CLAIMS

1. An apparatus for separating solids from solids laden drilling fluid, the apparatus comprising a shale shaker and a screen assembly, the shale shaker comprising a base and a basket isolated from said base, a flow tray arranged in said basket for directing screened drilling fluid, the screen assembly comprising at least one layer of screening material and a ~~screen~~ support having a perimeter with ~~at least one~~ a plurality of support points within said perimeter, characterised in that the flow tray comprises a plurality of contours~~, said plurality of contours~~ forming a plurality of raised portions to support said screen assembly.

2. An apparatus as claimed in Claim 1, wherein the each raised portion of said plurality of raised portions comprises at least one wear strip.

3. An apparatus as claimed in Claim 1 or 2, wherein said flow tray is made from a composite material.

4. An apparatus as claimed in any preceding claim, wherein the plurality of raised portions define flow channels for directing said screened drilling fluid along said flow tray.

5. An apparatus as claimed in Claim 4, wherein the flow channels are tapered to facilitate flow of screened drilling mud.

6. An apparatus as claimed in any preceding claim, wherein the flow tray is rigidly fixed to the basket.

7. An apparatus as claimed in any preceding claim, wherein said ~~screen~~ support comprises a tapered surface.

8. An apparatus as claimed in Claim 7, wherein each raised portion of said plurality of raised portions comprises a tapered support surface to receive said tapered surface of said ~~screen~~ support.

9. An apparatus as claimed in Claim 7 or 8, wherein said tapered surface is formed from a sheet material.

10. An apparatus as claimed in any preceding claim, wherein the screen assembly lies in a first plane and the flow tray lies in a second plane, the screen assembly in the first plane diverging from the flow tray in the second plane.

11. An apparatus as claimed in any of Claims 1 to 10, wherein the basket further comprises a second screen deck, the flow tray directing solids laden drilling fluid thereon.

12. A method of using the apparatus as claimed in any of Claims 1 to 11, the method comprising the step of placing the screen assembly in the basket of the shale shaker, flowing solids laden drilling fluid on to the screen assembly, at least a proportion of the solids flowing over the screen assembly and at least a proportion of said drilling fluid passing through said screen assembly into and along flow channels formed by said plurality of raised portions of said flow tray.