

Texas Wellfile Image Online Database

by Larry J. Rairden, #2924 – Houston, Texas



Larry J. Rairden

How often have you needed completion details, a directional survey, location plat, or other wellfile information to assemble a prospect? Where do you obtain such information? For

the independent prospect generator, such a task often meant a trip to the log library, a purchase from a commercial data vendor, or a good relationship with the operator of the well in question.

Today, much wellfile information is readily available through various state agencies, at no cost, via the Internet. In Texas, for example, wellfile records of the Railroad Commission of Texas have been scanned and made available online. (Louisiana wellfile records are also available online, through SONRIS, as described by J.S.F. Phelps, #2509, in the *SIPES Technology Corner*, August 2007.)

In the following example, I am developing a Yegua prospect in Hardin County, Texas. Several of the key wells to my prospect happen to be highly deviated. I have MD logs from these wells that are critical to my interpretation, but I do not have the directional surveys. The directional survey information is required so that my log correlations can be properly mapped in depth. One of these deviated wells is also a producing gas well. I hope to find a plat showing the boundary of the producing unit for my leasehold acreage maps.

Enter the Internet. Website "rrcsearch.neubus.com" launches the profile selection window of the wellfile image database of the Railroad Commission of Texas (Figure 1). From the profile pulldown menu, selecting

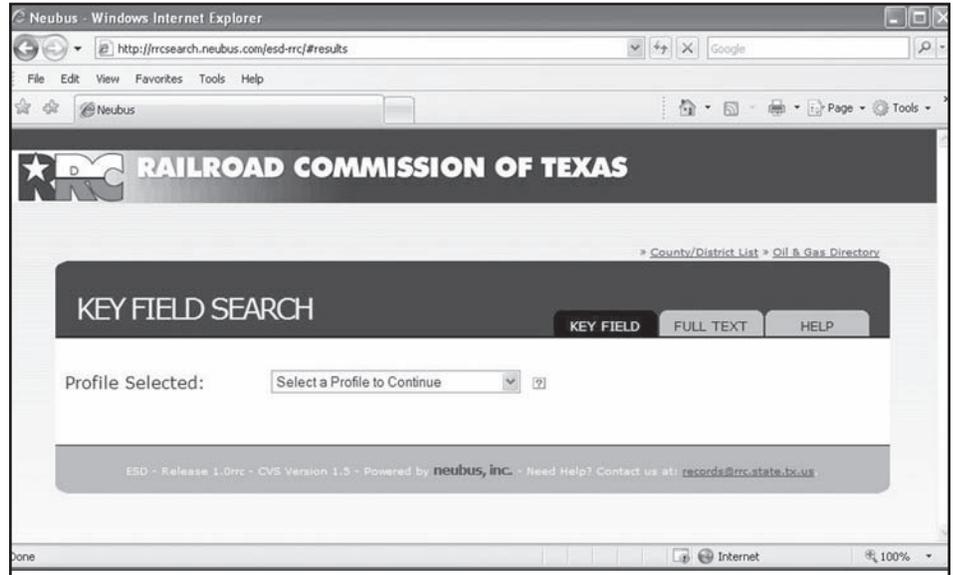


Figure 1. The profile selection window of rrcsearch.neubus.com.

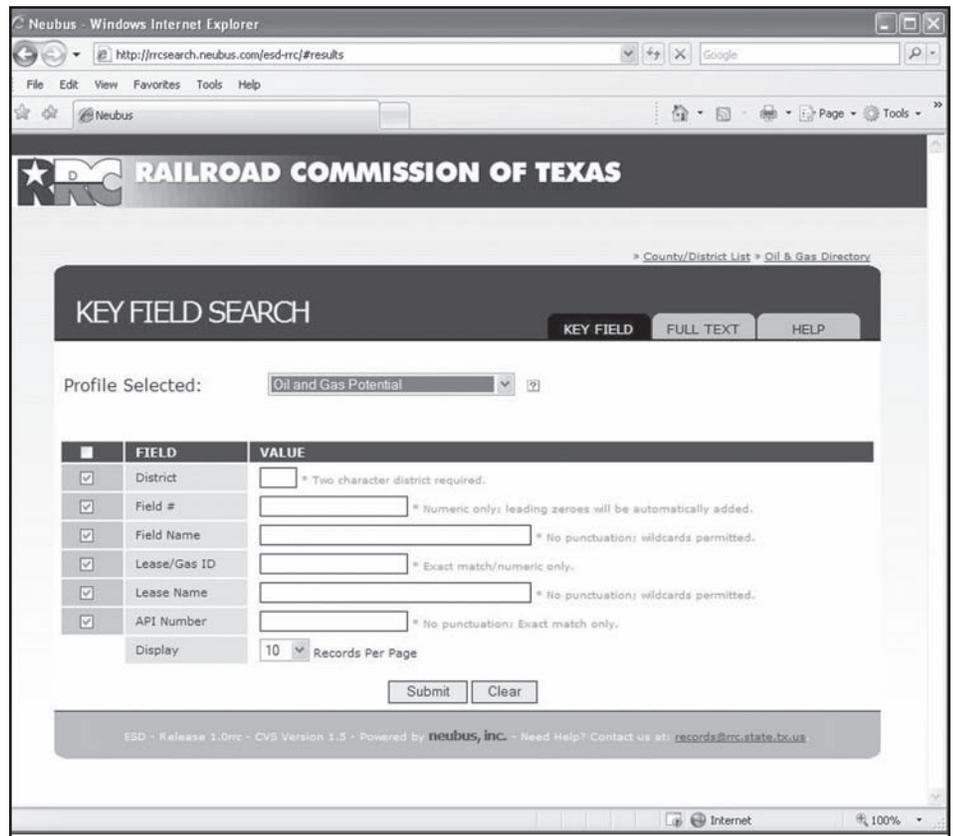


Figure 2. Profile selection "Oil and Gas Potential" displays the wellfile search query window.

(Continued)

“Oil and Gas Potential” brings up the key field search options for wellfiles (Figure 2). As Figure 2 shows, wellfile records can be searched by field name, lease name, API number, or other indexed attributes. A wildcard function is available for certain searches; otherwise, an exact match is necessary to find the indexed wellfile. The wildcard function can be activated by using an asterisk (*) as a prefix, suffix or as both on the entered value for ‘starts with,’ ‘ends with,’ or ‘contains.’

The first key well that I am searching for is called the “Peoples Energy Gemini Unit No. 1.” For my search, I simply enter “Gemini*” (“Gemini” followed by the wildcard function *) in the Lease Name field. Clicking the Submit button results in eight matching records (Figure 3). Two of these matches reference the field name “Pine Island Bayou Yegua EY-1” and relate to the subject well.

Clicking on the “WELL LOG” link for this field name enables a scanned image of the log to be displayed or downloaded. In this case, it is a TVD log. This complements the MD log for this well that I already have, so I save it for use in my prospect package.

Returning to the results page of “rrcsearch.neubus.com” and clicking on the “POTENTIAL” link corresponding to this field name “Pine Island Bayou Yegua EY-1” opens a 64-page pdf file containing a wealth of information. This file includes all of the forms and materials submitted to the Texas Railroad Commission for regulatory purposes. Scrolling down in this file, I find a plat of the well location and unit boundary on page 26. I copy this page into my project folder reference. Continuing to scroll down, I find the directional survey report that I have been searching for on pages 42-44.

At this point, I key in the MD/Inclination/Azimuth for about 10 points along the 5,000-foot deviated portion of the wellbore. With this directional information, my interpretation software (GeoGraphix

The screenshot shows a web browser window displaying the 'KEY FIELD SEARCH' interface of the Railroad Commission of Texas. The search results are as follows:

| POTENTIAL | OVERSIZED | DISTRICT | FIELD # | FIELD NAME | LEASE/GAS ID | LEASE NAME | API # |
|-----------|-----------|----------|----------|------------------------------|--------------|-----------------|-------|
| | | 03 | 00006001 | WILDCAT | 25049 | GEMINI | |
| | | 03 | 34376475 | GEMINI VICKSBURG | 23756 | GEMINI GAS UNIT | |
| | | 03 | 34376475 | GEMINI VICKSBURG | 23756 | GEMINI GAS UNIT | |
| | | 03 | 10385001 | BON WEIR | 18581 | GEMINI | |
| | | 03 | 71607495 | PINE ISLAND BAYOU YEGUA EY-1 | 201531 | GEMINI UNIT | |
| | | 03 | 65398166 | NEWTON S KURTH SAND | 233864 | GEMINI | |
| | | 03 | 10385001 | BON WEIR | 18581 | GEMINI | |
| | | 03 | 71607495 | PINE ISLAND BAYOU YEGUA EY-1 | 201531 | GEMINI UNIT | |

Figure 3. Results found with Lease Name matching “Gemini*” (the asterisk “*” being the wildcard function).

Discovery) can accurately map the wellbore path and post it in cross-section. My fault picks and formation tops can be displayed with their correct subsea depths in their correct spatial locations.

The above procedure is repeated for a second well, the “Blackstone Minerals A-2,” which has an S-curve

wellbore as opposed to the build-and-hold deviation of the “Peoples Energy Gemini Unit No. 1.”

Having entered the directional surveys, my cross-section software can now display these well log images on their deviated well tracks. Figure 4

(Continued)

