

**Report for the action item SCUFN 23/7 (on “Sand Ridge”)
and SCUFN 23/8 (on “Salt Dome”)**

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1. Formulation of the problem

Section of 3.1 of the SCUFN-23 report (page 10) reads as follows:

“SAND RIDGE(S): A low ridge, or series of long, wide, low, parallel ridges of sand, sometimes crescent shaped.

The Sub-Committee noted that a sand ridge on its own is not a large enough feature for this term to be included in B-6. However, “Sand Ridge” could possibly be used in terms of a province.

SALT DOME

It was noted that “Salt Dome” was a similar term to “Sand Ridge” in that it contains a term that has implications for province.”

The Generic Terms Group understands that the problem is that both of the features may be too small to be considered by SCUFN. We thus firstly examined the size of the features; see the attached PDFs for the examination.

2. Recommendation from the Generic Terms Group

2-1. Salt Dome

Following the examination, it seems that a typical salt dome may have a diameter of ~10 km and 400-500 m relief. This dimension is comparable to, or larger than that of a “mud volcano”, that was accredited by SCUFN-23 as a new generic term with genetic implications.

According to the precedent, where “Mud Volcano” was accredited by SCUFN-23, “Salt Dome” is also eligible for a “stand-alone” generic term (with genetic implications). As you can see the informal example of “TAMU Dome”, a salt dome in fact already has its own name in the community.

However, also as you can see the example of the Gulf of Mexico, there can be a region of numerous salt domes, for which case should be called as “Salt Dome Province”.

“Salt Domes” are formed as diapirs by vertically intrusive evaporite deposits, and have been studied extensively because of their association with oil and natural gas occurrences. In this context, the Generic Terms Group recommends that SCUFN should accredit the generic term (with genetic implications).

Below are some definitions found in Internet. During discussion in SCUFN-24 in Beijing, we may want to decide our definition of “Salt Dome”.

Definition by <http://www.webref.org/geology/geology.htm>:

“Mass of NaCl generally of roughly cylindrical shape and with diameter of about 2 km near top. Such mass has been pushed through surrounding sediments into present position. Reservoir rocks above and alongside salt domes trap oil and gas.”

Or

“A diapir or piercement structure with a central, nearly equidimensional salt plug, generally 1 to 2 km or more in diameter, which has risen through the enclosing sediments from a mother salt bed 5 km to more than 10 km beneath the top of the plug.”

Definition by Schlumberger Oilfield Glossary (<http://www.glossary.oilfield.slb.com/>):

“A mushroom-shaped or plug-shaped diapir made of salt, commonly having an overlying cap rock. Salt domes form as a consequence of the relative buoyancy of salt when buried beneath other types of sediment.”

2-2. Sand Ridge

Following the examination (review of the PDF by Hyo Hyun Sung and reading of Goff et al., 1999), it seems that a sand ridge is a very minor feature developed along shallow costal area, with dimensions 1-5 km in width and 1-10 m in relief. This is too minor feature for a “stand-alone” generic term (with genetic implications). In stead, the generic term can only be used as a generic term modifier for “Province”.

According to the literatures, it seems that “sand ridges” are quite common features along the US northeast coast as well as in the Yellow Sea (both along the Korean coast and Chinese coast), suggesting that the features can be global phenomenon. In this context, the Generic Terms Group recommends that SCUFN should accredit the generic term as a generic term modifier for “Province”.

Proposed definition (as proposed by Hyo Hyun Sung):

*“A submerged low ridge of sand formed at some distance from the shore. It can be a series of long, wide, low, and parallel ridges. **To be used only as a generic term modifier for Province, i.e. Sand Ridge Province.**”*

or

*“A low ridge, or series of long, wide, low, parallel ridges of sand, sometimes crescent shaped. **To be used only as a generic term modifier for Province, i.e. Sand Ridge Province.**”*