

GEOP 501 - Fall 2017 - Homework # 8 - (Due date: 5/12/2017)

Given the attached Excel Sheet of a check-shot survey:

- (a) If the shot is 30 m from the wellhead, compute the vertical traveltimes.
- (b) Provide the T-Z plot of this survey.
- (c) Provide the V_i -Z plot of this survey.
- (d) Provide the V_{RMS} -Z plot of this survey.
- (e) Provide the V_{RMS} - T_0 plot of this survey.
- (f) Use the value of V_{RMS} at $T_0 = 1.7$ s to:
 - (i) Estimate the corresponding depth.
 - (ii) Calculate the error in this estimation from the true depth value.
 - (iii) Is this error acceptable for drilling purposes? If not, what would you suggest?