



中國地質大學
China University of Geosciences

艰苦朴素 求真务实

温家宝

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OpendTect--导入井数据

Li

中国地质大学



1.2.4 导入井数据

井数据：

(1) 使用井名称和井轨迹定义测井

(2) (可选地) 添加如下信息：

- Time-Depth曲线

- Markers

- Logs

(3) 在Well-tie模块 (synthetic-to-seismic 匹配模块) 中，可以修改Time-Depth曲线 (拉升或压缩)。

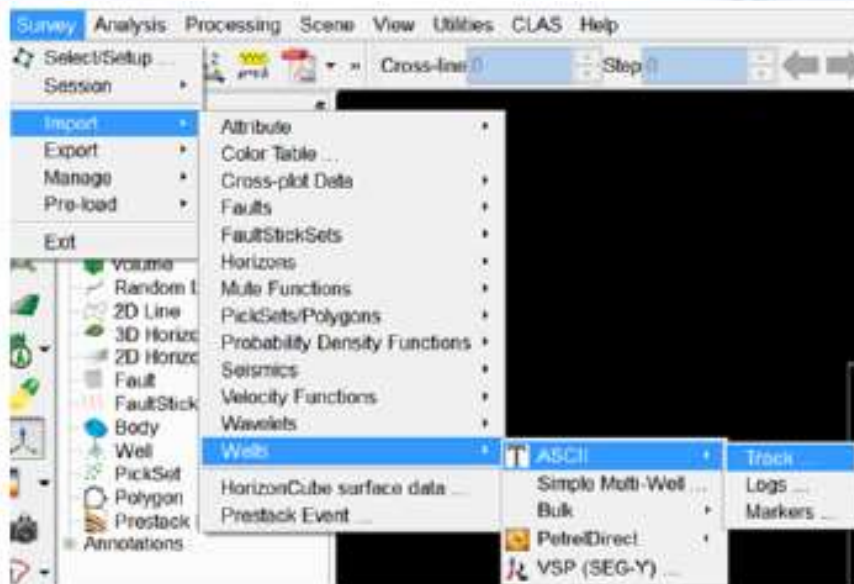
(4) 在Well管理中，使用OpendTect的Rockphysics库和math&logic操作，创建新的Logs



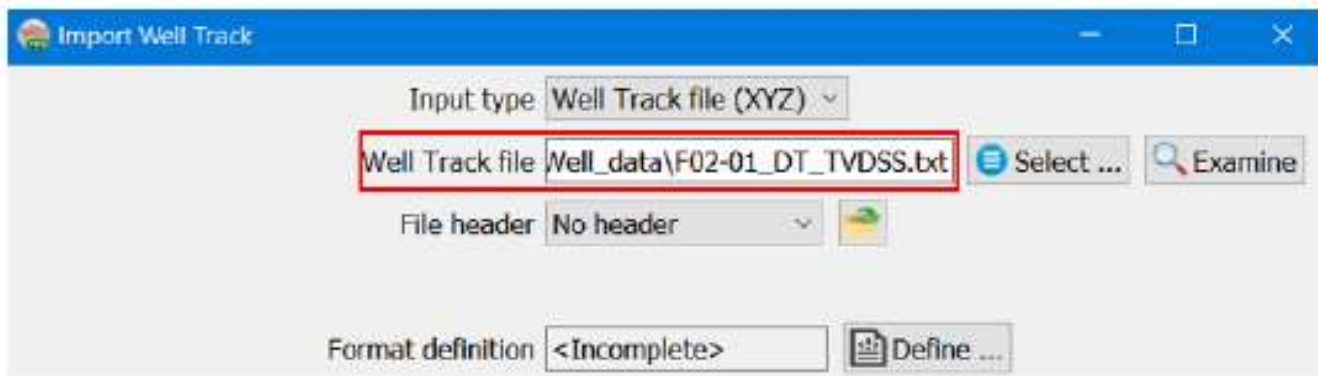
练习目标：从ASCII和LAS文件，加载井数据。

Workflow:

1. First **import** the well track by choosing Survey > Import > Wells > ASCII > Track.
2. **Select** the Well track file: /Rawdata/Well_data/F02-01_welltrack.txt for example.

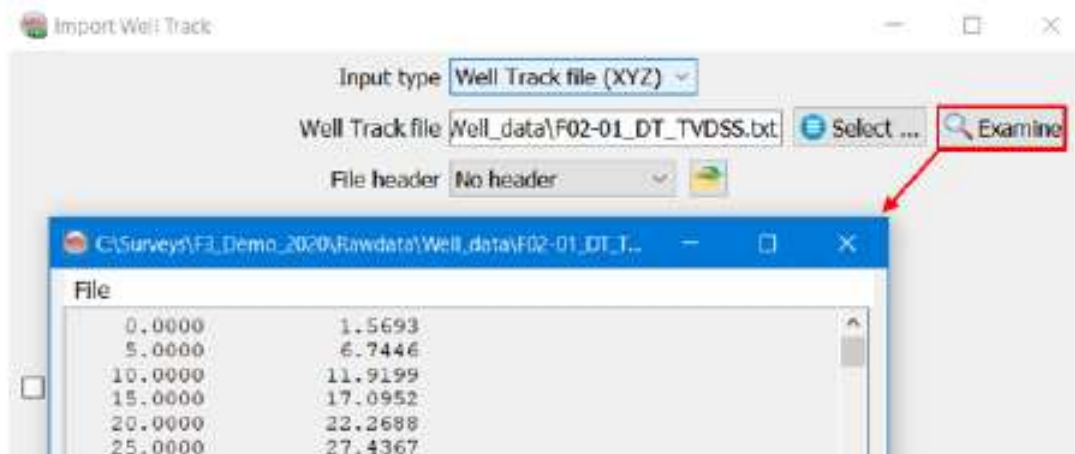


If you select Directional or Vertical Well, you can manually add the well head coordinates.

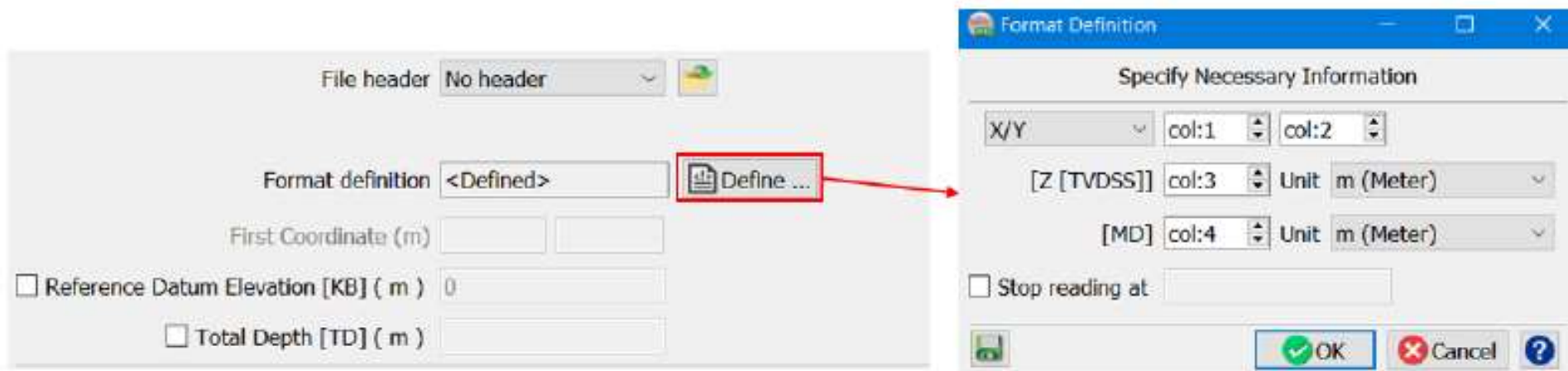




3. **Click** on the Examine button.

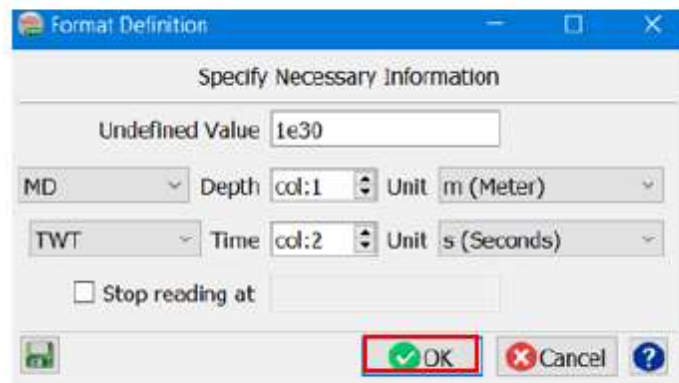
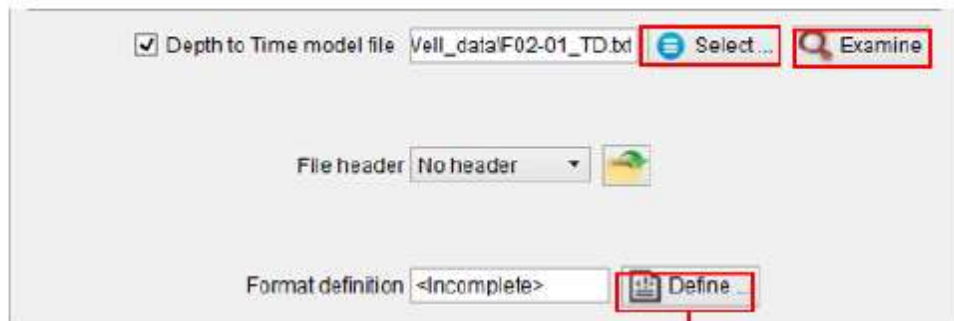


4. **Define** the Format Definition for the well track: col-1: X, col-2: Y, col-3: Z and col-4: MD. The default units are in meters, but can be modified from the drop-down menu.





5. **Select** the Depth to time model file: /Rawdata/Well_data/F02-01_TD.txt.
6. **Examine** the file.
7. **Define** the Format Definition for the Depth to time model; col-1: Depth in m, col-2: TWT in sec.



If you uncheck the Depth to Time model file, you will be able to add a constant velocity model for this well.






8. Is this checkshot data? **Tick** yes.


Advanced options are optional

9. **Provide** an output name.

10. Once done, **press** the Import button.


☒ Depth to Time model file Well_data\F02-01_DT_TVDSS.txt  Select ...  Examine

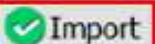



File header No header 

Format definition <Defined>  Define ...

Is this checkshot data? ☒ Yes ☐ No

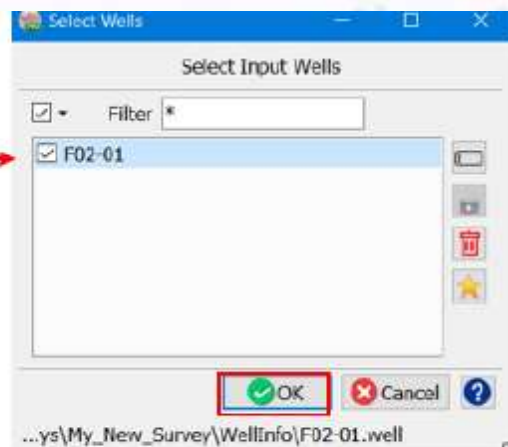
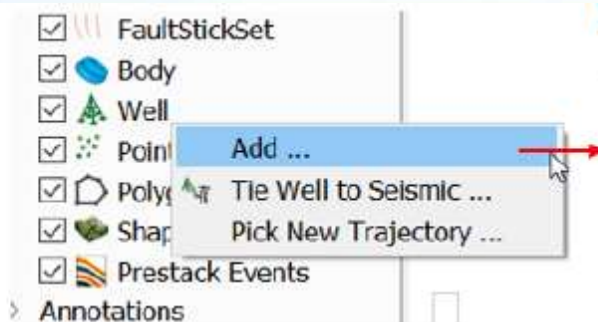
Advanced/Optional ...

Output Well F02-01  Select ...

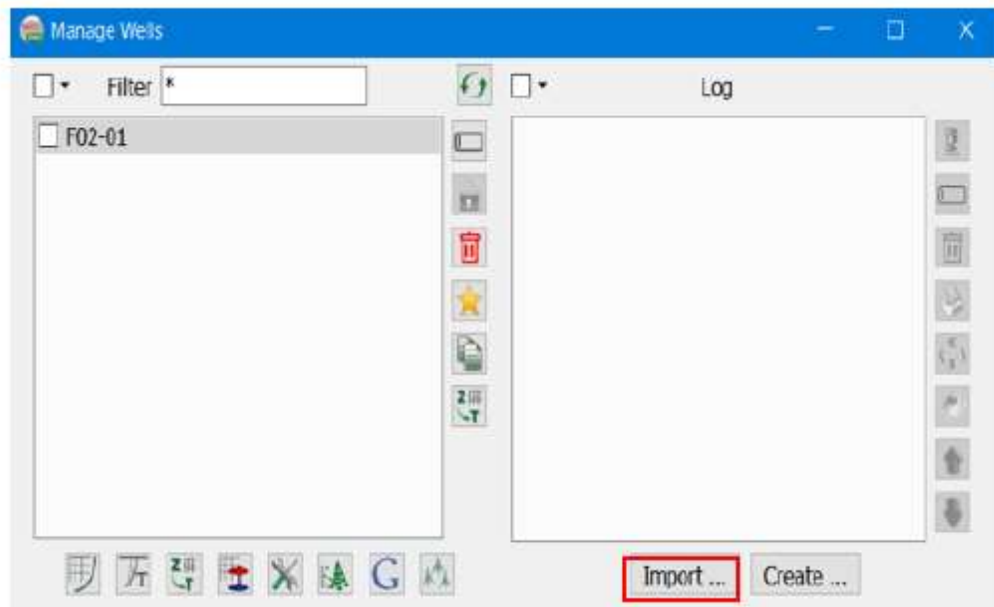
☐ Display after import  Import  Close  ? 



11. Display the well in the survey: **right click** on Well > Load and **select** your well.



12. To import the logs files: **click** on the Manage Well Data icon and **click** on Import.
Alternatively, **follow** Survey > Import > Wells > ASCII > Logs.





13. **Press** the Import button, then **select** las file: /Rawdata/Well_data/F02-01_logs.las.
14. **Toggle** MD.
15. **Highlight** all logs needed to import
16. **Select** Curve in the name after log
17. **Click** on Import.

Import Well Logs

Input (pseudo-)LAS logs file: ydata\Well_data\F02-01_logs.las Select ... Examine

Depth interval to load (empty=all): 30 3150 (m)

Depth values are: ☐ TVDSS ☒ MD

Undefined value in logs: -999.25

	Curve	Unit	Description
1	<input checked="" type="checkbox"/> CALI	in	Caliper_1 (Caliper)
2	<input checked="" type="checkbox"/> RHOB	g/cc	Density_1 (Density)
3	<input checked="" type="checkbox"/> GR	API	Gamma Ray_math (Gamma Ray)
4	<input checked="" type="checkbox"/> DT	us/ft	P-wave_1 (P-wave)

Name log after: ☒ Curve ☐ Description

Add to Well: F02-01 Select ...

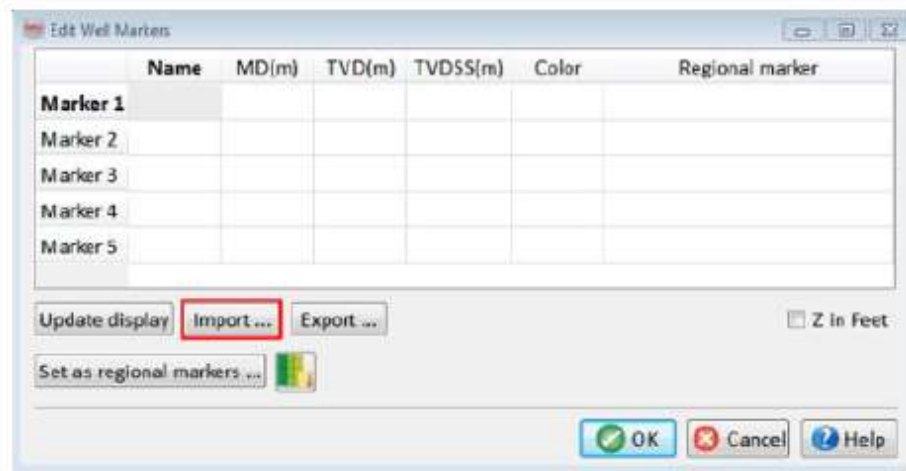
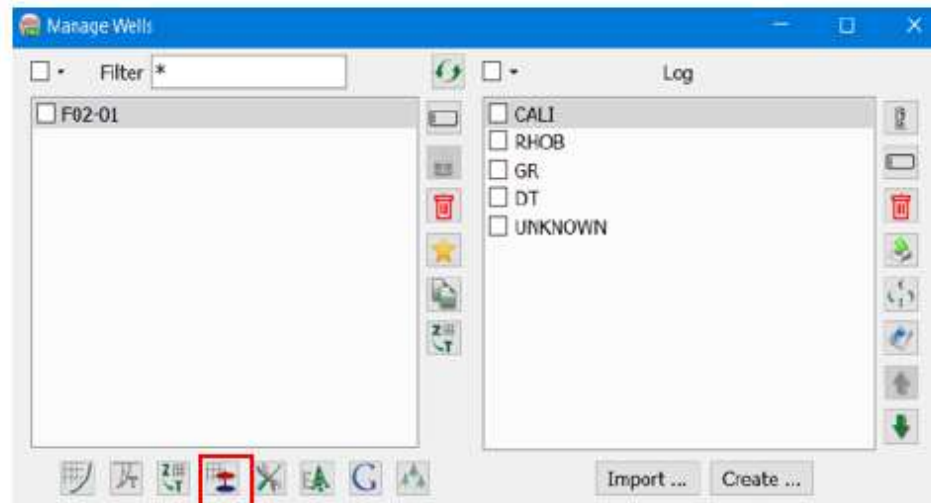
Import Cancel ?



Workflow cont'd:

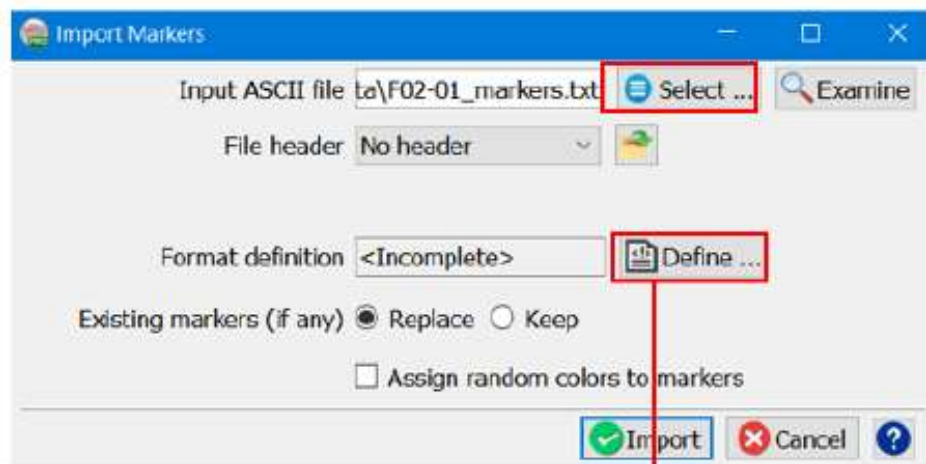
18. In the well manager, **click** the Edit Markers icon.

In this exercise, we will **import** markers from an existing file. It is also possible to add markers manually.

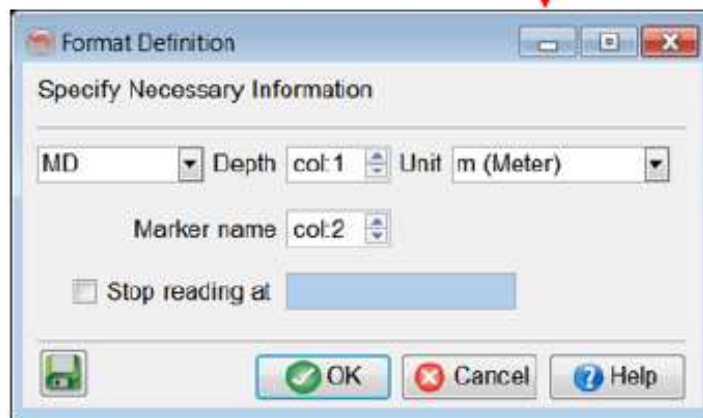




19. **Select** the input file: /RawData/ Well_data/F02-01_markers.txt.

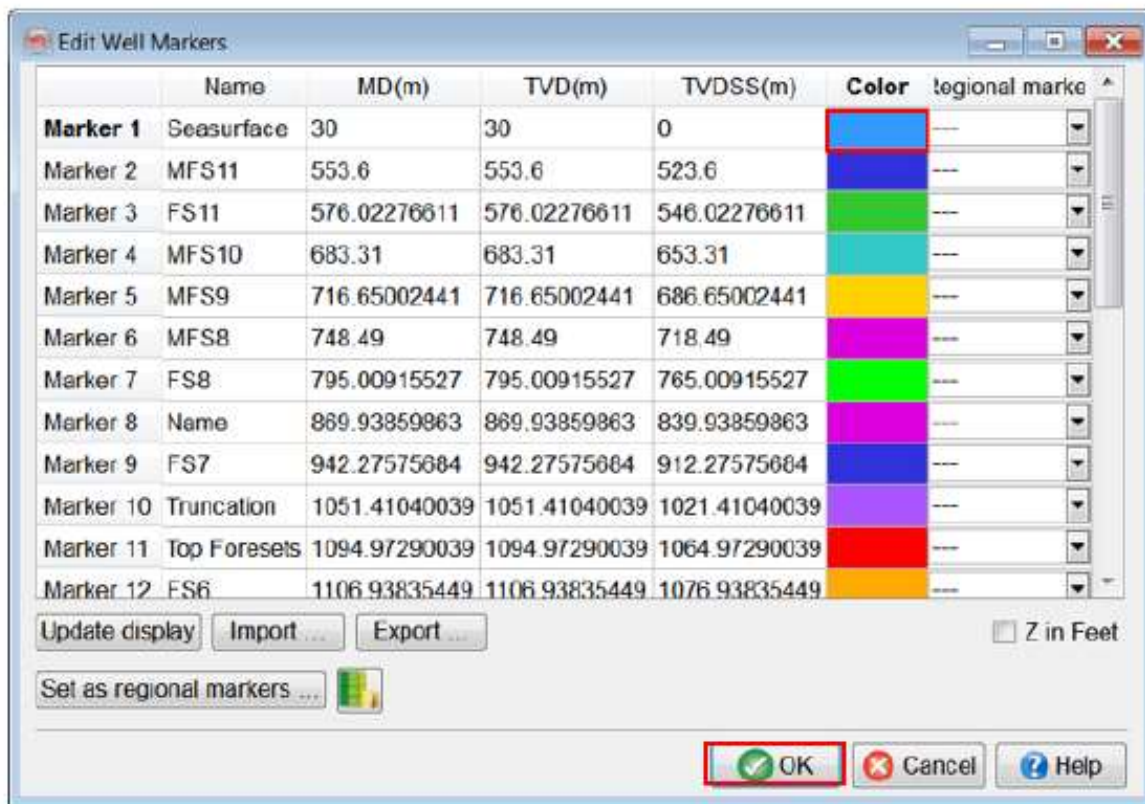


20. **Define** the Format Definition:





21. **Select / Modify** a color for each marker by **double-clicking** on the appropriate row in the Color column.
22. **Press** OK.
23. Once done, **close** the dialogs and return to OpendText scene.



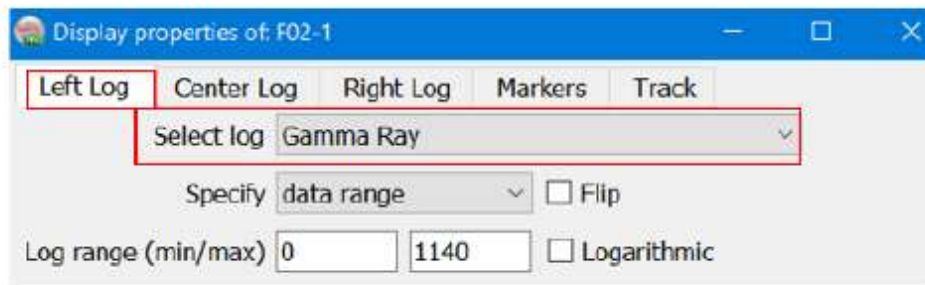


Workflow cont'd:

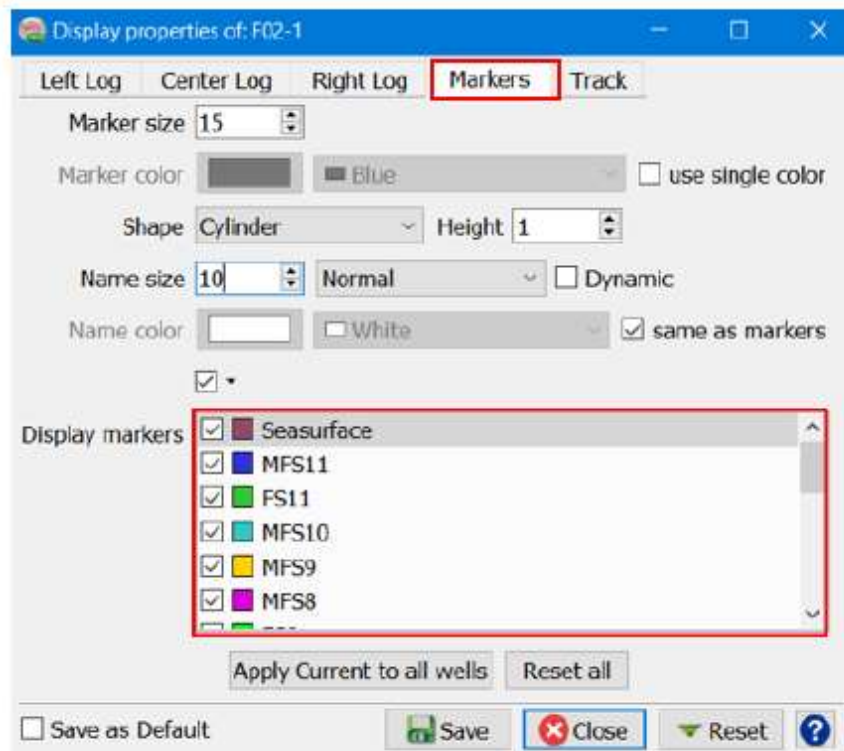
24. In the scene, **display** the log and/or markers on the well : **right click** on the well in the tree and **follow** Display > Properties.



25. In the left-, center- or right-log tab, **select** the log to display and the properties.



26. **Open** the Markers tab: **toggle** on the desired markers and **set** the marker size etc.





1.2.5 导入多口井

OpenText中有不同选项可以导入多个测井。

Import -> Wells -> Bulk...

