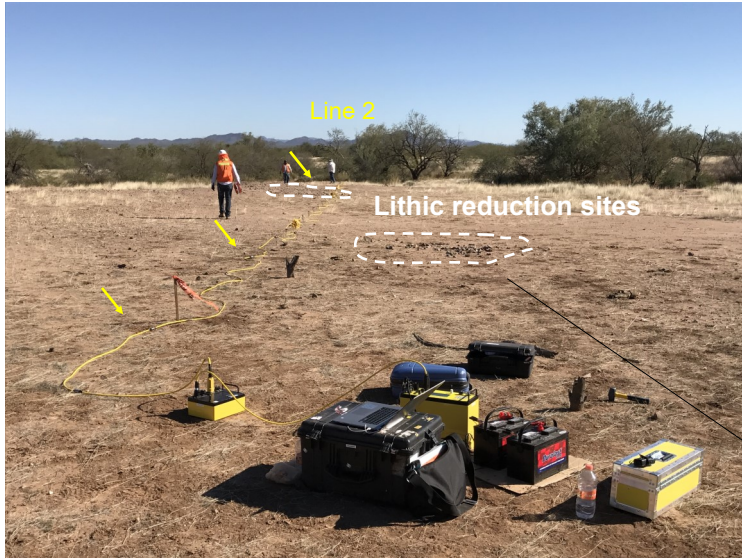


3D Archaeological Reconnaissance with Electrical Resistivity Imaging (ERI)

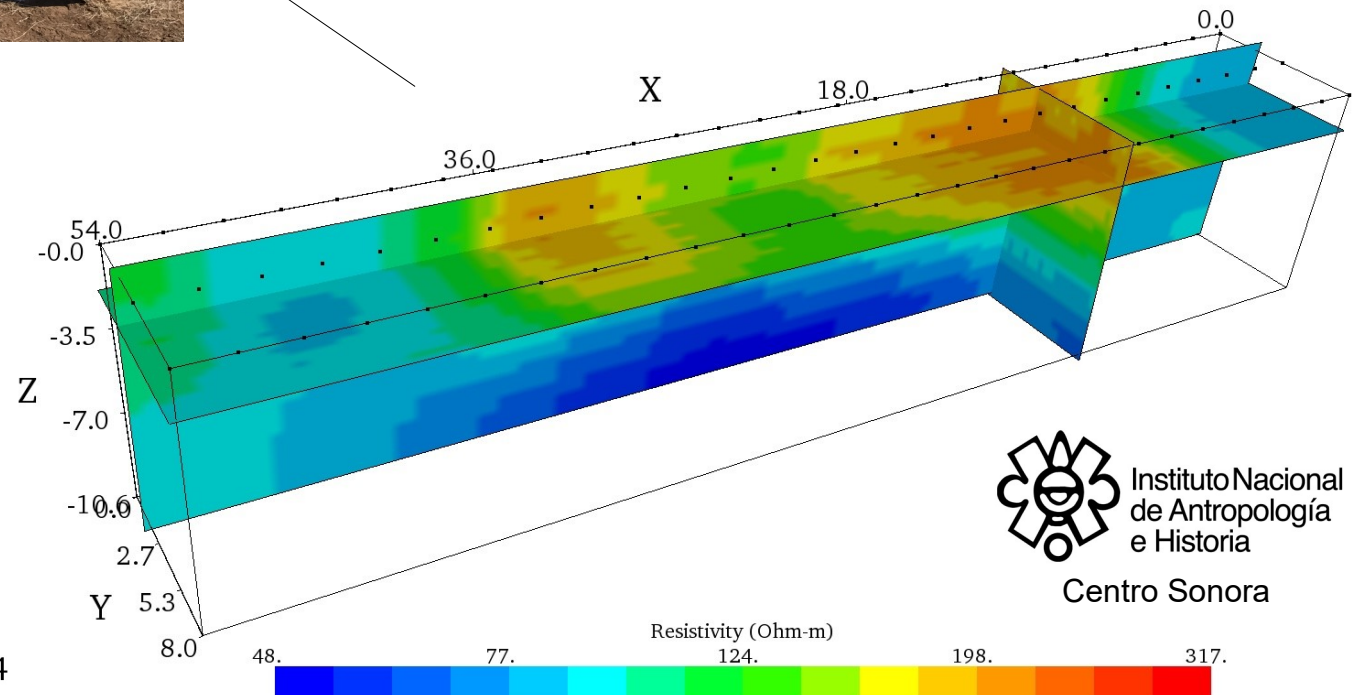


Electrical Resistivity Imaging transect

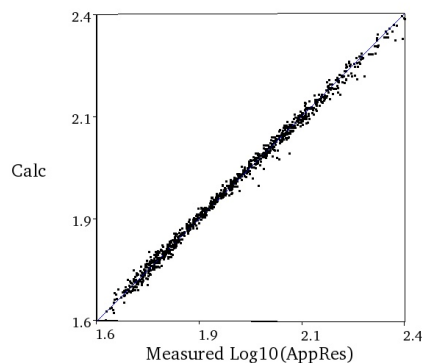


Objective: to identify potential major archeological remains within the near subsurface that could affect the construction of a hydrocarbon pipeline.
Date: 08 of February, 2017. **Site:** outskirts of Hermosillo, Sonora, Mexico
Instrument: SuperSting R8 WiFi w/28 electrodes, **Software:** EarthImager 3D.
Array type: 3D dipole-dipole, 2 m electrode spacing and 4 m line spacing
Results: successfully imaged the subsurface extend of two exposed lithic reduction sites as high resistivity anomalies within unlithified Pleistocene fluvial deposits shown as low resistivity anomalies. 3D ERI did not reveal the presence of major archaeological remains that could compromise the development of a hydrocarbon pipeline in the state of Sonora, Mexico. Lithic reduction sites were once stone tool manufacturing sites used by ancient natives.

3D Dynamic Slices of Inverted Resistivity



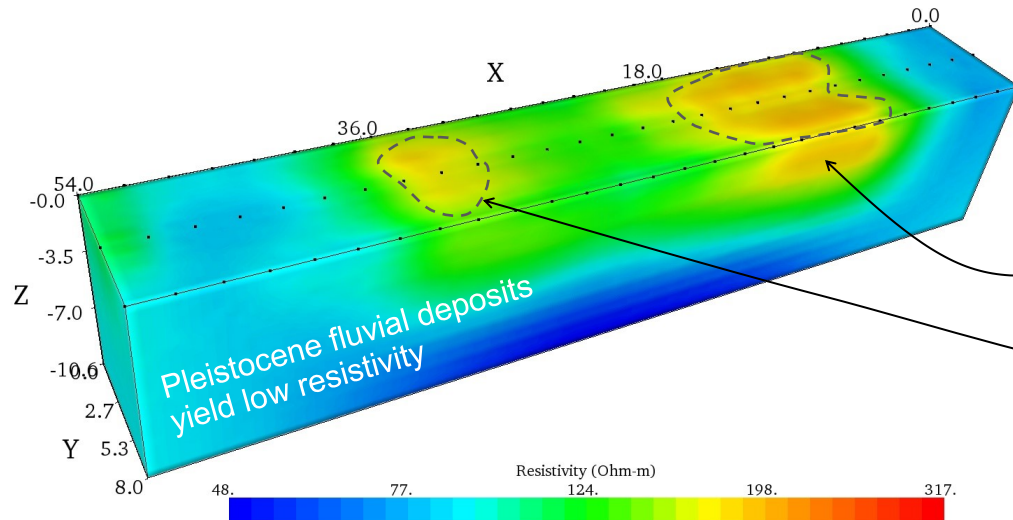
Apparent Resistivity Crossplot



Iteration No. 2. RMS = 3.1%. L2 = 0.4

3D Archaeological Reconnaissance with Electrical Resistivity Imaging (ERI)

3D Inverted Resistivity Image



Lithic reduction sites yield a high resistivity

