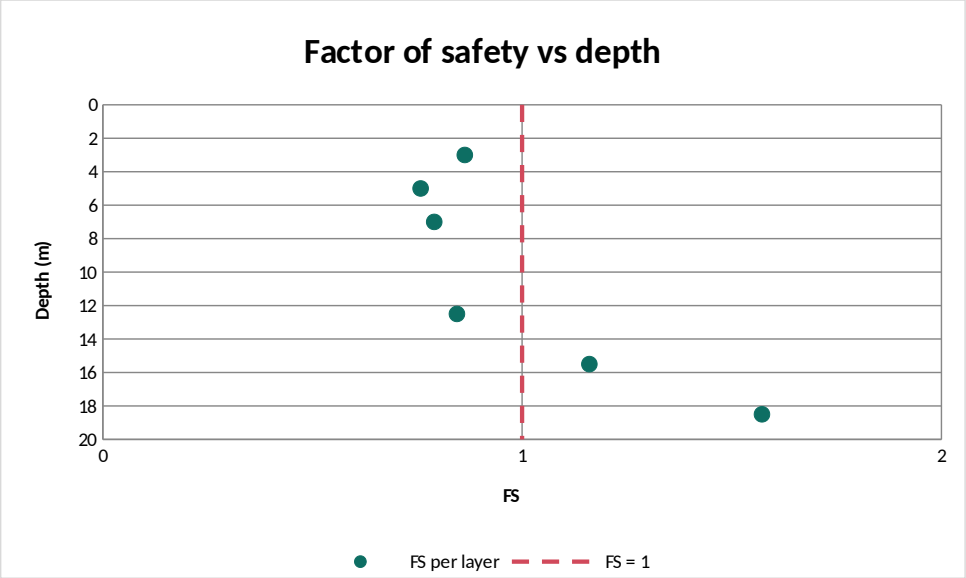
# Seismic Site Class & Liquefaction Report | گزارش نوع زمین و روانگرایی

*Generated from sheet Liquefaction · RastaWorks*

| | |
|---|---|
| **Project / پروژه** | Sample Project |
| **Location – Section / محل** | Borehole BH-1 |
| **Depth (m) / عمق** | 0–30 |
| **Date / تاریخ** | 2026-10-22 |
| **Prepared by** | Engineer |

| Quantity / کمیت | Value / مقدار | Unit | Quantity / کمیت | Value | Unit |
|---|---|---|---|---|---|
| **Vs30** | **272.6** | m/s | **Site type** | **III** | – |
| **Rock PGA** | **0.250** | g | **F_PGA** | **1.350** | – |
| **PGA at surface** | **0.338** | g | **amax used** | **0.338** | g |
| **Mw / water table** | **6.5 / 2.0** | – / m | **MSF** | **1.442** | – |
| **Minimum FS** | **0.76** | – | **Layers FS < 1** | **4** | – |
| **LPI (0–20 m)** | **10.43** | – | **LPI class** | **High** | – |

Result: minimum FS = 0.76 · LPI = 10.4 (High)




Notes: Simplified SPT procedure (Youd et al. 2001) for sands and non-plastic silty sands; clay layers are treated as non-liquefiable. FS < 1 indicates triggering is expected for the stated Mw and amax. Site type follows Standard 2800 (5th ed.) Table 2-5 by Vs30; Types V and VI need engineering judgment. For design use, review by a qualified geotechnical engineer is required.
نتایج باید توسط مهندس ژئوتکنیک ذی‌صلاح بازبینی شود.