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C. A. Yeilding[1], B.Y. Yilmaz[2], D.I. Rainey[1], G.E. Pfau[3], R. L. Boyce[1], W.A. Wendt[1], M. H. Judson[3], S.G. Peacock[1], S.D. Duppenbecker[1], A.K. Ray[1], R. Hollingsworth[2] (1) BP, Houston, TX (2) BP, Houston (3) BP

The History Of A New Play: Crazy Horse Discovery, Deepwater Gulf Of Mexico

The Crazy Horse discovery is an accumulation of over one billion barrels in the deepwater Gulf of Mexico. This test led to the discovery of a new play, and challenged traditional exploration philosophies in the GoM. After early success in the amplitude-driven deepwater play, pool sizes were declining, and success rate was flat at best. We adopted a 'back to basics' philosophy, focused on the geologic elements of the basin, while ignoring seismic attributes. This concept changed the way we viewed prospectivity in the GoM, and steered us towards deeper untested structures.

Regional work indicated that Mississippi Canyon was a top place to focus our exploration efforts. Existing discoveries highlighted the presence of a world-class petroleum system as well as large structures with significant fetch areas. The Crazy Horse area held promise as a top area to test this new play concept.

Before we could drill, several major hurdles had to be overcome. The acreage position had to be secured, and rigs with the ability to drill in these water depths had to be accessed. Three-D seismic surveys and depth-imaging breakthroughs were required to describe the prospect elements and position a well.

The seeds for the Crazy Horse discovery were sown in the fertile ground of exploration dry holes almost a decade before. It is a story of team persistence and learning, through several organizational generations. It is also a tale of willingness by the leadership of an organization to provide the support necessary for the team to succeed.