

## ESRI Petroleum User Group (PUG) 4-6 March 2002

### Westin Galleria, Houston Texas

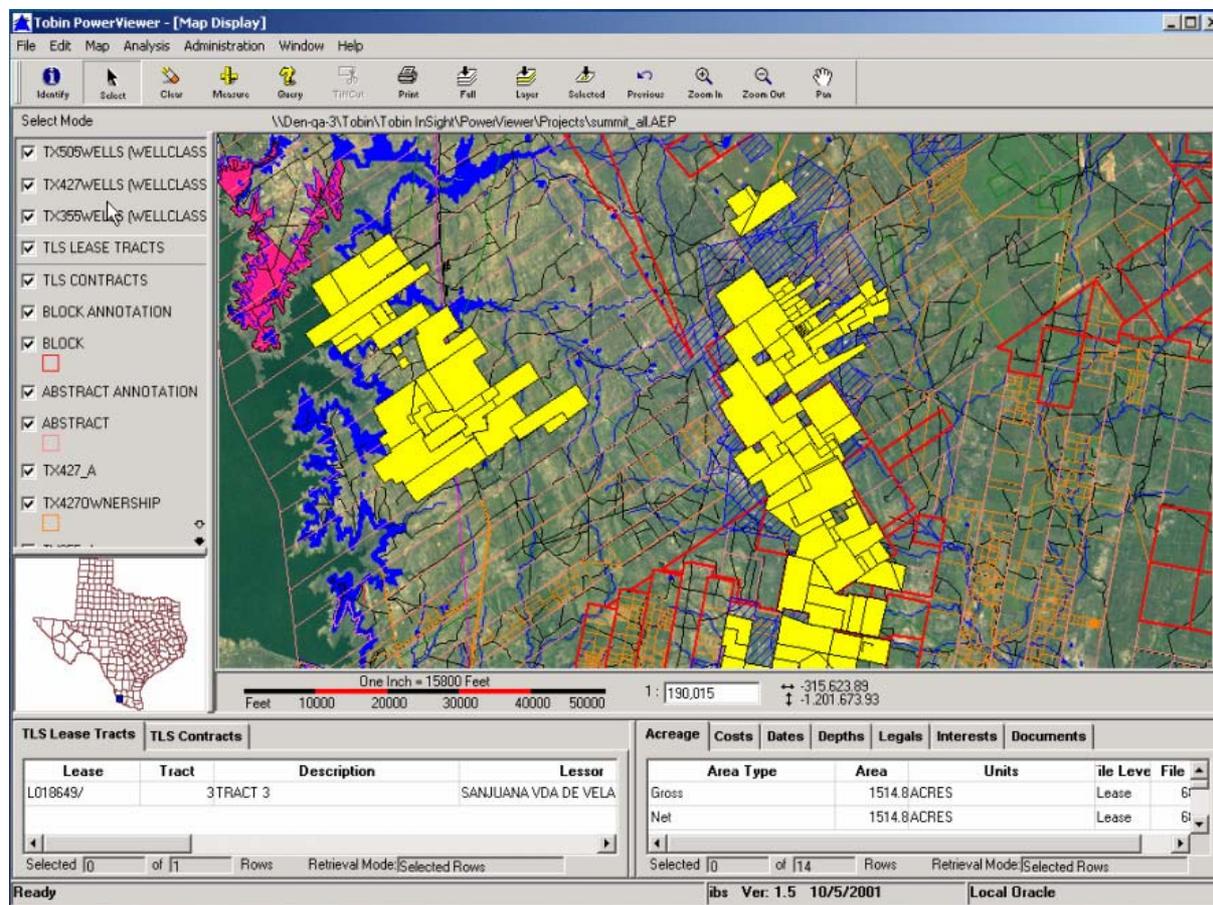


Figure 1 GIS in action – bitmap imagery, vector graphics and tabular data.<sup>1</sup>

### Introduction

The ESRI Petroleum User Group is in its 12<sup>th</sup> year and had its largest attendance to date with around 300 present at the peak. Foreign participation came from Western Siberia, Europe and South America. With the announcement of PUG luminary Bill Wally's (Chevron Texaco) retirement this meeting offered a time for reflection. Charles Fried (BP Amoco) presented a paper describing the PUG's origins in the 1989 'Project Database'. In this industry-wide request for technology and Geographical Information Systems (GIS) 'challenge' to vendors, the then unheard of ESRI came out ahead. Since then, ESRI has come to dominate the oil and gas industry's use of GIS. The PUG has a close relationship with ESRI and receives a fair amount of attention in the form of ESRI support of the PUG meetings and some influence on product development. This has fostered an almost religious following of ESRI by some PUG members – is their faith justified? Bill Wally believes so. By latching on to a horizontal software vendor, the oil industry effectively gets GIS research and development for 'pennies on the dollar.' Many significant architectural improvements to ArcGIS were requested by the PUG. On the other hand, the PUG has had to bide its time waiting on some critical functionality while ESRI deals with more important business outside of oil and gas. One

<sup>1</sup> Image courtesy of Tobin International.

example of this is the ability to label seismic shotpoints correctly. Although this has been in the PUG 'List' for over a decade, ESRI has only now gotten around to a fix, which will be available later this year.

The big change in ESRI's product suite, and one that oil and gas companies are in the process of coming to terms with, is the introduction of the Arc 8 Geodatabase. This offers the possibility of richer metadata and attribute modeling within the GIS. This is a good thing for the mapmaker, but will cause some headaches in corporate data management, as it will be necessary to arbitrate where to store data – in vertical applications (some of which contain their own embedded ESRI products), or in the new Geodatabase. The move to Arc8 also represents a shift to a Microsoft COM architecture. This has not been an easy shift for ESRI, which initially came up with some unwieldy COM objects. These are now in the process of componentization.

What happened to the Public Petroleum Geodatabase announced at the PUG last year? It seems that this project has been abandoned. No doubt ESRI would like all its clients to design and use a Geodatabase but there is no longer any intent to channel such an effort into a 'standard'. The notion of a 'standard model' is often now associated with a commercial initiative: Miner and Miner in facilities and MJ Harden in the case of the pipeline ISAT model. The ISAT pipeline model is one of two competing models – the other, PODS, coming from a group of companies led by New Century Software.

GIS cuts across the spectrum of oil and gas activity. A large proportion of the PUG membership comes from the pipeline community where environmental and regulatory pressures are driving GIS development. The results are an impressive use of GIS combining vector, bitmap and spatial data to create accurate maps for use in emergencies. The addition of GPS and wireless GIS further aids the field worker.

ESRI's product line can be confusing, one suspects by design rather than by accident. Taken as a whole, the functionality is impressive. Trying to decide exactly which products are right for you may be difficult at times.

#### Highlights

[Operation Database – early days of Petroleum GIS](#)

[BHP Billiton – Integrating ER Mapper and ArcView](#)

[Schlumberger - SmartView 'to replace SmartMap'](#)

[ArcReader – Changing map distribution licensing?](#)

[Maplex - Quality Cartographics](#)

[Shotpoint posting – at last!](#)

[PODS and ISAT – the pipeline standards war!](#)

[GPS and Wireless GIS](#)

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