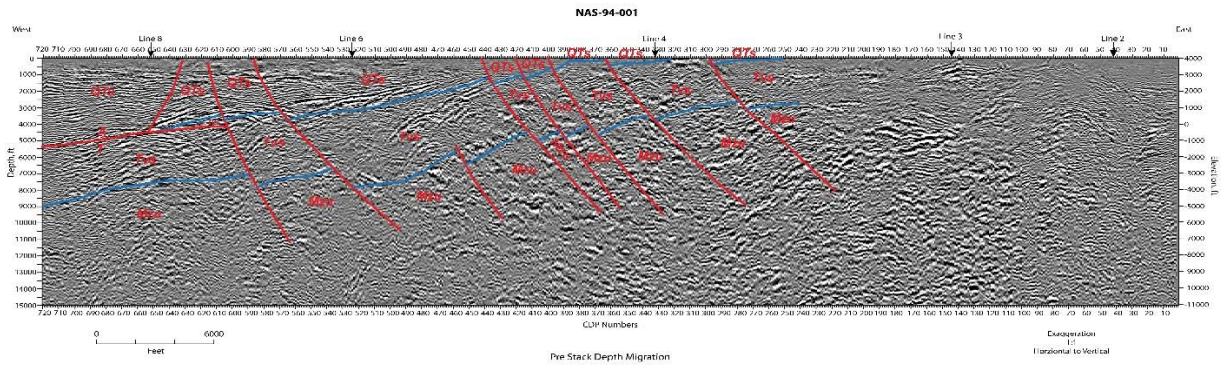
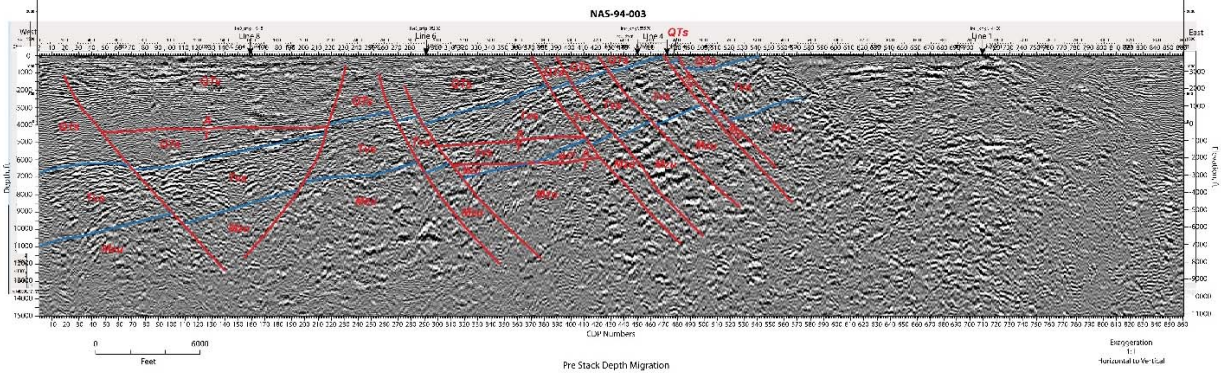


Figure B1. Generalized geologic map of the FORGE area near Fallon, NV, showing locations of interpreted seismic reflection profiles (red and black seismic lines highlighted in yellow to show areas interpreted), Quaternary faults (red lines), and depth of Mesozoic basement. The FORGE area is in green and surrounding monitor areas are shown by gray hashes. Black dots are wells with available data from logs, cuttings, or core.

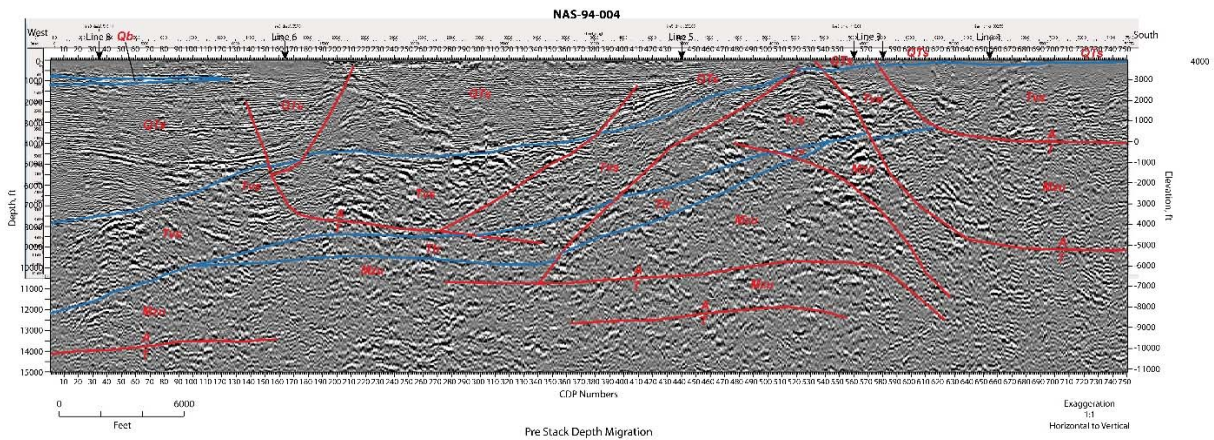
Profile N-1



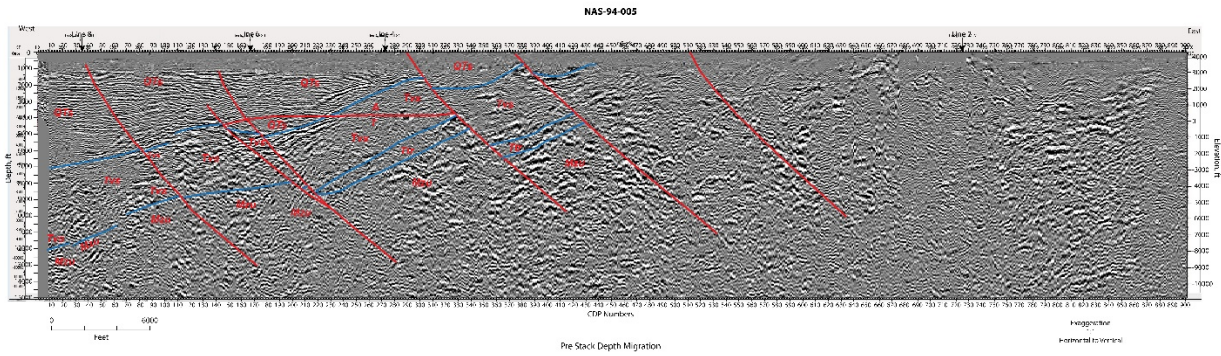
Profile N-3



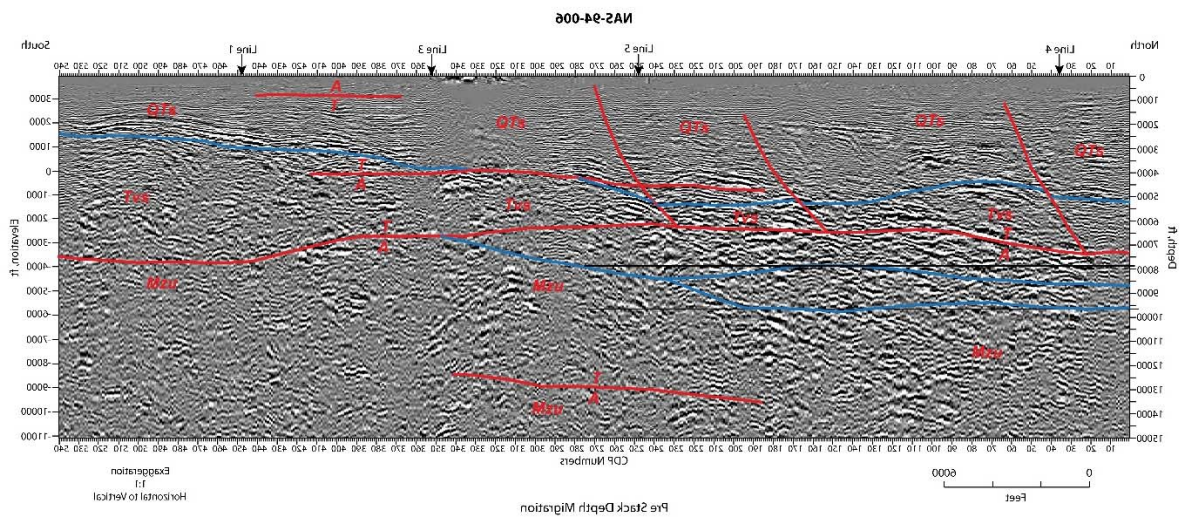
Profile N-4



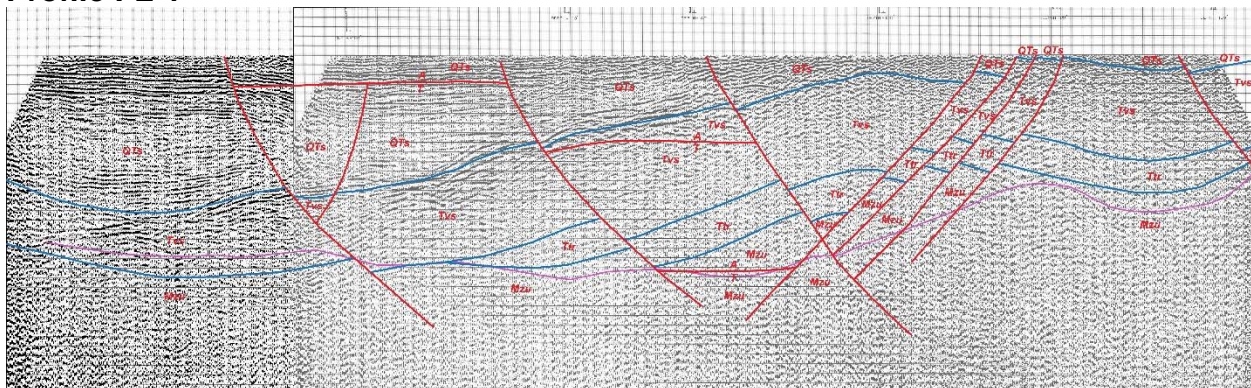
Profile N-5



Profile N-6

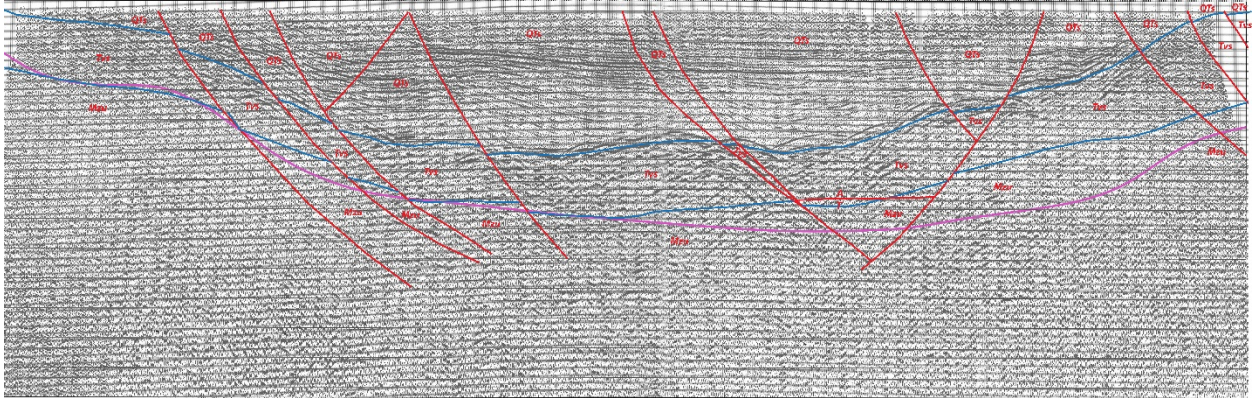


Profile FL-1



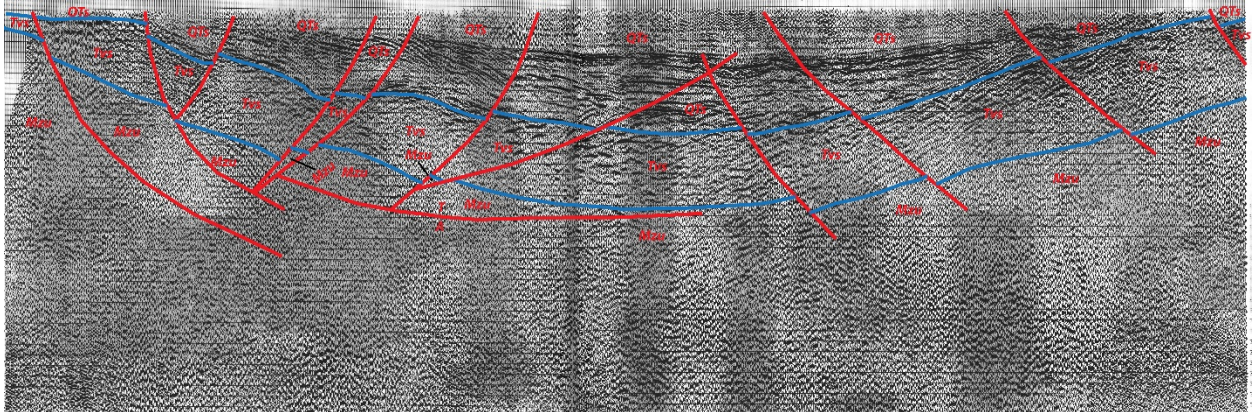
Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.

Profile FL-2



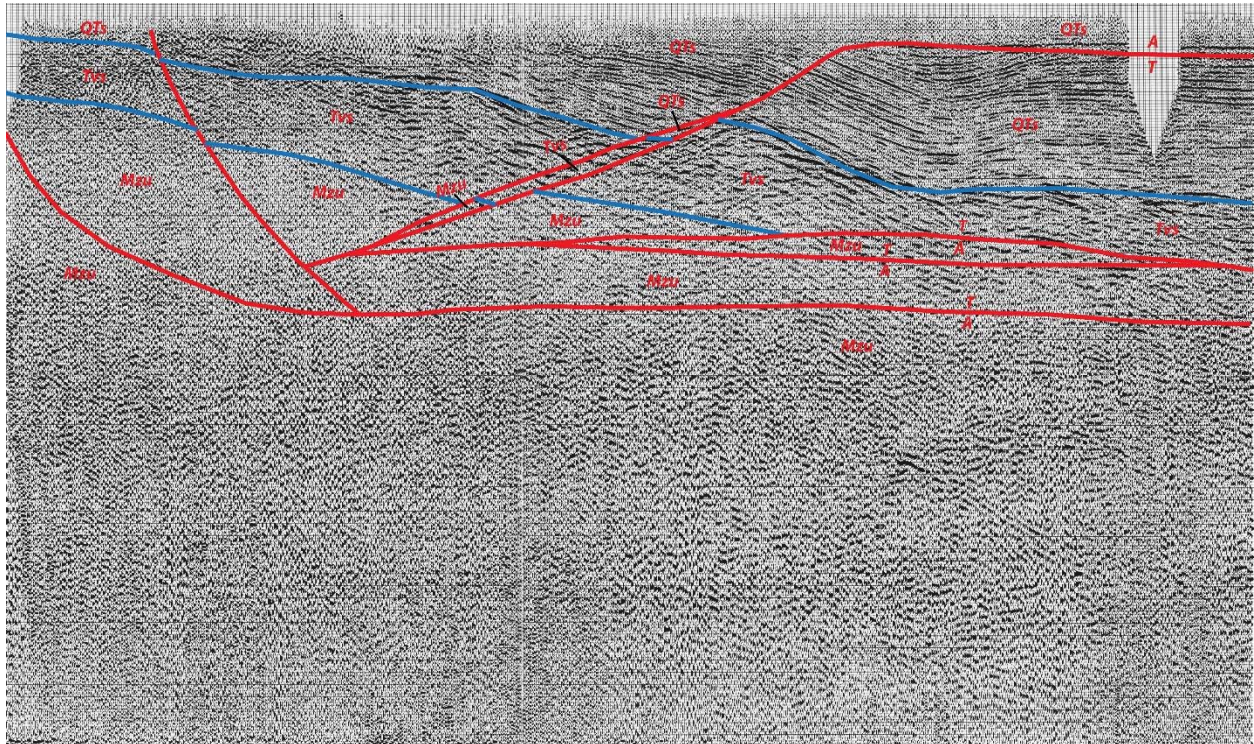
Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.

Profile FL-3



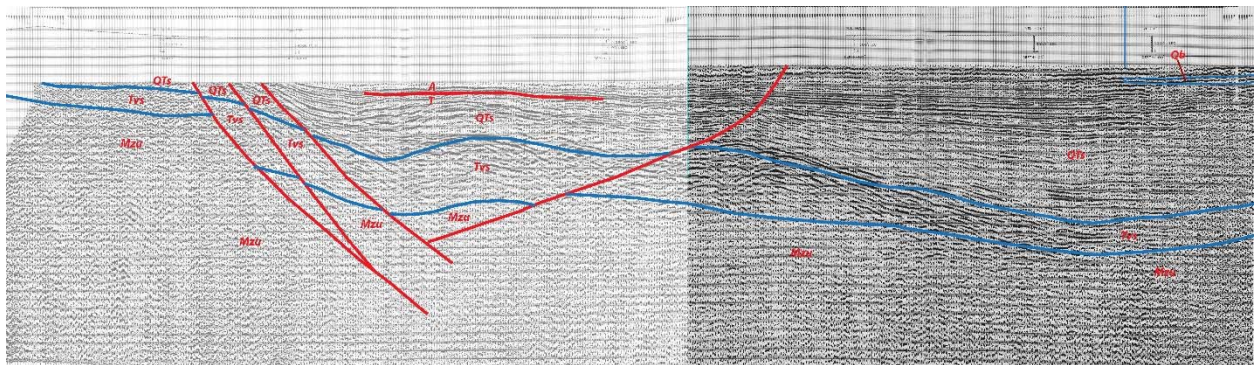
Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.

Profile FL-4



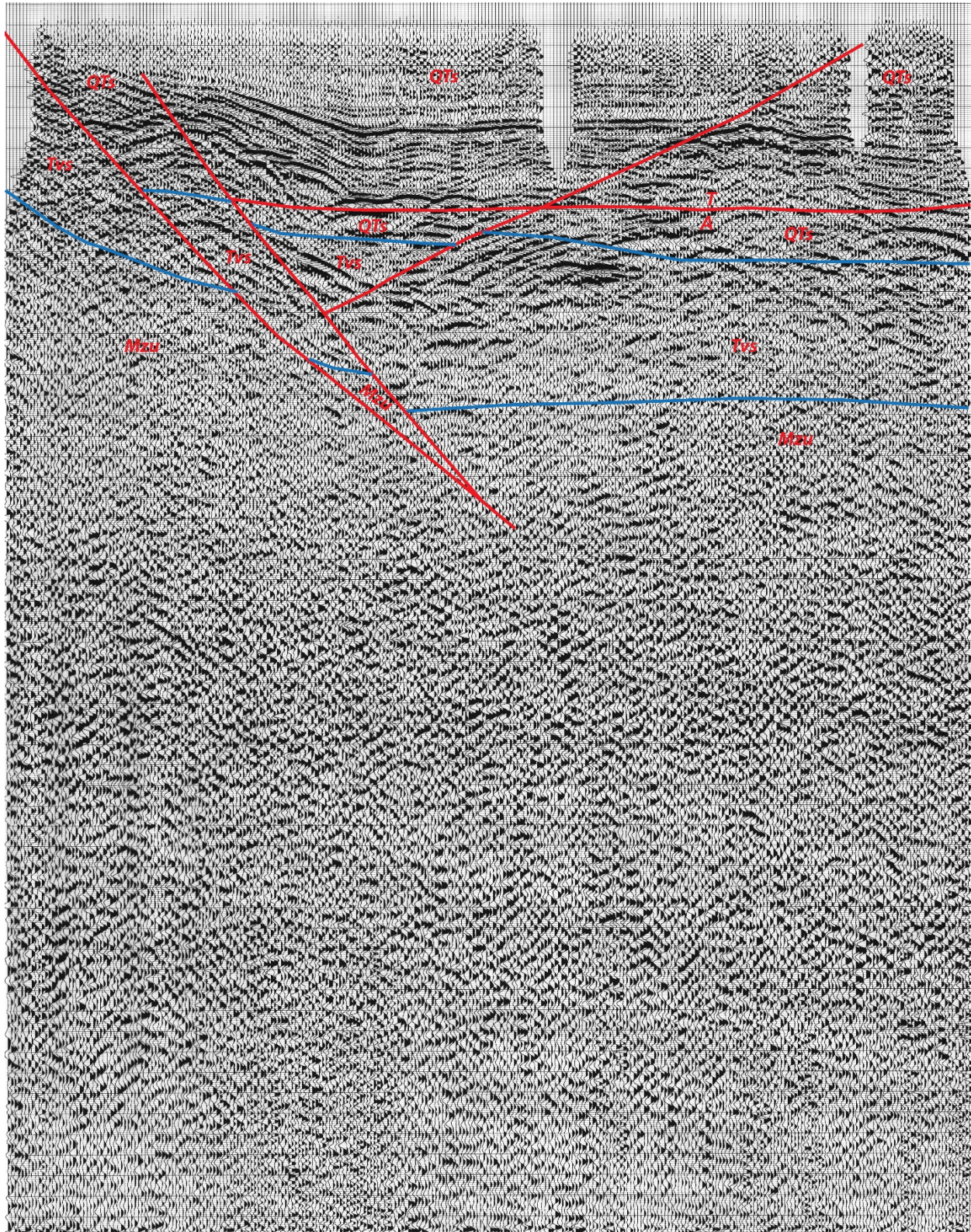
Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.

Profile FL-5



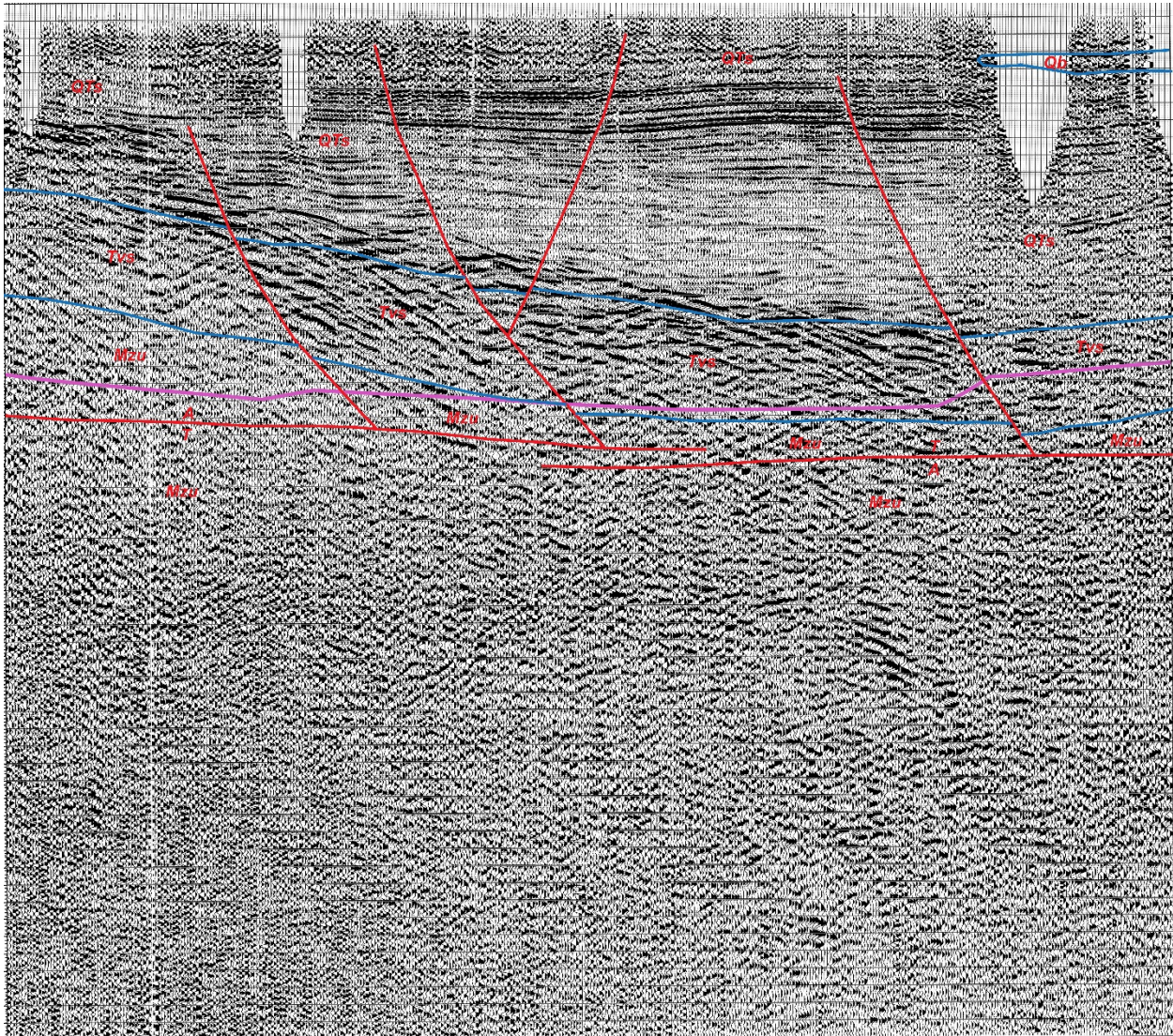
Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.

Profile FL-6



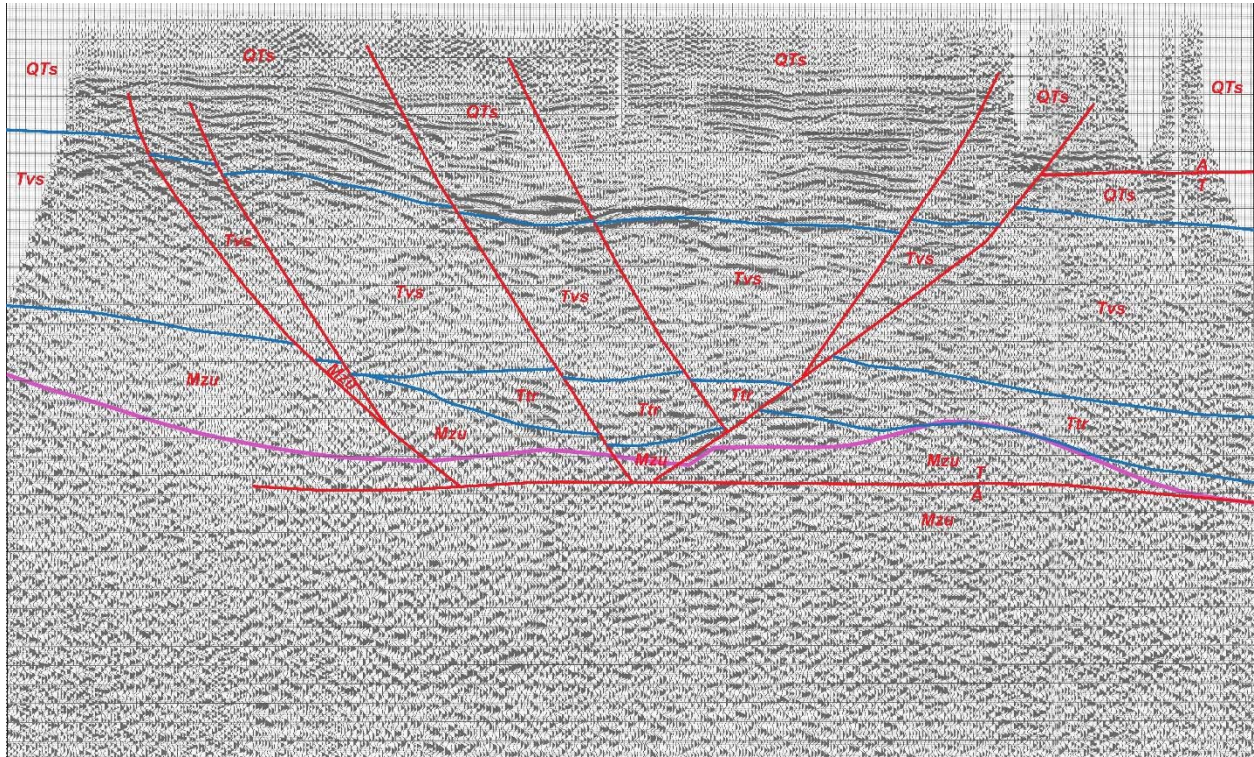
Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.

Profile FL-7



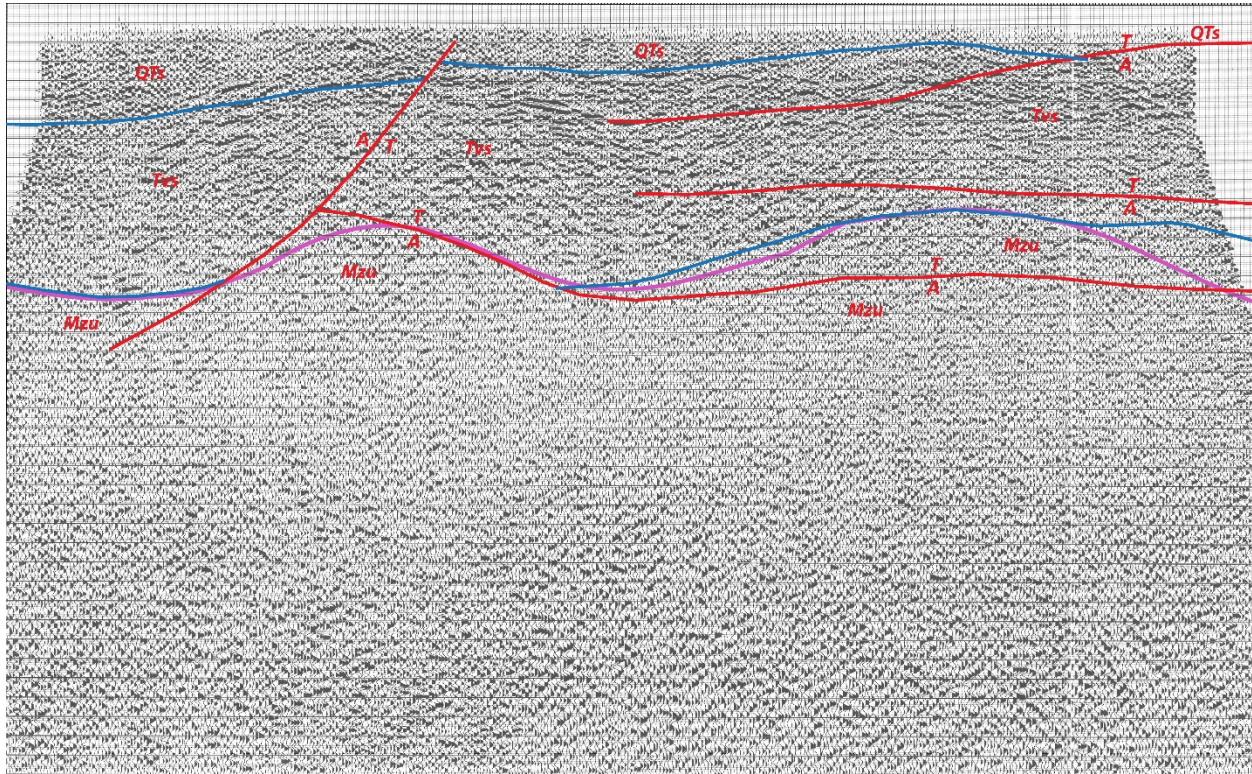
Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.

Profile FL-8



Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.

Profile FL-9



Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of the University of Nevada, Reno.