

Stratigraphic cross section A-A' traverses an area from the Coquina #1 Vasquez (11-24S-28E) south to the Getty #1 Salt Draw "11" Fed COM (11-25S-28E). The relationship and relative position of the two main objective sands within the Atoka section is depicted on this cross section. It is felt that both the Willow Lake and Salt Draw sands are present in the State V-492 Well No. 1 and are separated by a two foot "tight" streak which is being interpreted as a shale. The sands in this well are probably near or at the edge of their respective channels.

The Willow Lake sand is associated with a channel that trends generally north-south across the area of interest. Mapping of the net sand with porosity greater than 7% was done in order to establish the productive limits of this sand. As it can be seen on the isopach map, this sand has a net thickness of 5' in the State V-492 Well No. 1 and 0' of net sand in the Maddox # 1 Guitar well in Section 23. In both the HNG # 1 Craft in Section 25 to the east and in the wells in Sections 34 and 35 to the south, the sand is completely absent. Utilizing the aforementioned points of control, a narrowing of the channel can definitely be seen as the channel progresses out of Section 22 and through Sections 26 and 27 toward the south. An orthodox location 660' FNL and 1980' FWL in Section 26 would most likely be at the very edge or out of the channel, whereas the proposed 660' FNL and 1650' FWL location would be closer to known production in the State V-492 Well No. 1 and the two wells in Section 22 and therefore would be much more likely to encounter the Willow Lake sand within the channel.

Like the Willow Lake sand, the Salt Draw sand is also associated with a channel which cuts through the area during Atoka time. Isopaching of this sand using a productive limit of 7% porosity shows the proposed location of the IMC Well No. 1 being at the edge of the channel which runs along the western edge of Section 26 and down to the south. With the sand being completely absent in the wells in Sections 22 and 25 and having only 4' of net sand in the State V-492 Well No. 1, a location any further to the east in Section 26 probably would miss the sand completely.

Structurally the proposed unorthodox location would be only slightly updip (10-15') to a well in an orthodox location further to the east. Water has not been a problem to date in these Atoka sands in the immediate area; however, the structural advantage which may be realized in the IMC Well No. 1 location could be beneficial.

IV. Conclusion

With the previous discussion in mind, it can be concluded that the proposed location of Pogo's IMC Well No. 1 has a much better chance of encountering both the Willow Lake and Salt Draw sands than a well located at a standard location 660' FNL and 1980' FWL of the section. Therefore, in order to enhance the probability of establishing commercial gas production from these sands in Section 26, it is respectfully requested that approval be granted to drill the IMC Well No. 1 as proposed.