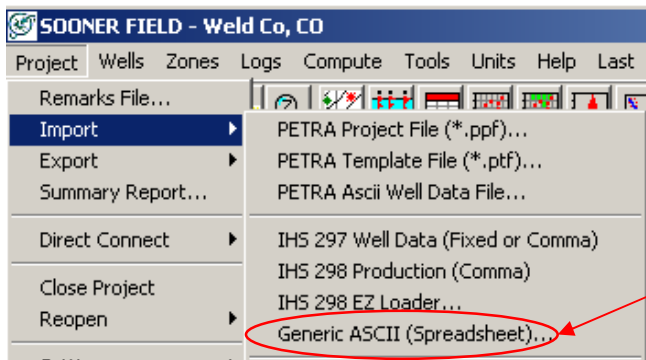
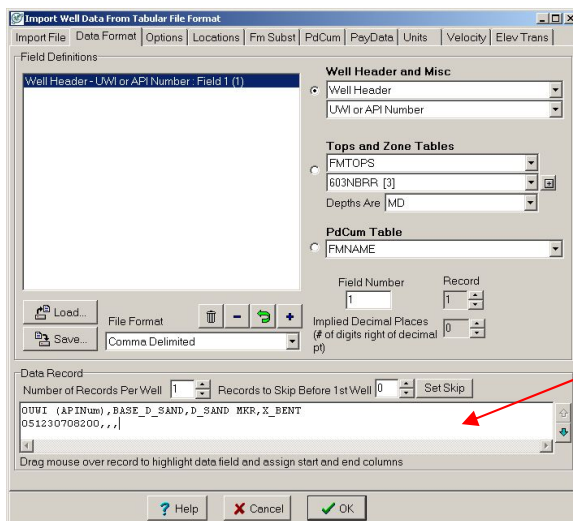


## LOADING FORMATION TOPS (Spread Sheet Data)

Many times you will have well data that can be loaded from an Excel spreadsheet file. PETRA will read a space delimited file (extension of .PRN) or a comma delimited file (extension of .CSV) which can be saved out of Excel. PETRA does not read the .XLS file directly. We will load formation tops from a “csv” file. To load this type of data, select the “Project > Import > Generic ASCII File” menu located in the “Main” module:




Click the “Open File” button and choose the file called, SOONERTOPS.CSV located in the *c:\geoPlus1\Data\Sooner* folder:





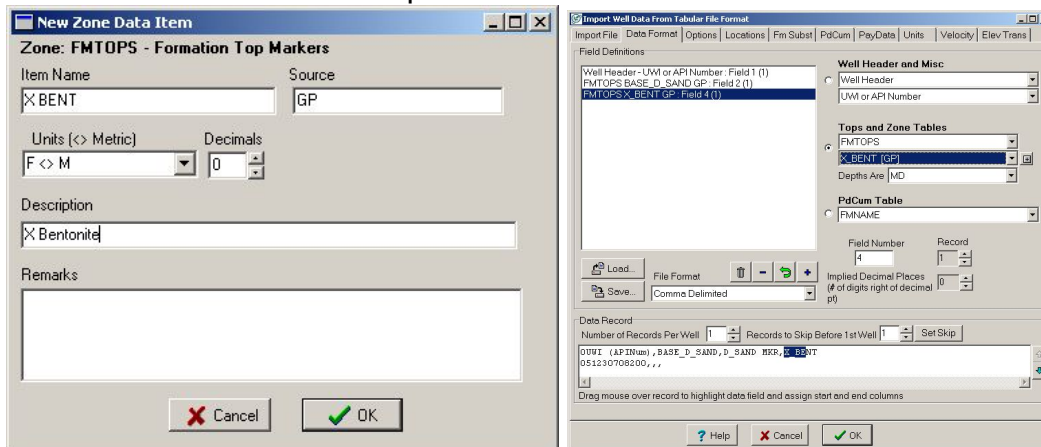
The “Data Format” Tab shows the first two records of the file at the bottom. Click the light blue down arrow once to scroll to the next record. You should now see the last header record and the first data record containing the API number and several commas.

We need to **skip the 1<sup>st</sup> header record** at the top of the file. Click the “Set Skip” button and a value of 1 will be put in the “Records to skip before 1<sup>st</sup> well” option. You can also enter a value of 2 manually. Skipping the records removes the “header” rows of the spreadsheet from being entered into the database.

We will next “connect” each field in the file that we wish to import to a database item. To start with, the API number must be present in the file to match a file record to a well in the database. Highlight the API number in the “Data Record” section using the mouse as shown in the figure above. Note that the “Field

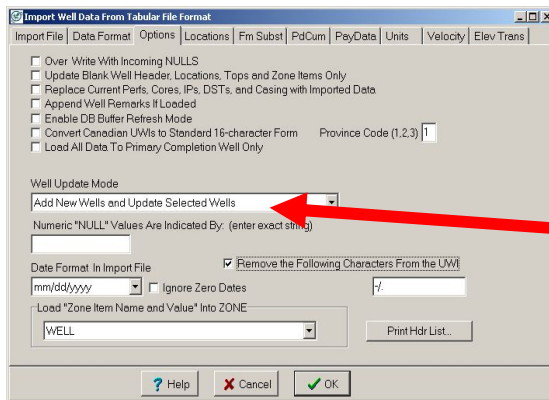
Number” value is set to 1. Click the “blue plus”  button located in the center portion of the screen. The API number (UWI) will be added to the “Format Definition” list. The other fields that we need to load are formation tops for the Base D Sand and XBENT.

To define the field position of the Base of the D sand, highlight the words “BASE\_D\_SAND”. This is field number 2 and needs to be assigned or connected to a formation top. We need to add a new top to the FMTOPS table by clicking the small gray plus  button beside the tops list. Enter the formation top name of Base D Sand and a description. Again, click the  button to add Base D Sand to the formation description list.




Repeat the above process for the formation top XBENT (field #4).

**IMPORTANT** – Check how wells are to be updated or added. Look at the “Well Update Mode” located on the “Options” Tab. Select “Update Selected Wells Only” to insure we don’t accidentally add any wells to our project.



Click the “OK” button to begin loading the file.

**Change to: Update Selected wells only**

Save the format definition by clicking the “Save” button  just in case you need to reload this file. Save the format as **TOPS.FM1**.

The Excell spreadsheet needs to be saved as a csv file and looks like this:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OUWI (APINum)	BASE_D_SAND	D_SAND MKR	X_BENT										
22	51231306500	6324	6256	6163										
23	51231308200	6329	6289	6192										
24	51231309000	6329	6273	6179										
25	51231309200	6303	6279	6186										
26	51231310700													
27	51231313300	6288	6246	6153										
28	51231313800	6342	6278	6183										
29	51231325900	6270	6232	6139										
30	51231327600	6301	6226	6138										
31	51231333000	6284	6241	6151										
32	51231333100	6322	6281	6187										
33	51231349100													
34	51231349600													
35	51231350300													
36	51231350500	6355	6312	6220										
37	51231350700	6355	6312	6220										

## FORMATION TOPS DATABASE

On the “Main” module, click on the “FmTops” Tab and locate the well with WSN #22. You should see the two new tops listed at the bottom of the list. The formation top is stored in the database table as measured depth. Subsea or TVD subsea for deviated wells is computed when needed. You can edit either MD or SSTVD values.

The **QUALITY CODE** (QUAL) field is available for you to enter such comments as FO (faulted out), EST (estimated), INL (Interval Not logged), “?” (questionable data), or NDE (not deep enough). The quality code field can be posted and used to query wells, highlight posted data and filter wells used for contouring. Quality codes have a maximum of 8 characters.

You can also enter a **REMARK** for each top value. Simply double-click in the remark field to bring up the edit box. Remarks have a maximum of 4096 characters.

WSN	Unique Well ID	Well	Cores	Perfs/Shows	Production	Prod Cums	Rasters	Other
Project	Well	Location	FmTops	Zones	Logs	IP Tests	Fm Tests	
36	05123120150000	1						
37	05123122240000	15-C						
38	05123122250000	16-C						
39	05123123810000	1						
40	05123124390000	2						
41	05123125790000	14-C						
42	05123126590000	10-C						
43	05123128930000	11-C						
44	05123130450000	15-C						
45	05123130650000	2-28						
46	05123130820000	8-28						
47	05123130820001	8-28						
48	05123130820000	11-C						
49	05123130820000	1-28						
50	05123131070000	1						
51	05123131260000	15-C						
52	05123131330000	7-21						
53	05123131340000	1						
54	05123131380000	6						
55	05123131680000	1-22						