Geophysics Field protocol – Seismic Refraction

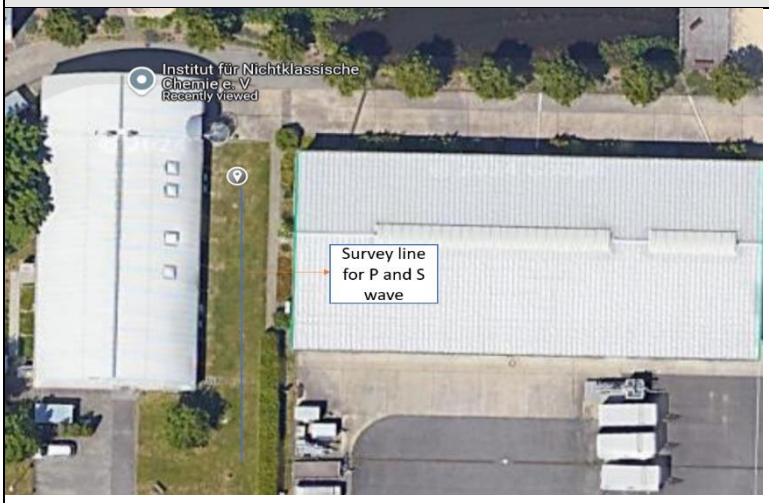
Site Location: MET Field Training site near parking lot;	**Date:** 8.10.2024
Geophysical Data Type / Method: P and S wave seismic refraction	**Type of Project:** Training Project

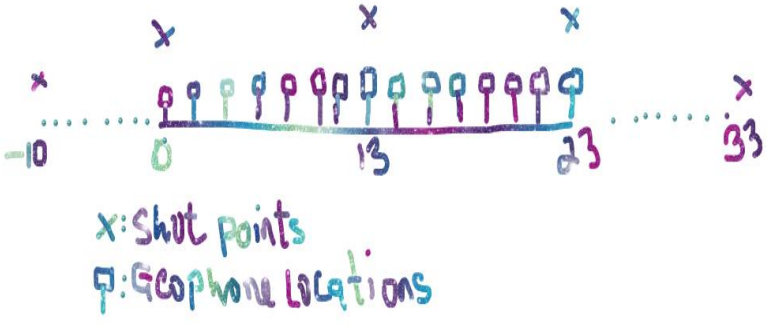
	Name	Function	
Surveyor	Edwin Gozie Nwaka	P and S wave seismic refraction field setup design and measurement	

Recording Environment

Weather: Sunny Temperature: - Min.: ----- - Max.: -----	**Land use:** Institutional **Vegetation:** Flat grassess **Topography:** Flat **Start coordinates:** 51°21'10.9"N 12°25'58.8"E **End co-ordinates:** 51°21'11.8"N 12°25'58.8"E	Comment: The survey was conducted to measure P and S waves from an optimized field setup design to investigate the allowable bearing pressure of the subsurface

Sketch of The Survey Area





Survey Information and Settings				
Instrument: Geodes (Geometrics ES-3000)	**P and S-wave geophone type:** 14.5Hz Geospace GS20-DX in land case	**Ground coupling:** Metal plate	**Source Type:** Hammer	**Acquisition geometry:** 2D line
Wave type: Pressure and shear wave	**Sample Rate:** 0.125ms	**Record length:** 0.13s	**No. of stacks:** 15	**Gain:** 1
Profile length: 23 m	**Receiver spacing:** 1 m	**First receiver:** 0 m	**Last receiver:** 23 m	**No. of shots:** 5

Record Name (P-wave data)	**Shot Position (m)**	**Topography**	**Mark After Shot**	**Record Name (S-wave data)**	**Shot Position**	**Topography**	**Mark After Short**
1	-10		✓	6	-10		✓
2	0		✓	7	0		✓
3	13		✓	8	13		✓
4	23		✓	9	23		✓
5	33		✓	10	33		✓