ID: Type: **Poster**

T3.4-P3. RESULTS OF SEISMIC STUDY ON THE UPPER PART OF THE SECTION AT SEMIPALATINSK TEST SITE AREA (FOR OSI PURPOSES)

The paper studies the structure of upper part of the section at the location of explosive nuclear boreholes at Semipalatinsk Test Site area. The data of first arrivals of the refracted waves' method at eight parallel profiles, 6 km long each, and at 500 m interval between them, was used. Based on the time of first arrivals using ray tracing method, velocity structure of the section has been determined up to the depth of 200-250 m. In the vicinity of UNE boreholes location, a technogenically changed layer with the thickness of 40-80 m and velocity that is reduced with regards to undisturbed rocks by the value of up to 1-2 km/sec has been detected. Thickness of this layer changes proportionally to the yield of the nuclear charge. The obtained information can be used to update the database as part of the study of traces from the underground nuclear explosions for a more effective implementation of On-site inspection.

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