



SDI Review Form 1.6

PART 1:

Journal Name:	<u>British Journal of Applied Science & Technology</u>
Manuscript Number:	2013_BJAST_5462
Title of the Manuscript:	Petrophysics of the B-Reservoir in Eyram Field, Onshore Niger Delta
Type of the Article	Research Paper

General guideline for Peer Review process is available in this link:

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

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



SDI Review Form 1.6

PART 2: Review Comments

	Reviewer's comment The author did a nice job in interpretation of reservoir properties based on well log data in Eyram Field. However, most of the interpretation is done by common methods, not much innovative.	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	1) The citation for Figures 4, 5 and 6 looks like wrong; for example, Figure 6 was never cited. 2) Empirical equations were used to calculate Sw, porosity and permeability, which is not calibrated with core testing data. Is there any core data available? 3) Why is there a relationship between Sw and Porosity? In addition, as making the fitting line, the two abnormal points should not be involved and a more reliable relationship could be built!	(1) The correction has been made (2) There is no core data (3) All the methods used in Calculating Sw gave the relationship between Sw and porosity. For example Archie gave it as: $S_w = \left(\frac{a \times R_w}{R_t \times \phi^m} \right)^{\frac{1}{n}}$ - where ϕ is the porosity. Secondly, the two abnormal points have been removed.
Minor REVISION comments	4) The caption of Figure 1 is unclear. Does top structure map mean B-reservoir top map? 5) In lines of 47-51, can faults serve as both sealing and conduits of hydrocarbon migration? 6) The comma should be deleted and a period should be added in line 76. 7) Is there any result of hydrocarbon types? Can they be shown in this paper?	(4) Yes, the correction has been effected (5) The last sentence in lines 47-51 has been removed (6) The comma has been removed. (7) The hydrocarbon type is mainly oil with small gas cap but they cannot be shown for proprietary reasons.
Optional/General comments		