

INSTRUCTIONS:
IRONITE SPONGE DETERMINATION

A. Equipment

1. This test is designed to measure the amount of active Ironite Sponge in the mud that can still react with H₂S.
2. The test uses the sand content tube, a strong magnet and plenty of water.

B. Test Procedure

1. Fill the sand content tube with mud to the “Water to Here” mark, 100 cm³.
2. Transfer all this mud to a larger glass container, like a pint jar or 1,000 cm³ beaker.
3. Thin the mud with water.
4. While holding a strong magnet against the container, carefully pour off all sand, silt, barite and any nonmagnetic mud products.
5. Add additional water and repeat Step 4 until only the Ironite Sponge and silt remain. Then, while holding the magnet with the unreacted Ironite Sponge on the top side of the container, rapidly pour off the silt and barite.
6. Add more water. Then pour the remaining suspension back into the sand content tube, which will remove any magnetic iron filings from casing or drill pipe. Flush the Ironite Sponge into the tube with more water.
7. Work the magnet rapidly up and down, allowing any last traces of nonmagnetic particles to settle. Then pour off these settled particles.
8. Draw the Ironite Sponge to the bottom of the sand content tube with the magnet and allow to settle. Tap the tube lightly to make sure the Ironite Sponge has settled properly and read the percentage.

C. Calculations

The concentration of unreacted Ironite Sponge in the mud is found by:

Ironite Sponge, lb/bbl = percent in sand content tube x 1.4

D. Remarks

The test works because unreacted Ironite Sponge is magnetic while Ironite Sponge that has reacted with H₂S is not magnetic because it forms iron sulfide (pyrite).

For more information, please contact us:

[ExpotechUSA](#)
[10700 Rockley Road](#)
[Houston, Texas 77099](#)
[USA](#)

[281-496-0900 \[voice\]](#)

[281-496-0400 \[fax\]](#)

E-mail: sales@expotechusa.com

Website: www.ExpotechUSA.com