

The official newsletter of TERRASCIENCES

Current TerraStation II version: v7.435

Netpay Output to Maps

We have enhanced the Netpay analysis module to allow selected computed results to be directly written to the current map within a project. You must have a license to the Petrophysical Analysis modules (KOBRA1) and the Mapping module. Contact your TERRASCIENCES representative if you would like to license these modules.

The requirements are that you have a collection of wells, and that those wells are linked to the map.

- 1. Click on the **Detailed Report** tab of the Netpay module.
- 2. Create the well collection by pressing the **<u>Select Well(s)</u>** button.
- 3. Define the cutoff values to use. Press the **Cutoff Control** button to do this.
- 4. Set the **<u>Report Type</u>** to **Summation Statistics**.
- 5. Set the Output Summation Report Format to "To Current Map File".
- 6. Supply an optional suffix that will be appended to all the selected outputs. This allows you to differentiate different runs, zones, etc. on the map file.
- 7. Press the **Format Report** button and select those items you wish to have written to the map file by clicking on the YES/NO entries in the table.
- 8. Press the **Apply** button to perform the operation.

Main Control Sensitivity Summary Detailed	Report Graphs Probabilistic Volumetrics				
Select Well(s)	Flag Curve Control				
Cutoff Control	Res. Rock:				
	Netpay:	5	Netpay - Sorrento Field, CO -	2X-C McCORMIC	44-34 (5390.0 -
Report Type	- October Committee Devel Committee Devel		Eile Edit View Options I	ools Analysis E	jelp
Summation Statistics	Output Summation Report Format Colum		4		- AL- ELAH
Denth Units	To Current Map File			m	
	Map Data Suffix:	6			
Umit MD Listings Display Heights?			Item Name	Display	this item?
Depth Listing Options			TOP INT	ERVAL	NO
🔽 Display Every Depth	F (D) (BASE INT	ERVAL	NO
Liston to 101 and	Format Report		GROSS INT	ERVAL	YES
	Save Format Restore Form	nat l	RR/GROSS	RATIO	YES
Show as Begin to End Depths		7	NET PAY THIC	KNESS	YES
	4	1	NET PAY/GROSS 1	DITAR	YES
🗖 Classify Netpay			PAY ARITHMETIC AVG	KSWIS	NO
			PAY GEOMETRIC AVG	KSWIS	NO
			PAY HARMONIC AVG	KSWIS	NO
Save As Restore	OK Cancel App	ply	GRUSS SAND THICK	KNESS .	NO
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Once the computations are complete, you can then proceed to the mapping module and generate maps of the computed variables.

Once in the map module, simply select the desired variable to map. In the example here you can see the computed variables at the bottom of the list (in the red box).



Below is an example of a color coded map of the NET PAY/GROSS values. Blue is the highest, green the lowest.



Volumetrics Estimator

We recently added a basic volumetric estimation capability to the **Petrophysics – Netpay Analysis** module. Press the **Volumetrics** tab.

Inputs can be in feet or meters, and the outputs can be in Imperial or Metric units. Simply fill in the appropriate numbers and the reserve values will be calculated and displayed in the lower right hand area of the panel (labeled as "Reserve estimate").

ain Control Sensitivity Summary	Detailed Re	port Graphs Prob	abilistic Volumetric	:s
Volume to be Evaluated		COptional Gas R	eservoir Parameters	
Units 🕂 Acres (and feet)	•	Compute For	mation Volume Fact	or?
Area (in Acres)	640.0	Reservoir Temperature (degF)		0.00
		Reservoir Press	ure (atm)	1.00
Height (Thickness) in feet	140.0	Reservoir Z Fac	lor	0.00
Geometric Factor (0 to 1)	1.00	- Reserve Estimate		
Reservoir Parameters		Units		•
Fluid Type	•	Gross Reser	voir Volume: 2280.7	ммьы
Net to Gross (%) 50.00		Net Reservoir Volume: 1140.4 MMbbl		
Porosity (%)	10.00	HC Pore Volume: 74.1 MM		Mbbl
Hydrocarbon Saturation (%)	65.00	STOIIP: 74.1 MMbbl		
Formation Volume Factor	1.00	Recoverable Reserves: 37,1 MM		(Mbbl
Recovery Factor (%)	50.00	OK L	Cancel	Apply

Pressing **Apply** will generate a text file report that can be printed.

Volumet	rics Estimation
Area (in acres):	640.00
Height (thicknes:	s): 140.00 (ft)
Reservoir Parame	ters
Net to Gross	: 50.00 %
Porosity	: 10.00 %
Hydrocarbon Sat.	: 65.00 %
Formation Volume	Factor : 1.000
Recovery Factor	: 50.00 %
Gross Reservoir V Net Reservoir Vo HC Pore Volume: STOIIP:	Volume: 2280.7 MMbbl lume: 1140.4 MMbbl 74.1 MMbbl 74.1 MMbbl
Recoverable Rese	rves: 37.1 MMbbl

Newsletter Archive

Just a brief reminder that you can access any of the past editions of TerraNotes on our website. Simply click on the **Client Center** menu and choose **Newsletters**. There are many technical tips and articles on features in the software that may be of use.

Pick Key in Tadpole Track Header

We recently added the ability to have a pick key within the tadpole track header. On the **Track Configuration** panel for the tadpole track, simply check the box labeled **Display Pick Key in Track Header**.

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Category Cola · Data Annual	57 Deplay Flok Kay in Track Header	
Standard Synt ★ tenter Sense fan PO Sei fan III Wege ∰t II ∰Dwyful ★ New Verse Senseet aactor o staast	Set Const Set Const program Set Const Const Program Heatsware Const Set Const Program Heatsware Const Total Total Heatsware Const	
General P Anut	Hall Trends - Dried	

The key will only show those pick types present in the track. An example is shown below

•	Unclassified Shale Bedding Sand Bedding Shale Slump	
0°	Tadpole Plot	90°

The options is also available for SCAT, Pick Tags and Stereonet tracks.

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Agents



Map Equus

Many of you with the Mapping module may not be aware of the addition of the Equus – user defined equation capability.

It is located on the **<u>Z Operations</u>** control panel, on the <u>**General**</u> tab.

Z vanable(s) Type	
Set to structure	
Set To Isopach Set To Other	
Map Equus	

Using this function give you great flexibility in computing new Z variables from existing ones.

The list of available equations appears in a table. You can right-click on the table and choose to Run, Copy, Add, Edit or Delete an equation. When you chose to run an equation, the control panel for the equation appears. Simply select the desired input and output Z variables and press <u>Accept</u>.

		Addition X1 + X2	
	Output: ???		Create New Z
put Z Varial	oles		
(0:		×5:	
(1.	???	X6:	
2:	???	X7:	
(3:		X8:	
(4:		X9.	

The resulting Z variable is then available for conturing and mapping.

The equations are stored in the *tseqn.v70* control file, usually kept in your 'userdata' folder.