



SDI Review Form 1.6

Journal Name:	<u>Physical Science International Journal</u>
Manuscript Number:	2014_PSIJ_14667
Title of the Manuscript:	Geoelectrical investigation of soils as foundation materials in Umudike area of Abia State, Southeastern Nigeria
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>1) Line 1: Author(s) should delete 'Abia State' from the title as the term is political rather than geographical. Further creation of states may after the location of this study in time to come. Southeastern Nigeria as used by the author(s) is enough.</p> <p>2) Lines 14-16: Author(s) should modify statement and add 'those encountered at' between 'are' and 'VES 8'</p> <p>3) Line 16: 'ABSU' to be changed to 'ABSUPAC' for clear distinction between the authors' present area of research and the famous ABSU at Uturu okigwe.</p> <p>4) Line 18: Key words to be arranged in alphabetical order</p> <p>5) Line 53: Ogwashi Asaba is an old name for the Formation. Recent literature and</p>	<p>Corrected</p> <p>Corrected</p> <p>Corrected</p> <p>Corrected</p> <p>Corrected but would have liked to be referred to those recent literature and</p>



SDI Review Form 1.6

	<p>researchers have modified the nomenclature to only be called 'Ogwashi Formation' because no two towns (type localities) should at the same time host similar type sections for a given Formation. Author(s) should change:</p> <p>(a) 'Ogwashi-Asaba' Formation to 'Ogwashi' Formation.</p> <p>(b) 'Bende-Ameki' Formation to 'Ameki' Formation.</p> <p>(c) 'Coastal plain sand' to 'Benin Formation'.</p> <p>NOTE: Formation should have capital 'F' in these cases.</p> <p>Author(s) should apply these in all the manuscript.</p> <p>(6) Lines 64-81: Source of the statements to be cited eg. Reyment, Simpson, Nwajide, Ekweozor, Short and Stauble, Tatan, Avbovbo, Reijers, Hospers, Kogbe etc. These are authorities that have worked in that field and probably could have made such assertion. Author(s) should check and cite accordingly.</p> <p>(7) Lines 115-116: Coordinates are not properly written eg. 5⁰28.793'N and not 5 28⁰793'N. Author(s) should correct accordingly.</p>	<p>researchers for reference purposes.</p> <p>Corrected</p> <p>Corrected</p>
--	--	--



SDI Review Form 1.6

	<p>(8) Line 124: (ABSU) to be changed to (ABSUPAC).</p> <p>(9) Line 149: Author(s) should state his/her/their direction of traverse and give reason(s) for his/her /their choice. This could enable us pin down his/her/their research findings to known near surface structural patterns in the area.</p> <p>(10) Lines 226-234: Author(s) should cite references please.</p> <p>(11) Line 268: Author(s) should state his/her/their resistivity threshold/cut-off for his/her decision just as he/she/they stated 1.2m cut-off as depth of consideration.</p> <p>(12) Lines 276-279: Author should try to pin his/her/their competence judgement to the type of geologic units occupying those VES locations to enable us compare his/her/their findings with existing knowledge about the geology of those localities.</p> <p>(13) Line 294: Author(s) should try to check if his/her/their earlier competence judgement is following a particular trend</p>	<p>Corrected but in line 123</p> <p>Explained in Fig. 3.</p> <p>Corrected but now line 245 to 248</p> <p>Threshold/cut-off resistivity included now line 286</p> <p>The focus (scope) of this work is centred on geoelectrical aspects of geophysics, though an inter-digitation of lithofacies in the area should be expected. But an attempt has also be made in the lithological explanation in lines 297 / 298.</p> <p>This paper is a humble attempt in using geoelectrical aspect of geophysics. An integration of geoelectrical, seismic refraction, and geotechnical methods is</p>
--	---	---



SDI Review Form 1.6

	<p>geographically within the study area instead of location-wise conclusion. Is the competency/incompetency of the topsoil increasing or decreasing towards the North, South, East or West? This will serve as a guide to builders/Engineers who may wish to erect buildings at areas away from the researcher's present research locations. Drawing iso-resistivity contour maps could help.</p> <p>(14) References: Some of the author(s) cited were not included in the reference list. eg. Varder-Velper, 1988 mentioned in line 183 was not included in Reference list and some others. Author(s) should either include or delete.</p>	<p>being understudied by the same group. That will serve as a better guide for future researchers. An attempted iso-resistivity contouring without the other aspects will appear as jumping the gun before the shot is fired; and an early conclusion might lack scientific connotations.</p> <p>Corrected</p>
--	---	--



SDI Review Form 1.6

<p><u>Minor</u> REVISION comments</p>	<p>Figure 1: The arrow for the inset is not pointing at the right point in the figure.</p> <p>Line 144: Author(s) should state the model of ABEM Terrameter used. This is necessary for a good judgemental reasoning on the data being presented.</p> <p>Line 154-Table 3: Author(s) should delete (m) in all the values in column 3 as it has been stated on the header of that column.</p>	<p>Noted</p> <p>Inserted</p> <p>Corrected</p>
<p><u>Optional/General</u> comments</p>	<p>Materials and Methods: The methods used by the author(s) are technically sound. Though the authors should endeavour to state the model of Terrameter used.</p> <p>Results and Discussion: Results were properly presented and well discussed</p> <p>Conclusion: The conclusion is well supported by the data discussed in the manuscript.</p> <p>REFERENCES: Cited references are relevant</p>	



SDI Review Form 1.6

	<p>and adequate. Though some were not listed as shown.</p> <p>Once the above comments are carefully adhered to and corrections effected, the paper can be published.</p>	
--	---	--