## Play-Based Exploration and Player© Workshop (4 days)

## **OVERVIEW**



This content-rich, entertaining, and informative course will be taught in a classroom setting where all students have access to workstations or PC's with the Player software (from GIS-pax) loaded. The **course** will combine all important Play-Based Exploration (PBE) concepts with 'how to' exercises in PLAYER, focusing upon 1) Common Risk Segment (CRS) map creation and editing; 2) post-drill well analysis; and 3) yet to find resource calculations. In other words, the course will combine the most important aspects of two other course offerings – the PBE 'Concepts' course (3 Days) and the PLAYER Workshop (2 Days).

The Player software is compatible with both R&A prospect software as well as GeoKnowledge clients. Key terminology differences between the major software products will be explained and compared. The course will teach methods espoused by R&A – that is, a fully quantitative approach to the process, making maps that show Play Chance and Prospect Success Ratio (PSR). The chance scheme presented can be customized to client needs.

While it is preferable that attendees be at least familiar with the 'look and feel' of an ARC project, enough basic ARC techniques will be taught to make attendees functional in all aspects of PLAYER. Emphasis of the course will be upon automated tools built into PLAYER, with addition of basic ARC editing skills.

This is not a basic level course. Attendees should have at least a few years prospecting experience and some exposure to basic statistical patterns common in our industry.

At the end of the course the attendees will be able to (or will understand the concepts for):

- define a project (a basin scale structure for one or more play analyses)
- define the stratigraphic hierarchy for data analysis
- understand the basics of importing/exporting datasets including importing and geo-rectifying maps
- define an overall play outline, and how to subdivide the play into segments
- utilize the powerful key well analysis functionality built into PLAYER
- establish parameter values for Play Chance/PSR, consolidate into Overall Play Chance/PSR/Total Chance maps
- adjust segment boundaries and then recombine and recalculate maps
- analyze field size distributions, including all pitfalls in that process, including time series analysis
- make estimates for undrilled prospect counts
- calculate undiscovered volumes associated with play segments.

## **COURSE AND EXERCISE OUTLINE**

- 1. Introduction / objectives / global trends
- 2. Basin analysis and global basin classification
- 3. Overview of PLAYER and basics of ARC editing functionality
- 4. How to build a project
- 5. Defining play boundaries
- 6. Segmenting plays
- 7. Common Risk Segment mapping different mapping methods
- 8. Treatment of chance plays vs. prospects
- 9. Data issues and key well analysis
- 10. Calculating undiscovered potential (conventional plays)
- 11. Using Field size distributions
- 12. Risk Analysis for plays
- 13. YTF Exercise for Brent Play
- 14. Unconventional gas PBE and YTF (Optional)

## **EXERCISES**

Exercises generally follow each listed topic above, touching upon all aspects of PBE and using PLAYER's functions to manage the process. As with the PBE Concepts course, what makes this course unique is that participants form multi-disciplinary teams to analyze a dataset (maps, cross sections, wildcat drilling results, field volumes) for a mature basin based upon state of knowledge from circa 1980. The dataset has been pre-loaded into Player, but participants will gain hands-on experience importing map data, making adjustments to their segment boundaries, and conducting key well analysis. The data are used to make Common Risk Segment maps for play and prospect-specific chance, predicted ultimate trap density, and predicted future field size characteristics.

Each team will make a prediction for the undiscovered potential in each play segment. At the completion of the exercises, a 'solution set' of actual results (1980-present) is provided so that participants can learn powerful lessons about what they did well, and areas for improvement.