

The industry has a problem and it starts at the well, perhaps this well in Dimmit County, Texas.

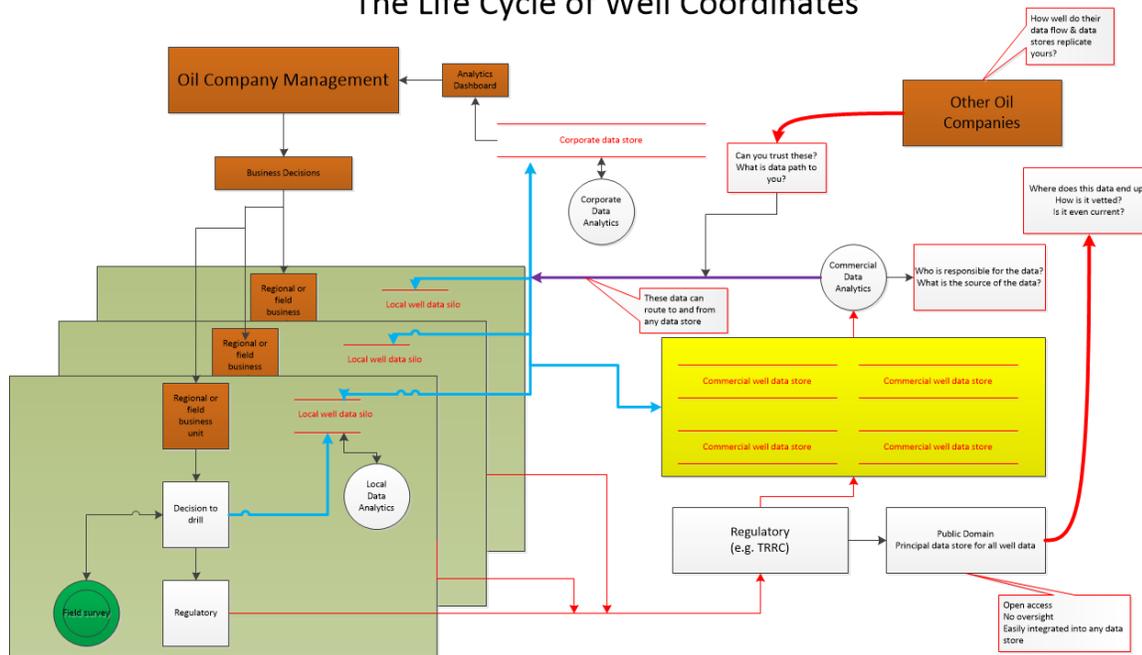


Without this image we might not know there is a problem; in fact multiple problems. We can see the well's location in the image next to the green dot. We can also see other coordinate representations for the same well that are found in various data stores used within and without each company's user base. We as an industry have named these silos and we have recognized the potential problems they create. Yet we

continue to struggle to find solutions to allow us to resolve silos and to get to a point where we can address the issues with data stored in them.

There is in fact, a solution that is being used to address this particular problem of well locations and it is called *bundling*. The beauty of *bundling* is its use of collaboration, and horizontal thinking to achieve a solution; it is easy to scale its solution; and, not only for well locations but also for other well related things. First let's look at the issue of silos as demonstrated by the following diagram:

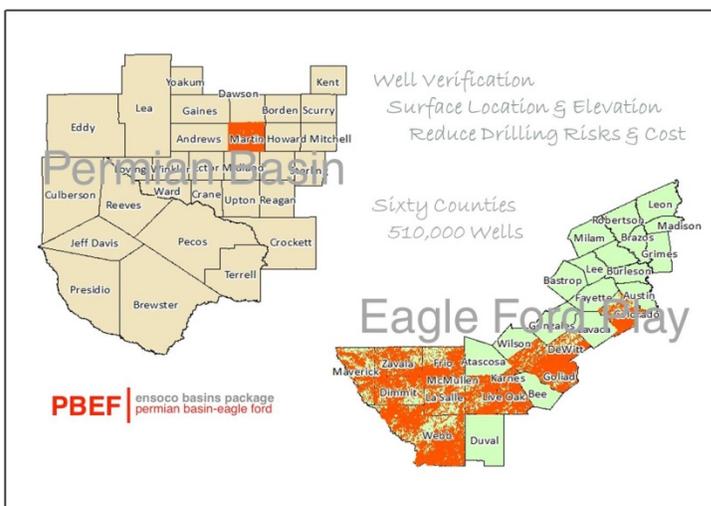
The Life Cycle of Well Coordinates



The diagram shows that silos exist in two forms; within the constraints and structure of each oil and gas company and externally through data stores controlled by governmental, commercial, service and even other oil and gas companies. Whatever solution is created must be able to address the issues of all silos, not just the ones within an individual company; simply because of the paths data flow into and out of companies. This is where *bundling* becomes so important and why even the name *bundling implies a total solution*. The simple equation $bundle = [data + expertise + partners]$ indicates the solution.

ensoco is bundling well data from silos contained within companies and throughout the well data flow. We are engaging companies to provide their data to be combined with well data we are sourcing into a *well data bundle*. We are using expertise we have developed as well as looking within and outside industry for expertise in various technologies to address the issues of well location and well header data. We are engaging partners to provide expertise and tools to address a total and sustainable solution to this problem.

ensoco have begun this task by bundling two-basins into a package, the ensoco basins package covering the Permian Basin (PB) and Eagle Ford (EF) Play – the PBEF Basins Package



.... 60 counties, 510,000 wells contained in two of the most important producing areas in our industry.

By combining two regional development areas, we have addressed the issue of corporate silos within business units by encouraging shared costing

across divisions. We are addressing silos across industry as well by sourcing well data from clients, public domain and commercial entities.

With the power of modern database computing and expertise, we are rationalizing well header data conflicts using all the silo'd sources of those data. Through the use of imagery we are addressing the core problem of location confidence. As in the first example above, the well location is visually obvious as are the incorrect representations

of that location. Only through the *ensoco bundling method* can wells truly be reliable and usable for the intended needs of our industry. For every well, dating to the 1930's, we are providing through historical and modern imagery, a visible representation of the well location. Through modern technology and the application of crowd sourcing, we are able to engage people to assist in resolving an industry problem bridging issues outside our industry, while providing our clients with a solution which enables them to be better and more knowledgeable stewards of the areas they work through risk reduction.

The solution we are creating represents a shared need and not just that of a particular company, but all companies and it offers a model for developing similar solutions that not only address our two-basins package but beyond. Beginning at a point of a 25% solution representing what we have already completed, to all the wells in both the Permian Basin and the Eagle Ford Play. The package represents 1/3 of all the wells in Texas. These are being placed in a single useable and reliable well location database and are being made available to all companies. This bundling resolves the need for every company having to perform the effort individually while still facing the continuing cycle of silos outside each company.