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Journal Name:	**British Journal of Applied Science & Technology**
Manuscript Number:	**2014_BJAST_12754**
Title of the Manuscript:	**EXPERIMENTAL ANALYSIS OF SHALE FOR EVALUATING SHALE DRILLING FLUID INTERACTION IN AGBADA FORMATION**
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:

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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	**Introduction:** Line 20 change it's to it is Line 21 – The reference number should be block parenthesis at the end of the statement to which the reference refers before the period, e.g. cost of well [1]. Line 23 – put reference number properly Line 26 – Replace year of study with reference number e.g. Chenevert [3] showed .... Line 28 –31 - Put reference number properly Line 37 & 55 should be deleted and contents incorporated into the introduction since this is not a thesis or project report but a research article Line 41 – last sentence change "as a result from" to "as a result of" Line 46 – put reference number properly Lines 47-51 – Do not list. Render as ".... shale instability include sloughing, caving, ..." Line 60-72 – replace year of study with reference numbers as in line 26 above Line 72 – Define WBMs. Acronyms should be defined when first used Line 73-74 – Render statement as "Results ..... physical phenomenon-osmotic membrane and ....." i.e. delete "which are" Line 85 –this section can be set out as: **2.0 Materials and Methods** **2.1 Experimental Details** **2.2 Experimental Procedure** **2.2.1 Shale Test Sample Characterization**	

2.2.2 Fluid design and test matrix

Line 98-100- should be a continuous statement of experimental study No. 3 i.e. "Development and evaluation ..... samples by performing dispersion tests ..... atmospheric ..... and ..... 120°F as well as swelling tests under ....."

Lines 103 – 107- Give clear descriptive statement of methods of characterization instead of summary. Put reference number properly at the end of line 103

Line 106 &107 should be deleted and lines 110-115 moved to section 2.2.2 as suggested above

Line 120 –Replace "also" bentonite with "as well as" bentonite

Line 122- Reverse sentence as "Three mud systems formulated are shown in table 1 below"

Table 1: S/N indicates 9, but the mud systems are 3. For the sake of clarity why not consider this

S/N	Mud System	Composition
1	KCl-Bentonite Mud	3% Bentonite + 1% KCl 3% Bentonite + 0.3% KCl
2	CaCl-Bentonite Mud	3% Bentonite + 1% CaCl 3% Bentonite + 0.3% CaCl
3	NaCl-Bentonite Mud	3% Bentonite + 1% NaCl 3% Bentonite + 0.3% NaCl

Move the 1st row of table here i.e Base Fluid = water .....

Results and Discussion:

I suggest the following arrangement here:

3.0 Results and Discussion

3.1 Results

Here report all experimental results obtained i.e.

Table 2 & 3; merge Tables 3&4 as Table 3

Table 2 can be rearranged as:

Analysis	Well A	Well B
Depth (ft)	.....	.....
Clay Content (wt%):	.....	.....
Illitite	.....	.....
.....	.....	.....
.....	.....	.....
Mixed layer	.....	.....
Total clay	.....	.....
Non-Clay Mineral content (wt%):		
Quartz	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Table 3&4 to be combined as Table 3:
Table 3 Results of Shale Properties

Parameter (wt%)	Well A	Well B
NMC		
TOC		
CEC		

3.2 Discussion of Results:
Start this section from line 129
Line 128 had already been taken care of in the procedure so delete it
Line 134- the data given in Figure 1 "show" not "showed"
Line 140- Replace "could" with "may"
Line 142 – Do you mean "well B" or "Shale B"? Check and correct
Line 146, 165 &183 should be deleted and use paragraphs instead under discussion
Line 157- insert "of" between amount and non-clay
Line 188 and 189- put ref. No. Instead. Delete "is" after CEC also delete the statement "In our .... CEC test"

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	3.3 Adsorption Isotherms and Modelling Here combine lines 200 and 238. Delete line 210 differentiate these with paragraphs Line 220 – Delete the citations and render as " Several authors have reported isotherms ..... [No 1, No 2, No.3, etc]" Line 235- deduced **3.4 Shale-Drilling Fluid Interaction** Delete line 290 Combine Tables 6 & 7 Line 359 – Put 300 as subscript Combine Tables 8 & 10 as well as Tables 9 & 11 Delete line 402; Discuss section using paragraph Lines 439 & 440 – Render the statement as " ..... tests, despite the fact that swelling and dispersion are different phenomena"	
Minor REVISION comments	1) Please follow the referencing method outlined above and list the references sequentially following the numbering 2) Number the Tables appropriately after combining some as suggested above	
Optional/General comments	Follow the comments above. Delete words and phrases rendered in red fort and insert those in blue fort where appropria	

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