

WELL EDITOR

Entering Well Data:

1. Choose a dataset from the drop down menu.
2. Enter the API number followed by the Enter key or Query button. If the well exists, it will display. If it doesn't, you will be prompted to insert it.

Query button: Either starts or completes a query / search.

Area & Projection: Automatically populated. Based on the first 5 characters of the API number.

3. Enter the rest of the header information.

Well Type: Will warn you if a value is entered for the first time to allow you to check it before entering.

Operator Name: Name will be checked for validity. A list will be returned for selection.

Op Code: Auto populated based on the operator name.

Dates: Use any format. It will be converted.

Source: Your choice

Last Rev By: User (will be auto-populated in a later version)

Field Type: C=Core Test; D=Development; E=Exploratory; R=Relief; S=Strat Test

WELL EDITOR

4. **Enter the Surface** information in XY or LatLong or Offsets. It is necessary to identify first by clicking on the appropriate radio button.

5. **Recompute Surface** to calculate the other values.

NOTE: If you attempt to recompute the surface and there are bottom hole values, you may be asked whether you wish to also recompute the BH.

IF the bottom hole is “tied” to the surface and should change if the surface changes, (for example, the bottom hole is entered offset from the surface) THEN recompute the bottom also.

IF the bottom hole was put in as a stable XY or LatLong value and should not change when the surface changes (as in an edit to the surface after the original entry), then do not recompute the bottom hole.

6. **Enter the Bottom Hole** (BHL) information in XY or LatLong or Offsets. It is necessary to identify first by clicking on the appropriate radio button.

7. **Recompute BHL** to calculate the other values.

8. Other Fields:

- **NAD 83 Convert:** If your values are in NAD 83, this feature allows you to convert it to NAD 27.
- **DIR (in red):** Indicates that there is a directional in the EII dataset.
- **LOC Type:** OFF (offshore). This should auto populate to indicate that it is an offshore well.
- **Source:** Your choice
- **Lease Type:** F=Federal; S=State
- **Comments:** When entering comments, the left menu and scroll bars become active.

9. **SAVE** to update the database.

ADDITIONAL NOTES:

If you edit any dataset that Energy Graphics updates, your changes will be overwritten when the next update is done. Unless the data is proprietary, consider sending the information to Energy Graphics. The database technicians will research and enter the data if possible.

Multiple users can edit, but must be logged in as different users.

If there is a directional survey, the bottom hole is typically entered by Energy Graphics as a LatLong value.

If there is not a directional survey, the bottom hole is typically entered by Energy Graphics as an offset from the surface.

Tool Bar:

- **Undo:** Removes data since the last save. If you “undo” in order to reenter a well, click the Query button to clear your screen first.
- **Delete:** Deletes the current record/well.
- **Save:** Saves the current record/well
- **Print:** Creates a form print

Right Menu:

- **Straight Hole:** Equates the bottom hole to the surface to create a straight hole.
- **BHL=SURF:** Equates the bottom hole to the surface
- **SURF=BHL:** Equates the surface to the bottom hole
- **Verify Surface:** When the surface offsets are referenced from an irregular block line, this option computes new values using a different reference.
- **Verify Bottom:** Same as above for bottom hole.
- **Edit Dir:** Links to Directional editor.

DIRECTIONAL EDITOR – Option 1

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Query Undo Delete Save Print EII Exit

Directional Well Header Survey Sum Ties Direction Surveys

Directional Wells

Well ID 17710500000 5 Refnum 46636 WDIR_HDR

Entry Date JAN-31-2008 Rev Date JAN-31-2008 Last Rev By PATTI 6

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Dataset	Refnum	Well Type	Well Number	Operator Code	Mdepth	Tvd	Spud Date	Comp Date
GULF_MEXICO	57562	P&A	2	78	4240	4239	AUG-08-1973	AUG-20-1973

WELL_HDR

Lease Number G2324 WELL_OFFSHORE

Area	Block	Ext	Lat	Long
Surface	17710	361	28.11887	-91.65790
Bottom	17710	361	28.11884	-91.65798

WELL_LOC

Elev. Datum Depth Unit Drilling Elev. Elev. Unit

KB	F	92	F
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Comments WDIR_COMM

Entering Directional Data:

1. Enter the well data if it is not already in the database.
2. Click on **Edit Directionals** from the Well Editor or from the main menu.

Directional Well Header Tab:

3. Set the target Directional dataset and...
4. Set the Well dataset.
5. Query / search for the API number. If it is new, insert it. The values in the gray fields will automatically populate.
6. Fill in the Last Revised By (user).
7. SAVE (important)

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Query Undo Delete Save Print EII Exit

Directional Well Header Survey Sum Ties Direction Surveys

Survey Sum Ties

Top Depth Base Depth N Ref Flag Surv Corr Ang N Ref Flag Corr Ang Dir Uncertainty Dist QC Code Oper Code Oper Name

0 4240.0 S G S .00000 U UNKNOWN

8 9

MD

Top Depth	Base Depth	Surv Date	Corr Angle Flag	Corr Ang	Declin N Flag	Ref	Equip Type	Calc. Method	Surv. Report Val.	Version	Surv. Contr.	Wrong/Incorrect Proj.	Ref	Zone	Run Kb	Dep To Kb
0	4240.0	AUG-18-1973	1	.00000	U	U		RC								

WDIR_SSUM

WDIR_SRUN

WDIR_TIES

Tie Type	MDepth	TVD	NS Offset	NS Dir	EW Offset	EW Dir

Survey Sum Ties:

8. Fill in the Top Depth and Base Depth with the MD depth range.
9. Fill in all other fields as they are shown in the screen shot (left). If the field is blank, leave it blank.
U=Unknown
RC=Radius of Curvature
10. SAVE (important)

DIRECTIONAL EDITOR – Option 1

Entering Directional Data (continued):

Directional Survey Tab:

Drift Angle in Deg/Min: Check if you want to enter in Deg/Min [1.5 = 1 degree & 5 minutes]. Leave unchecked to enter Deg.Deg [1.5 = 1 degree 30 minutes or 1.5 degrees].

Allow Continuous Insert is used when you need to add new points. For new surveys leave it off.

Add:

11. Start with a "0" record.
12. Fill in all fields as they are shown in the screen shot (left). If the field is blank, leave it blank. **Don't enter past the azimuth.**
13. **CALCULATE** after entering (mandatory). The other fields are populated on calculate.
14. **SAVE**.

Mdepth	Drift Angle Deg.Min	Drift Angle Deg.Deg	Azi NS	Azi Deg EW	azimuth	Tvd	Yoffset	Xoffset	Corr_Azi
0	.00	.00	S	.00 W	180.00				
1085	.00	.00	S	.00 W	180.00				
1137	.00	.00	S	.00 W	180.00				
1231	.15	.25	S	33.00 E	147.00				
1325	.00	.00	S	.00 W	180.00				
1419	.00	.00	S	.00 W	180.00				

Mdepth	Drift Angle Deg.Min	Drift Angle Deg.Deg	Azi NS	Azi Deg EW	azimuth	Tvd	Yoffset	Xoffset	Corr_Azi
0	.00	.00	S	.00 W	180.00	.00	.00	.00	180.00
1085	.00	.00	S	.00 W	180.00	1085.00	.00	.00	180.00
1137	.00	.00	S	.00 W	180.00	1137.00	.00	.00	180.00
1231	.15	.25	S	33.00 E	147.00	1231.00	-.17	.11	147.00
1325	.00	.00	S	.00 W	180.00	1325.00	-.34	.22	180.00
1419	.00	.00	S	.00 W	180.00	1419.00	-.34	.22	180.00

WELL PATH EDITOR – Option 2

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Window

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Energy Graphics

Editor : EXIT LOG ON

V. 6/27/08

EDIT WELL INFO EDIT DIRECTIONAL WELL HISTORY EDIT TOPS

EDIT VELOCITY EDIT LOGS LEASE HISTORY EDIT APD

EDIT OPERATORS EDIT OPRIGHTS EDIT PLANS EDIT 3DSP

EDIT WELL PATH EDIT EIP WELL EDIT PIPELINE EDIT NEW PROSP.

FIX WELLS EDIT LEASE BLO...

Record: 1/1

Entering Well Path Data:

Required fields:

- API number (well id)
- MD
- TVD
- X offset in grid north
- Y offset in grid north

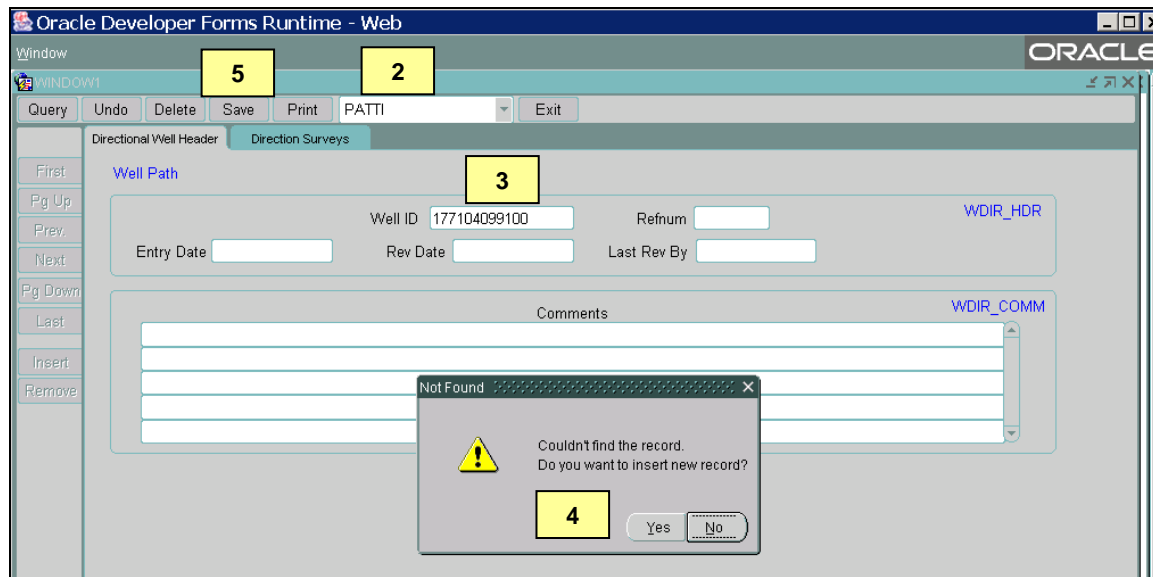
Optional fields:

- Drift (inclination) angle
- Azimuth

Well path data may be entered even if the well it is not already in the database. However, it will not post if the well is not in the database.

1. Click on **Edit Well Path** from the main menu. This option is only in the main menu.

WELL PATH EDITOR – Option 2



Entering Well Path Data (continued):

Directional Well Header Tab:

2. Set the target Directional dataset.
3. Query / search for the Well ID (API number).
4. If it is new, insert it.
5. SAVE.

Directional Surveys Tab:

6. Option: If you are not entering a drift angle and azimuth, check the box "Skip Drift Angle and Azimuth". This will skip those fields and make entry easier.

"Allow Continuous Insert" is used when you need to add new points. For new surveys leave it off.

7. Enter MD, TVD, Y offset, X offset. Use tab or enter to move through the fields.
8. SAVE.

Note: The drift angle and azimuth will not be calculated on save in option 2.

