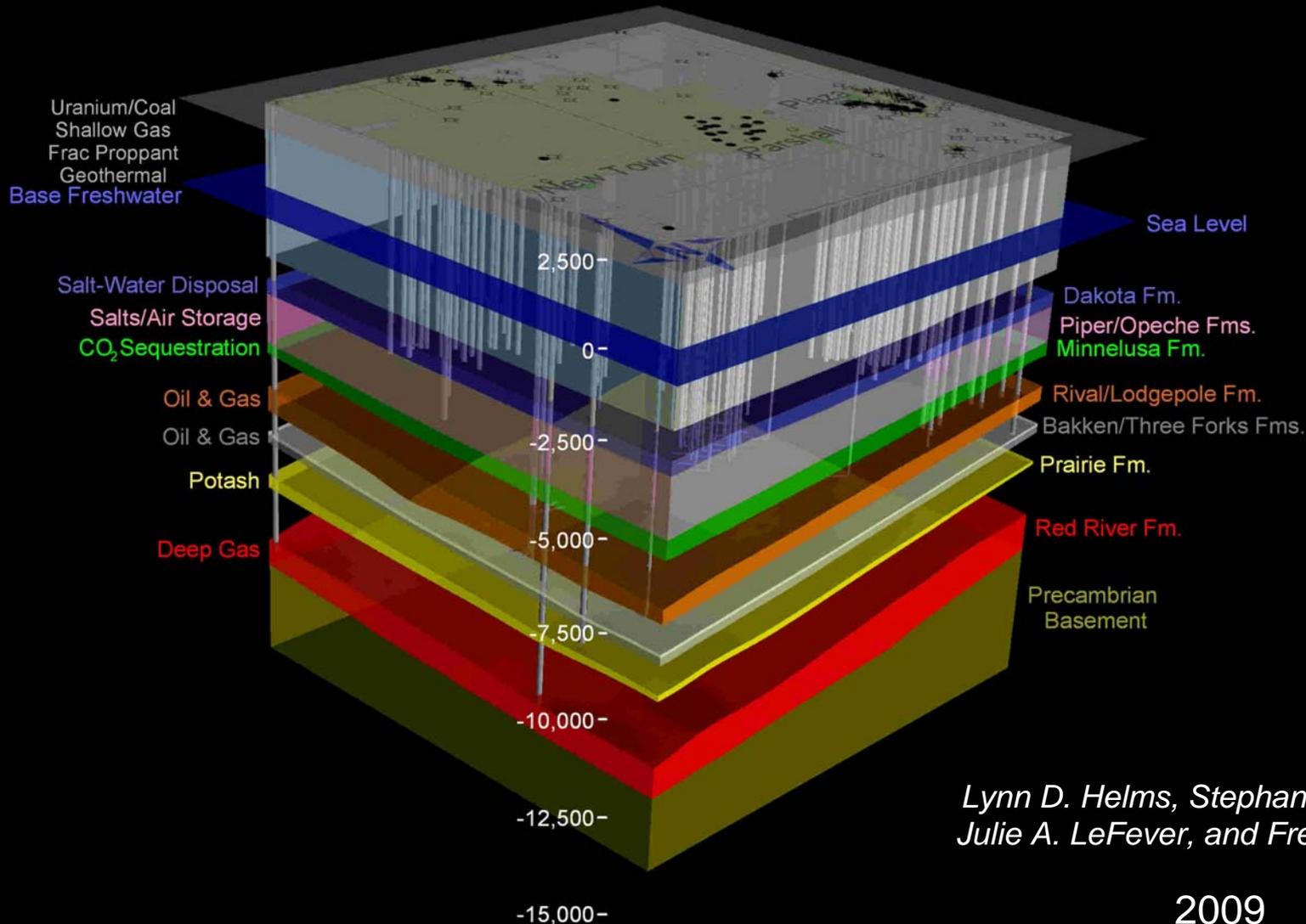


# Three-Dimensional Geologic Model of the Parshall Area



*Lynn D. Helms, Stephan, H. Nordeng,  
Julie A. LeFever, and Fred J. Anderson*

2009

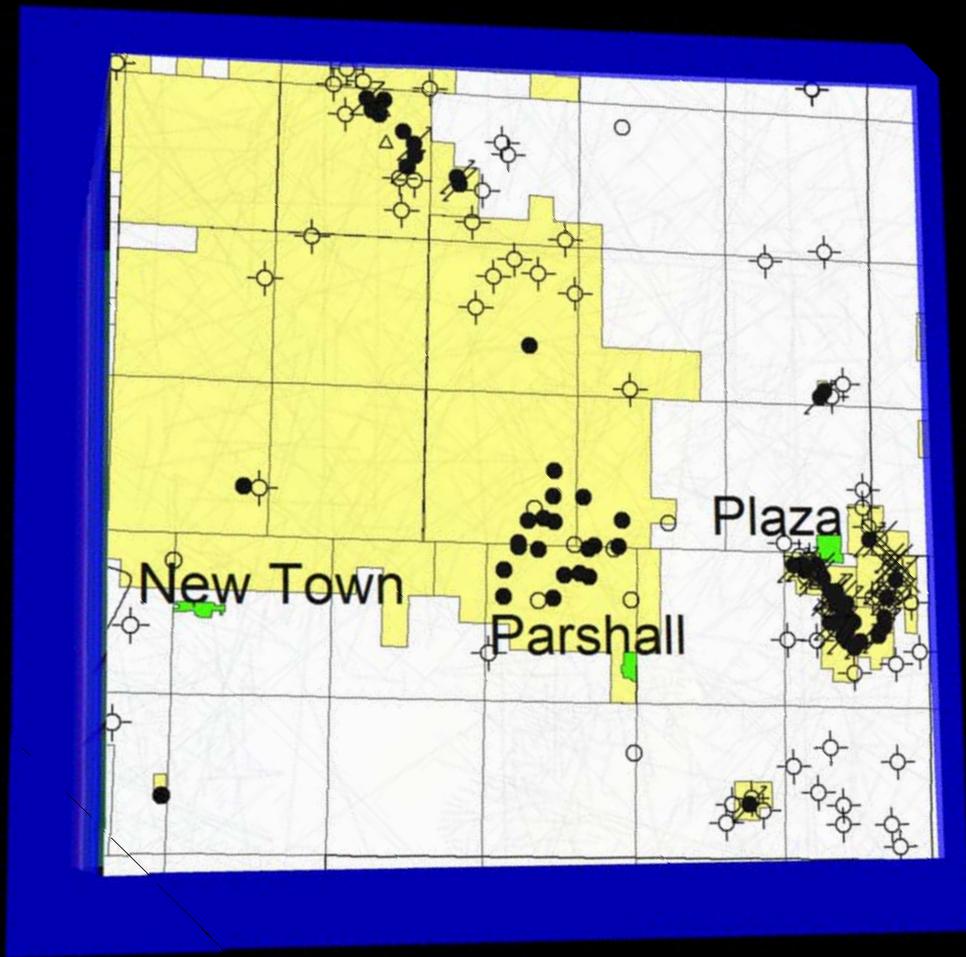


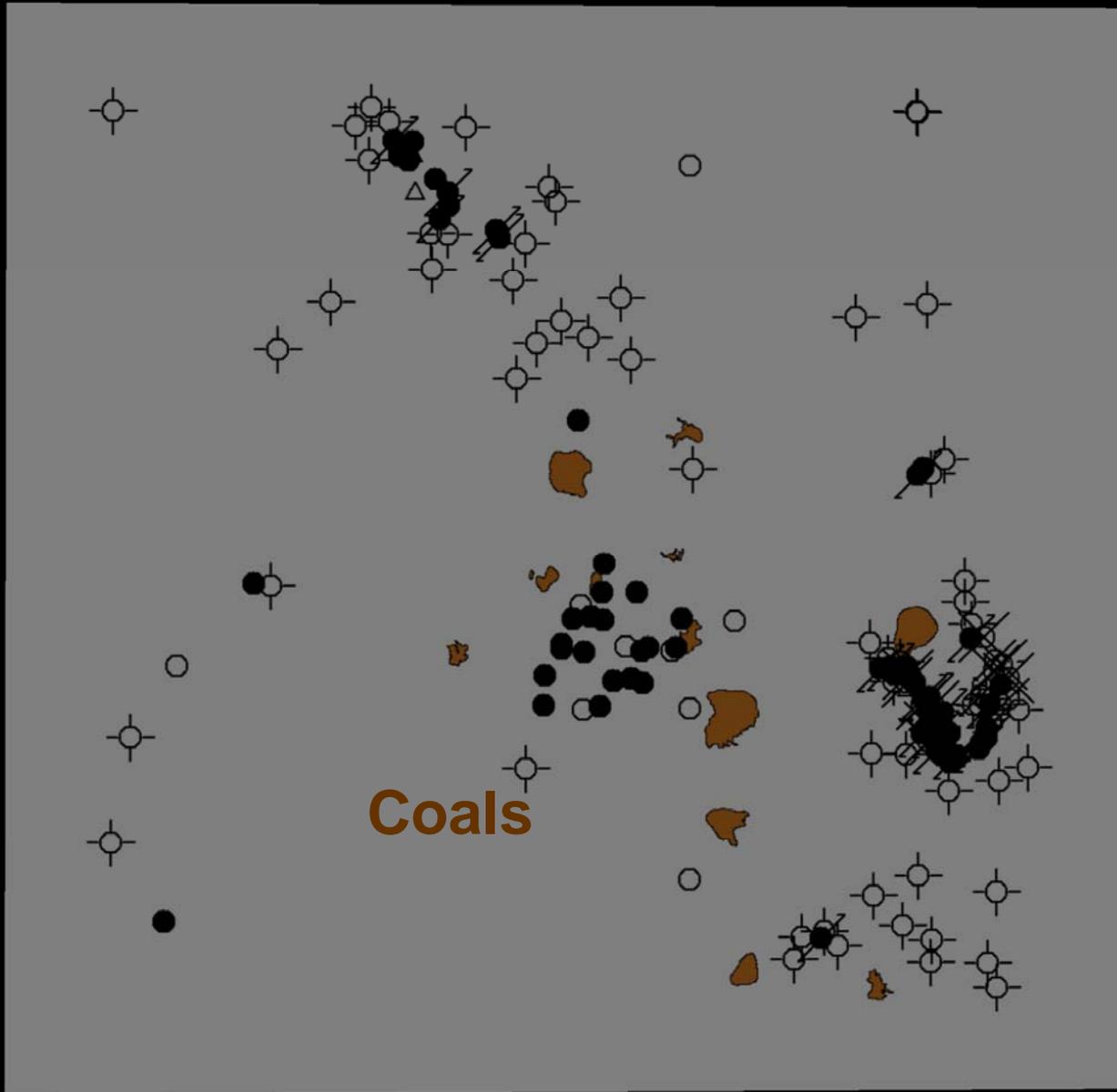
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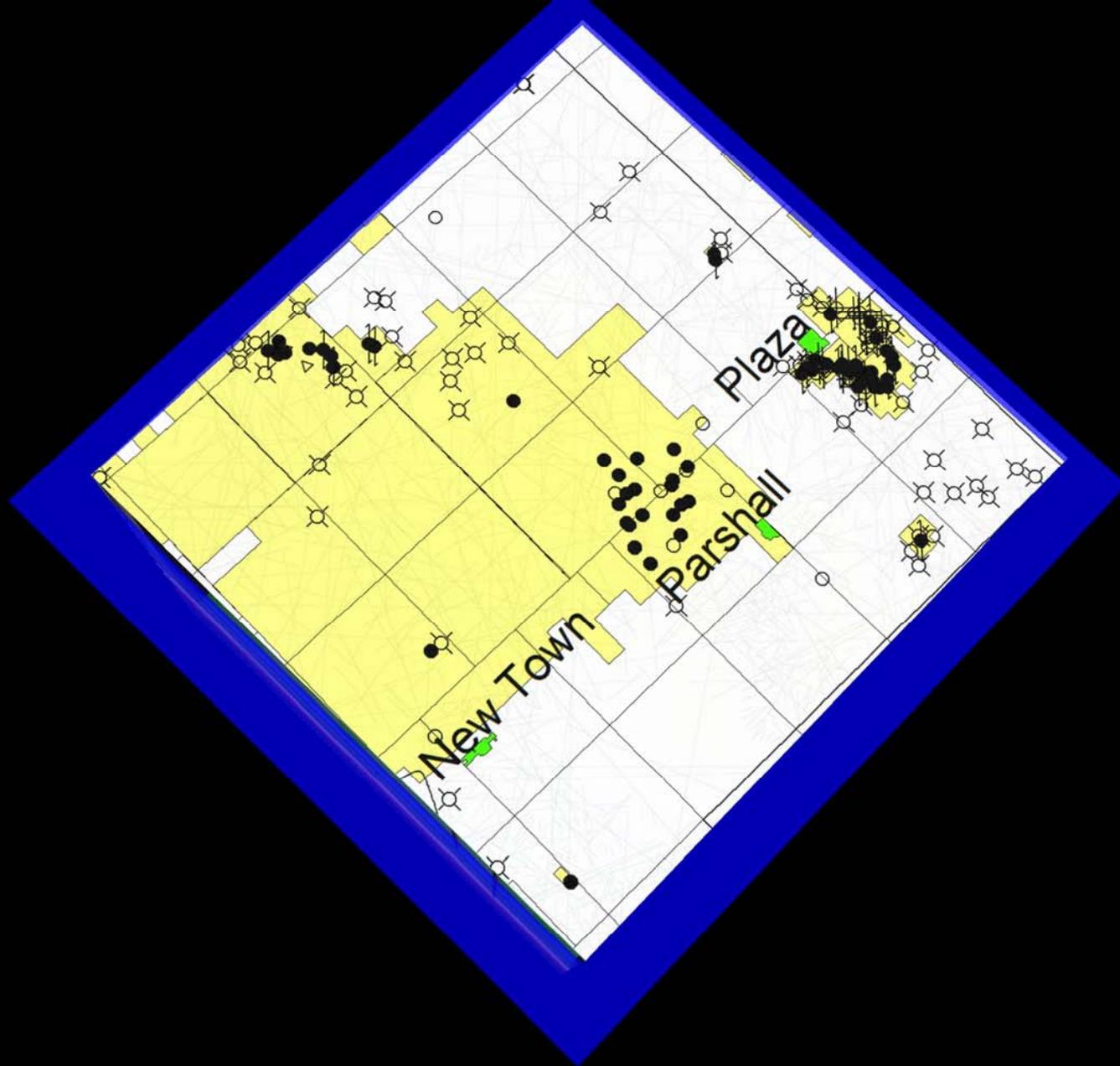
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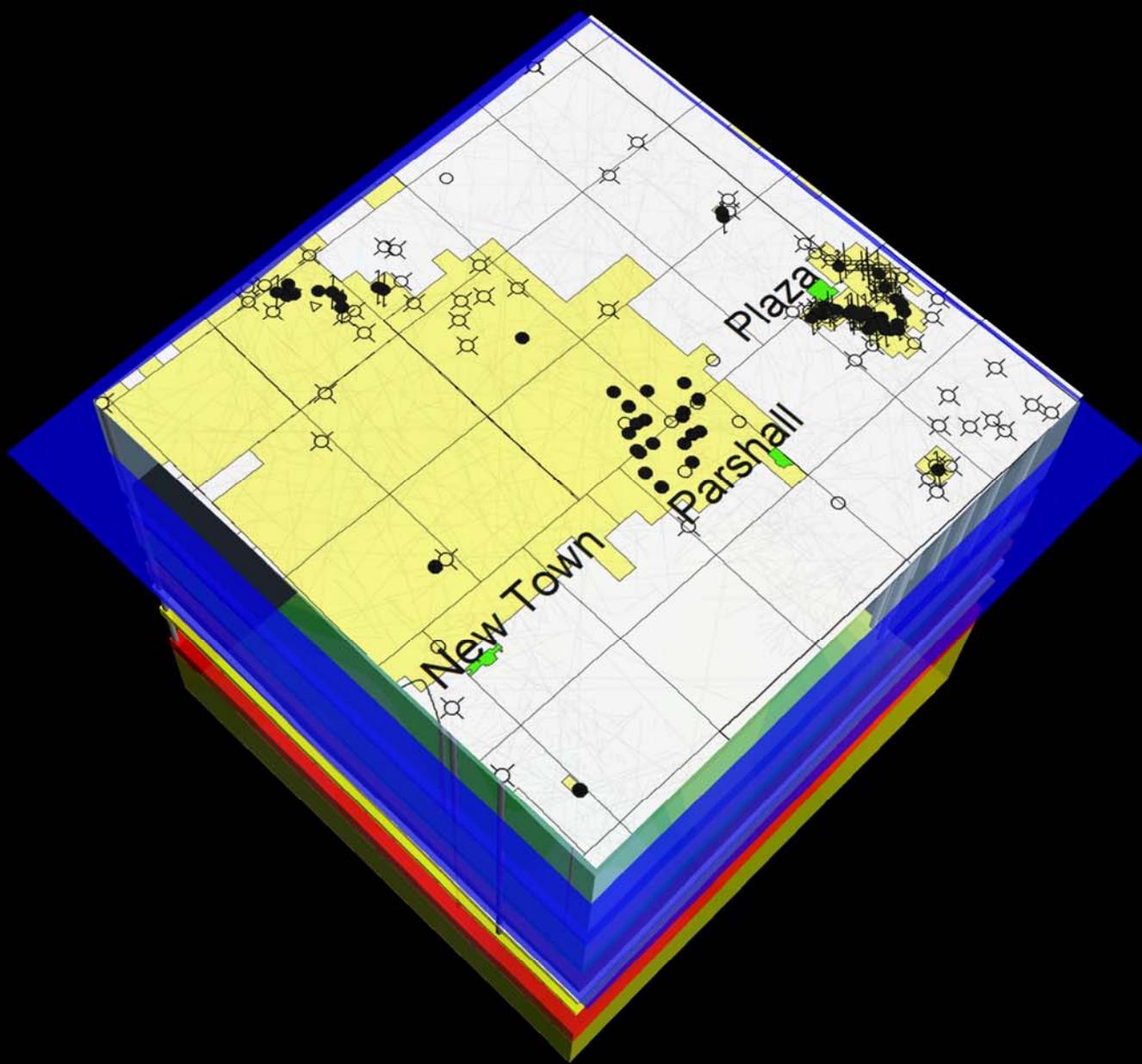
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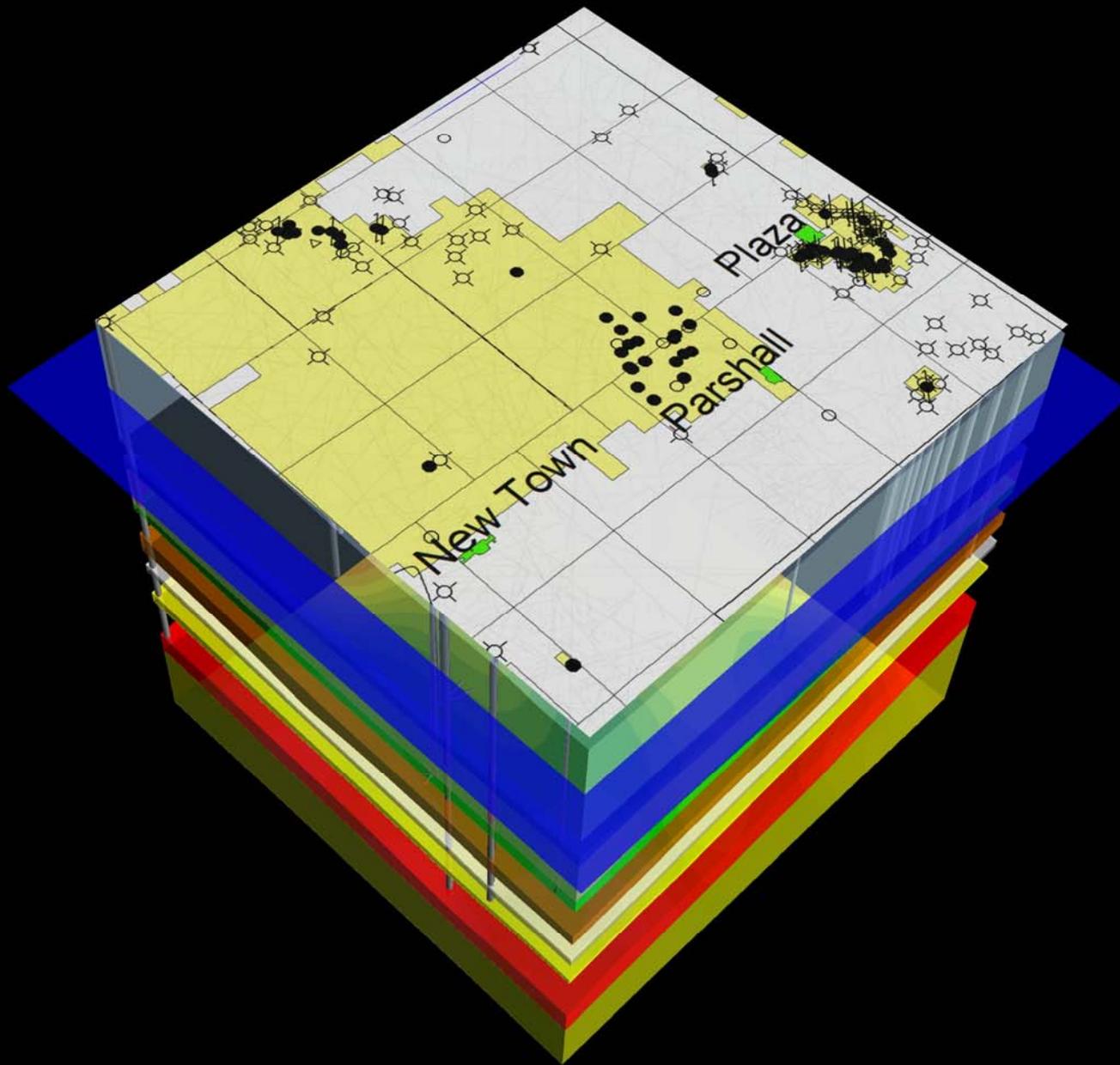










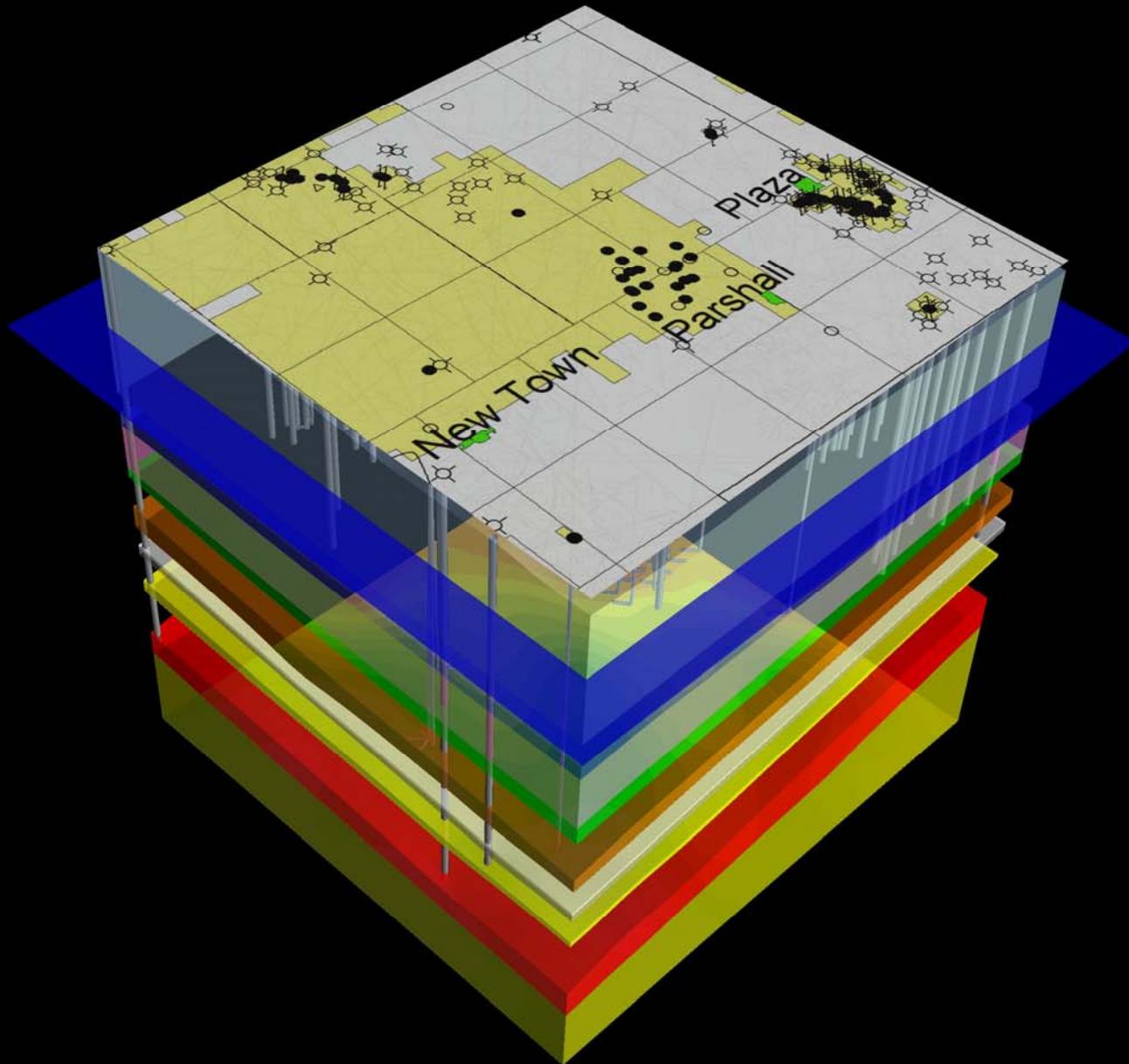


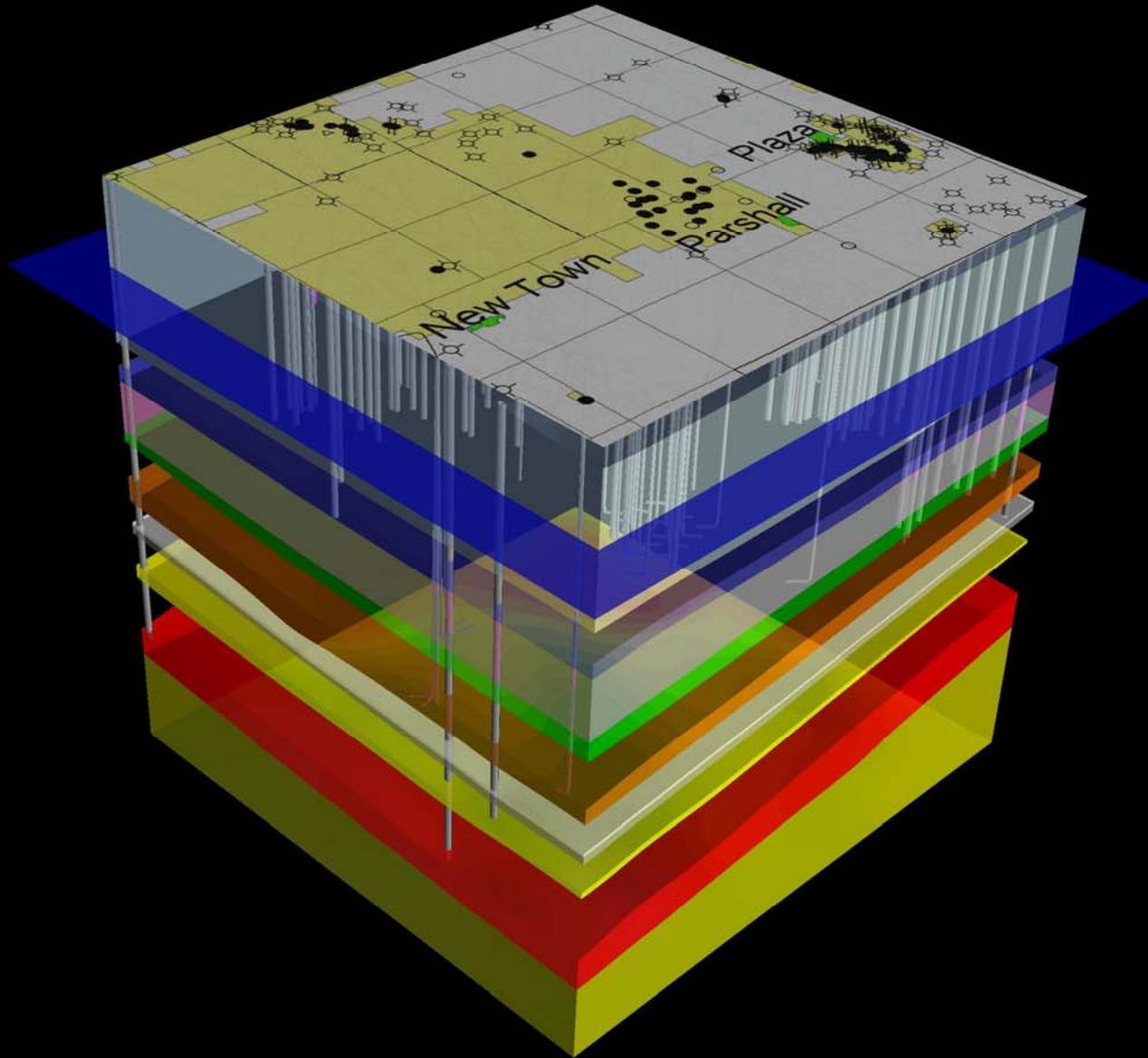
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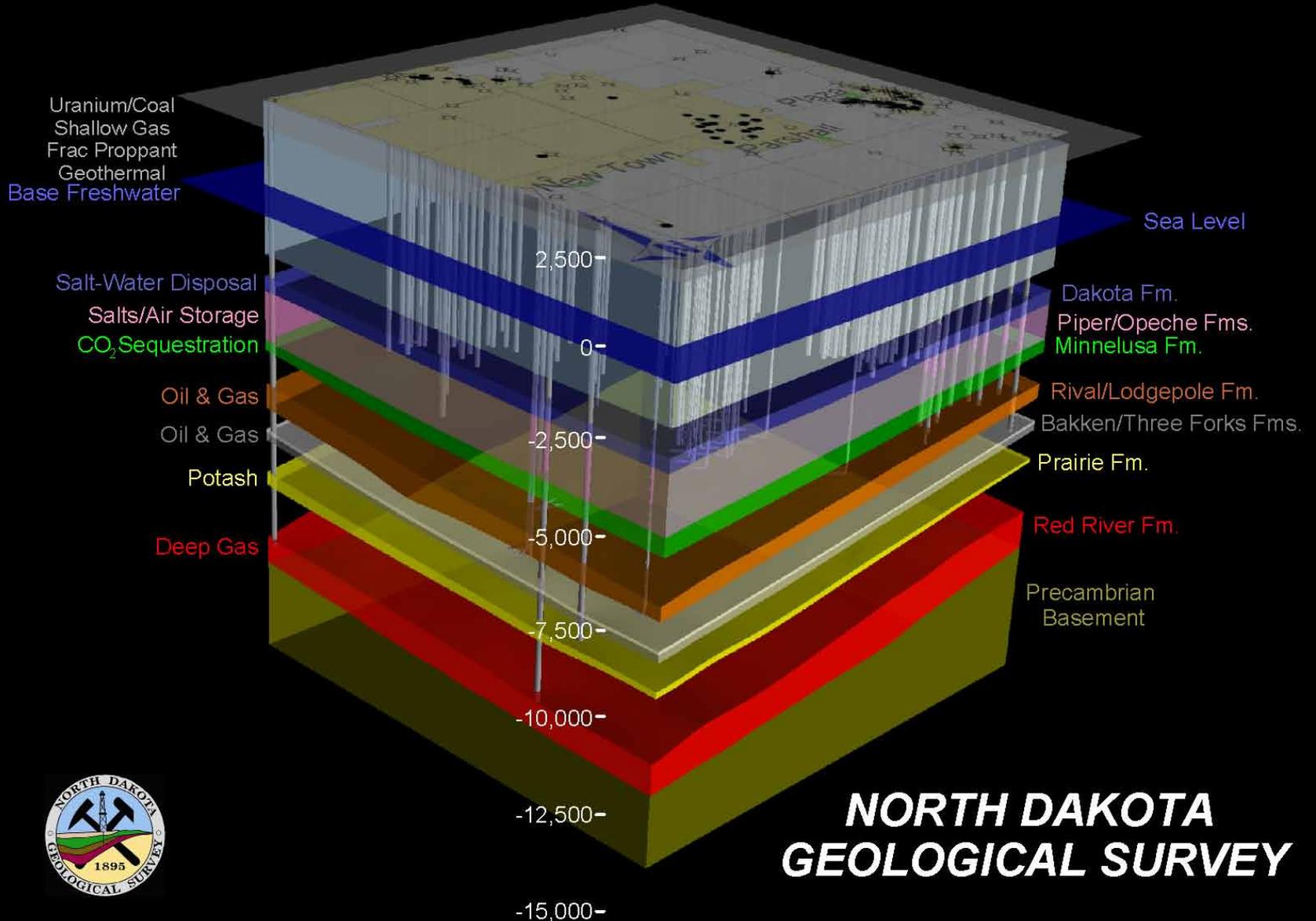
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# Three-Dimensional Geologic Model of the Parshall Area



**NORTH DAKOTA  
GEOLOGICAL SURVEY**



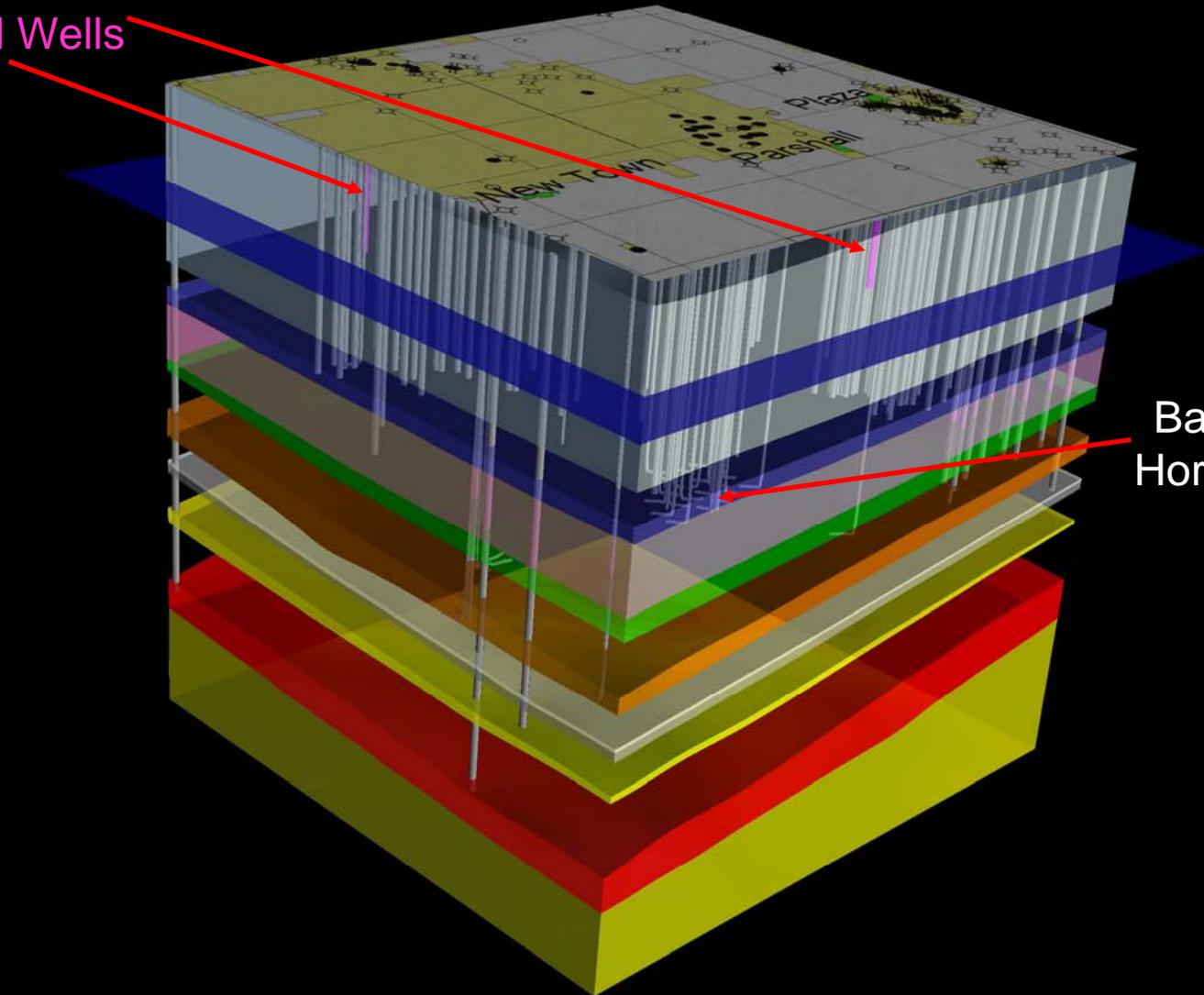
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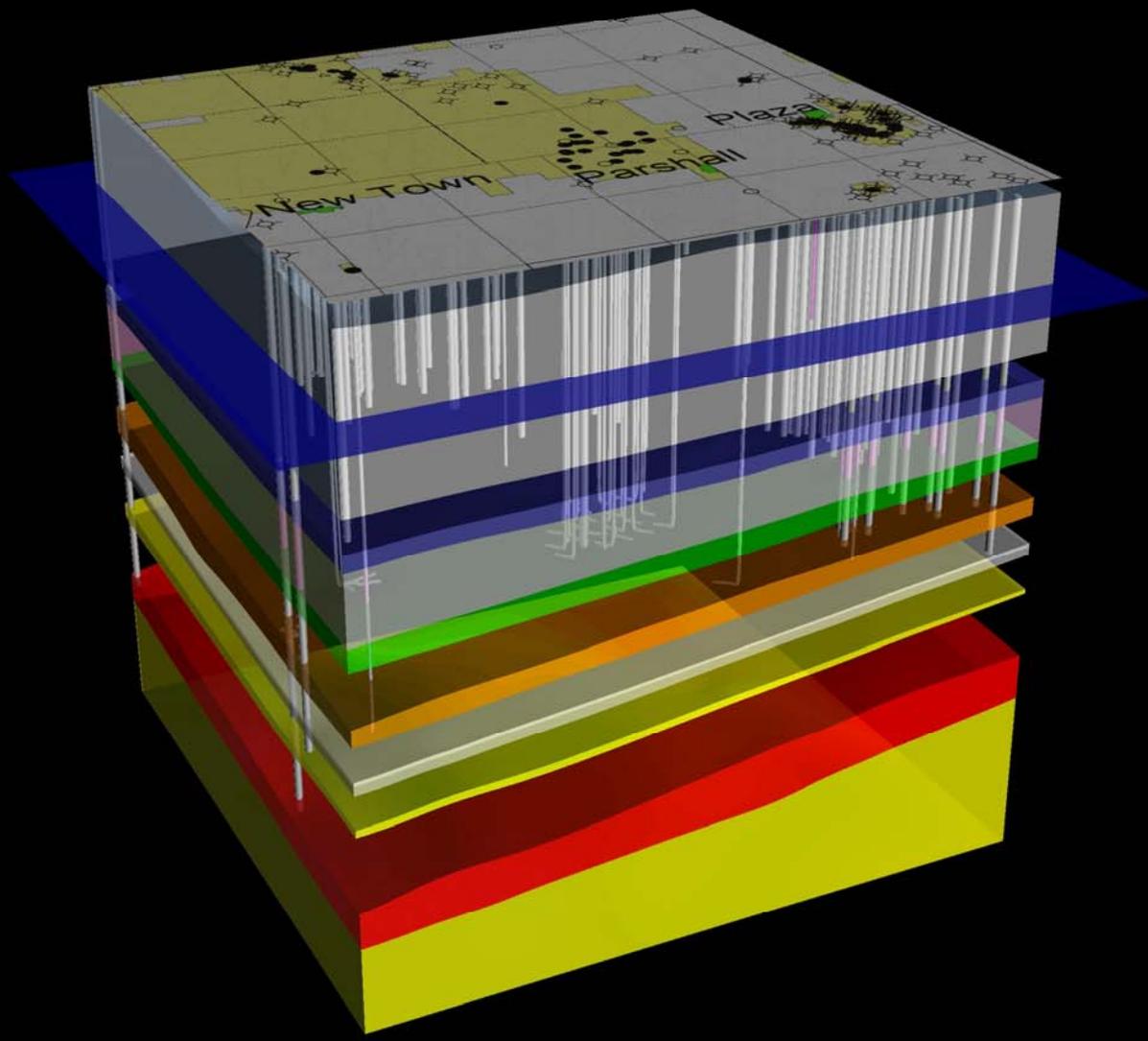


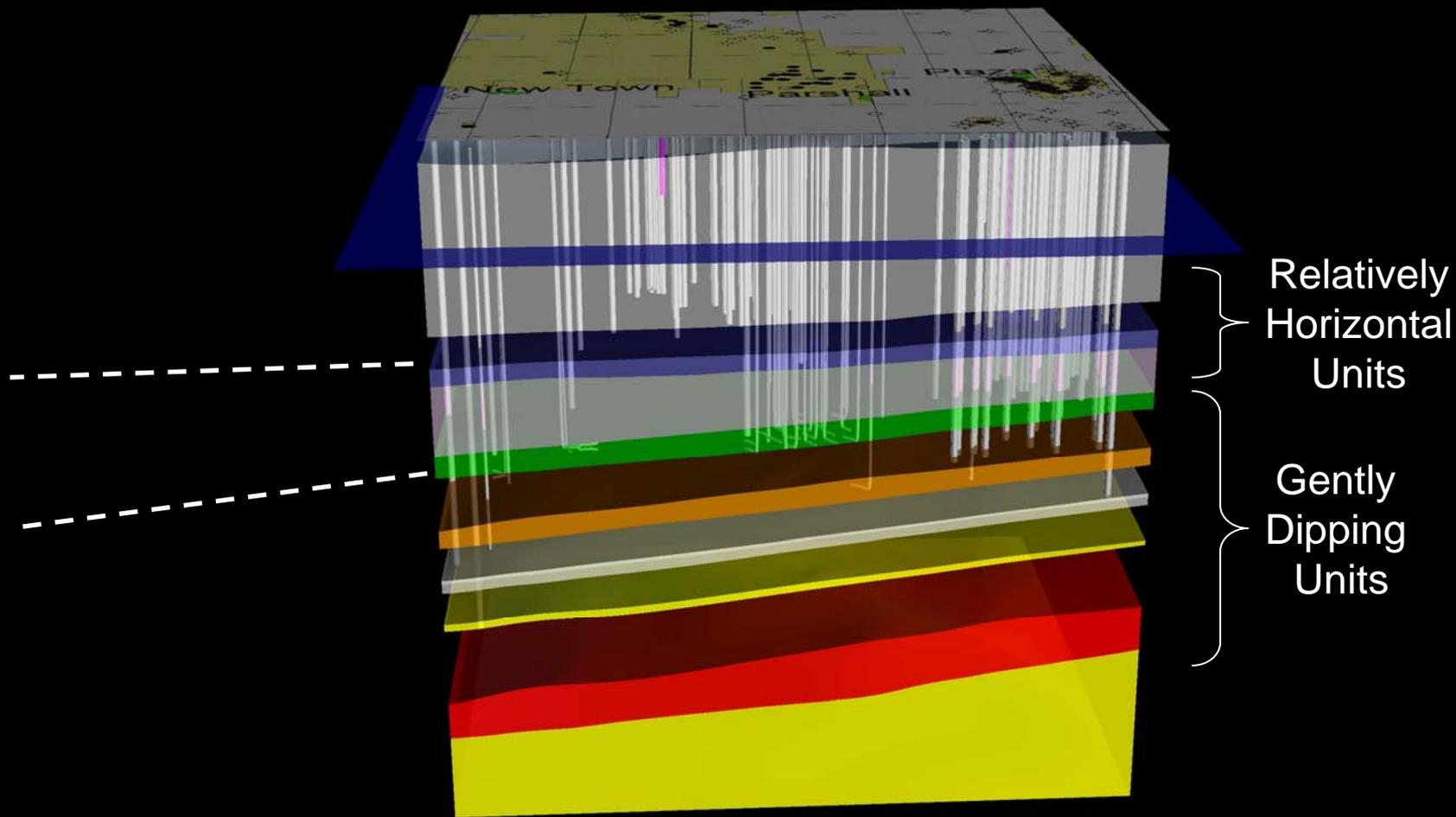
Salt-Water  
Disposal Wells

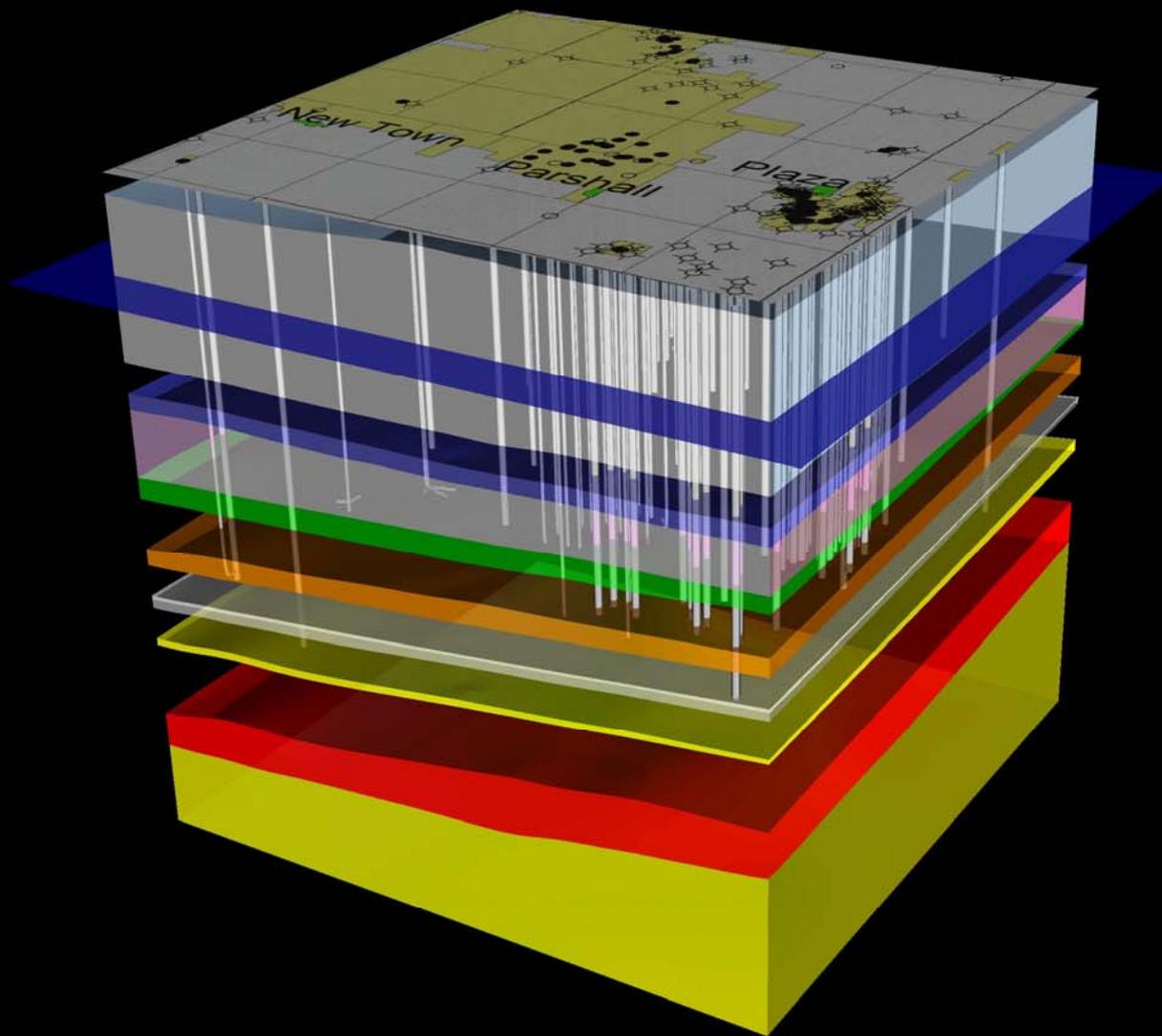


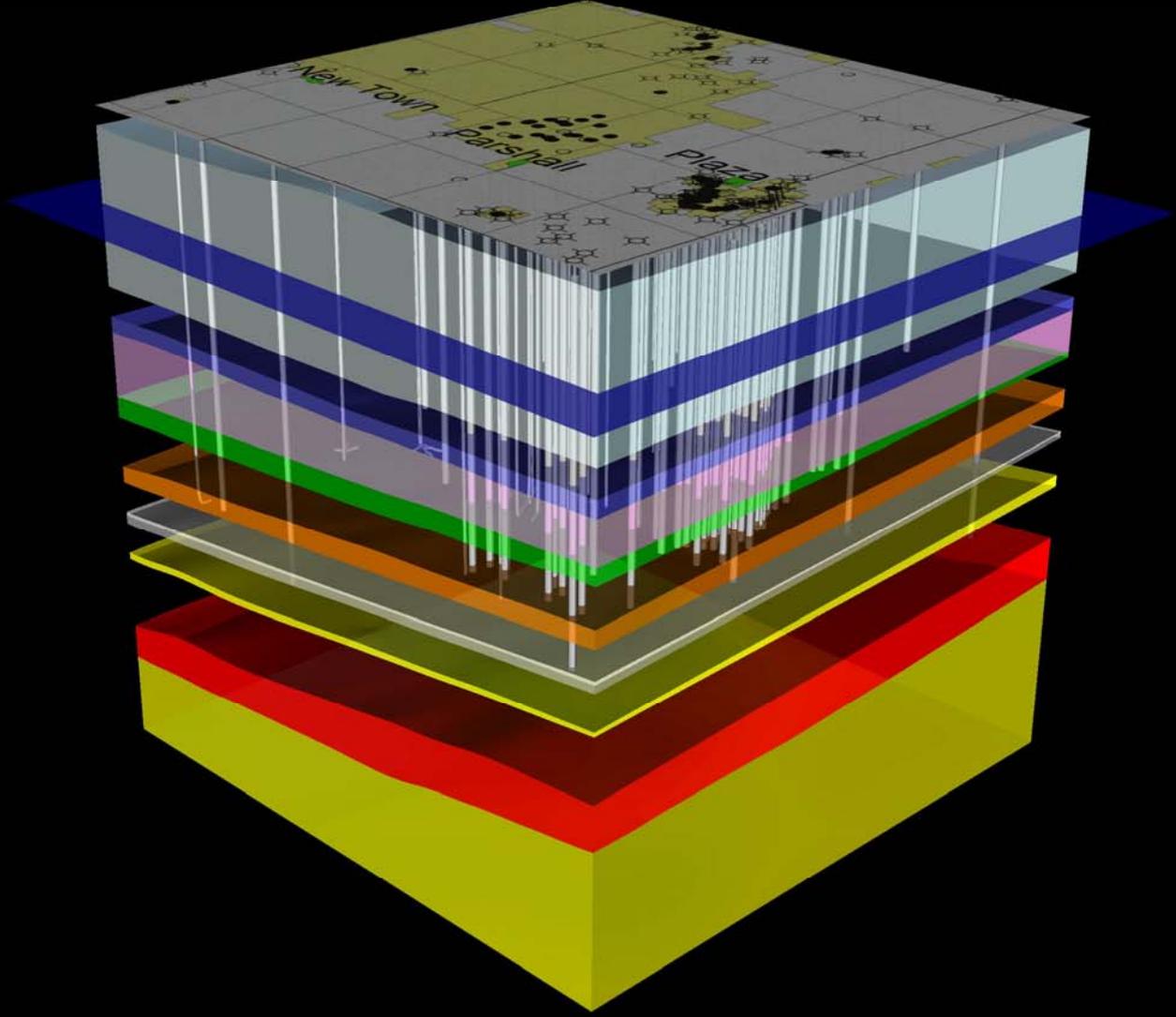
Bakken Wells  
Horizontal Legs









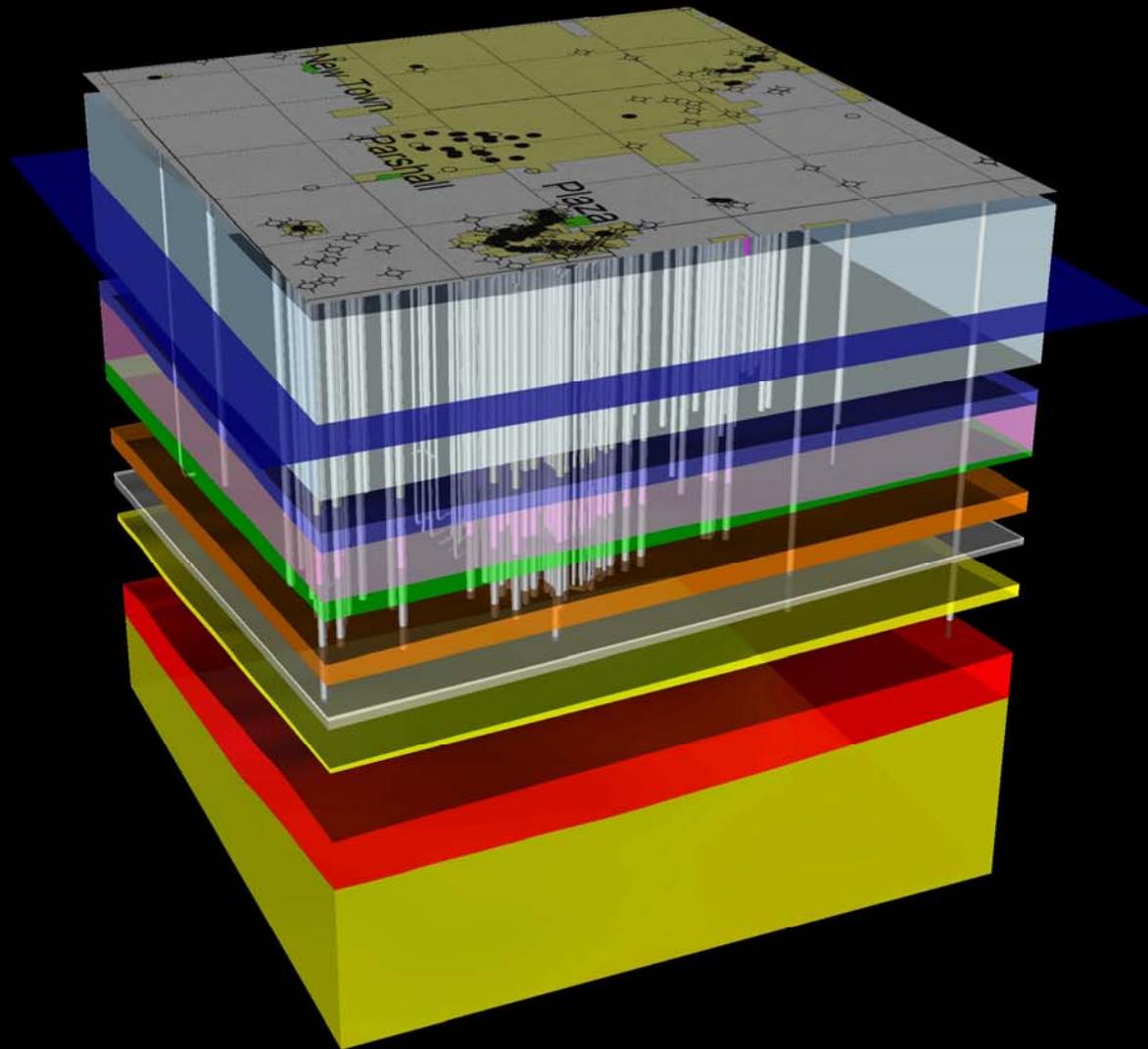


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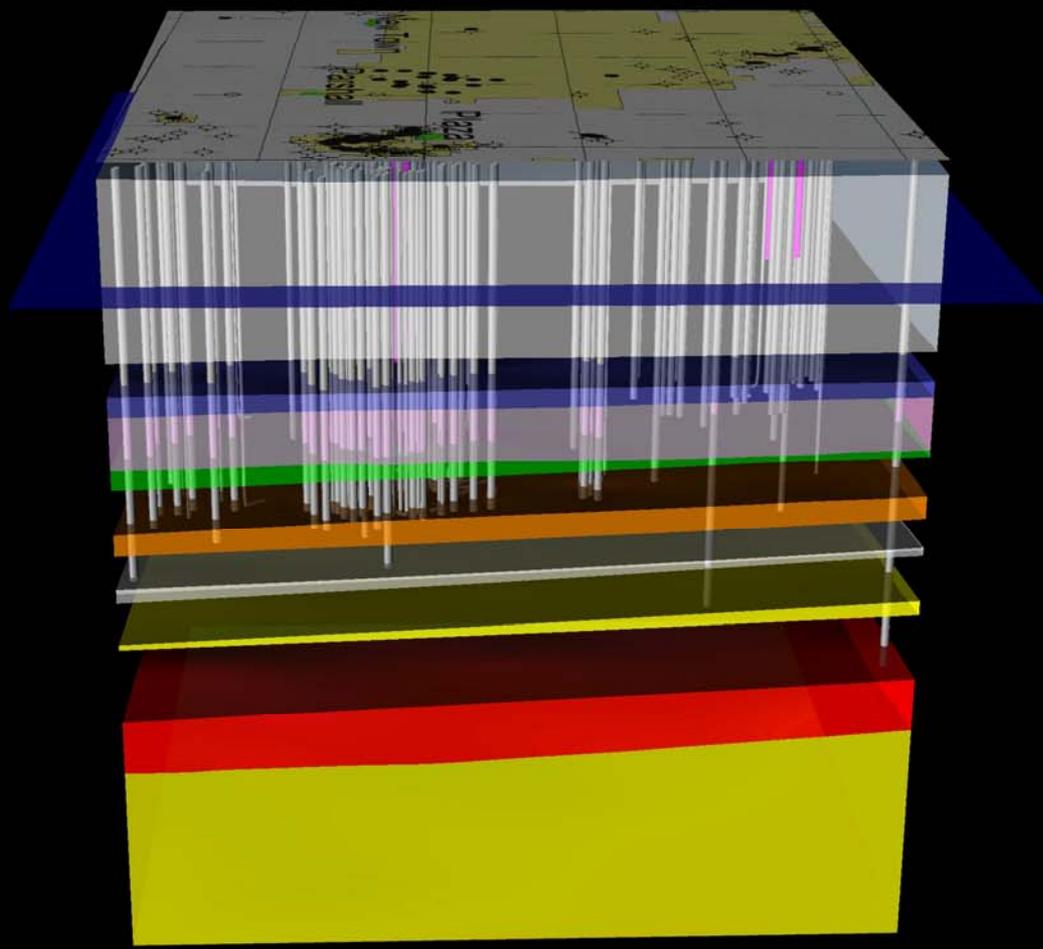


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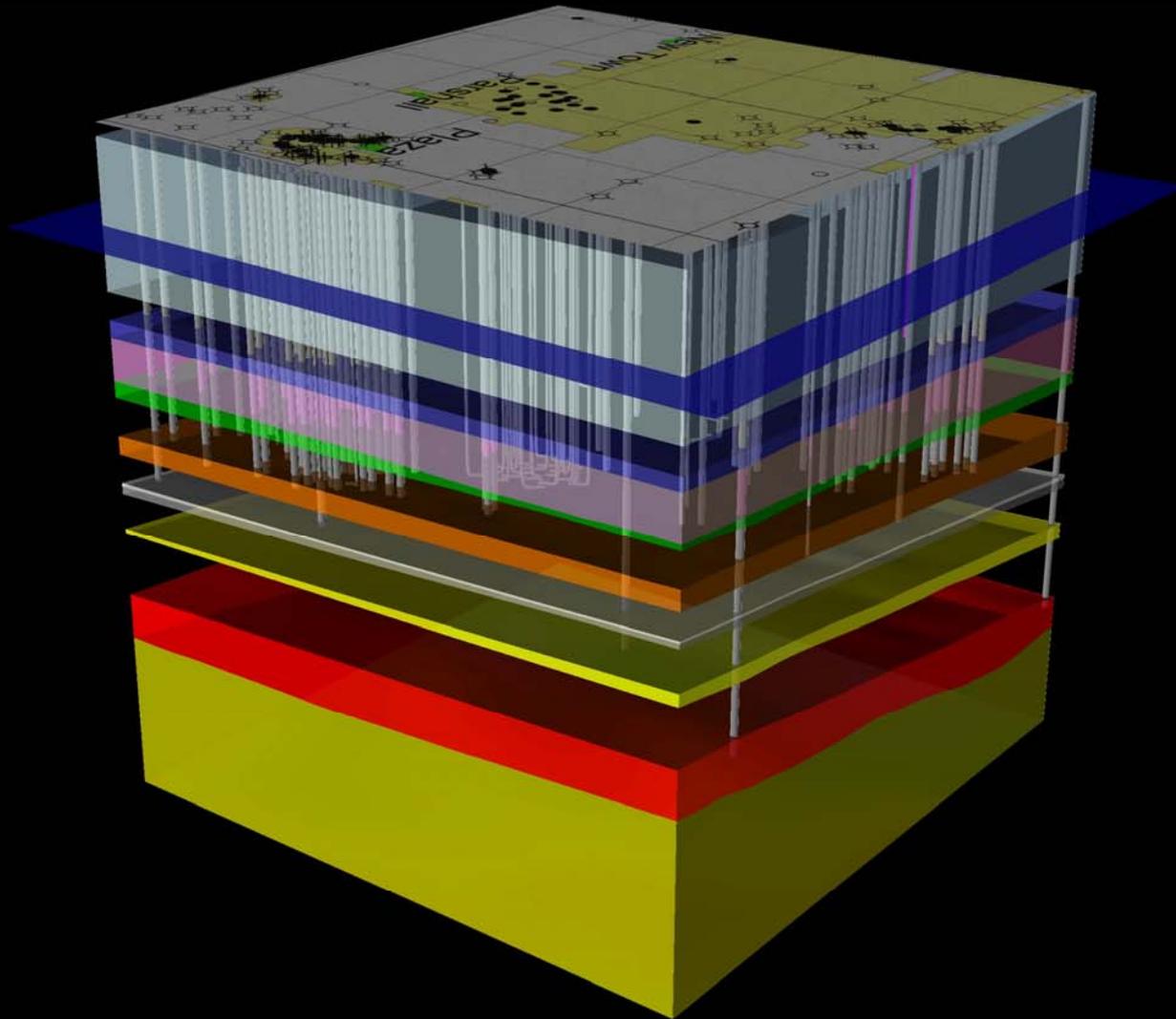


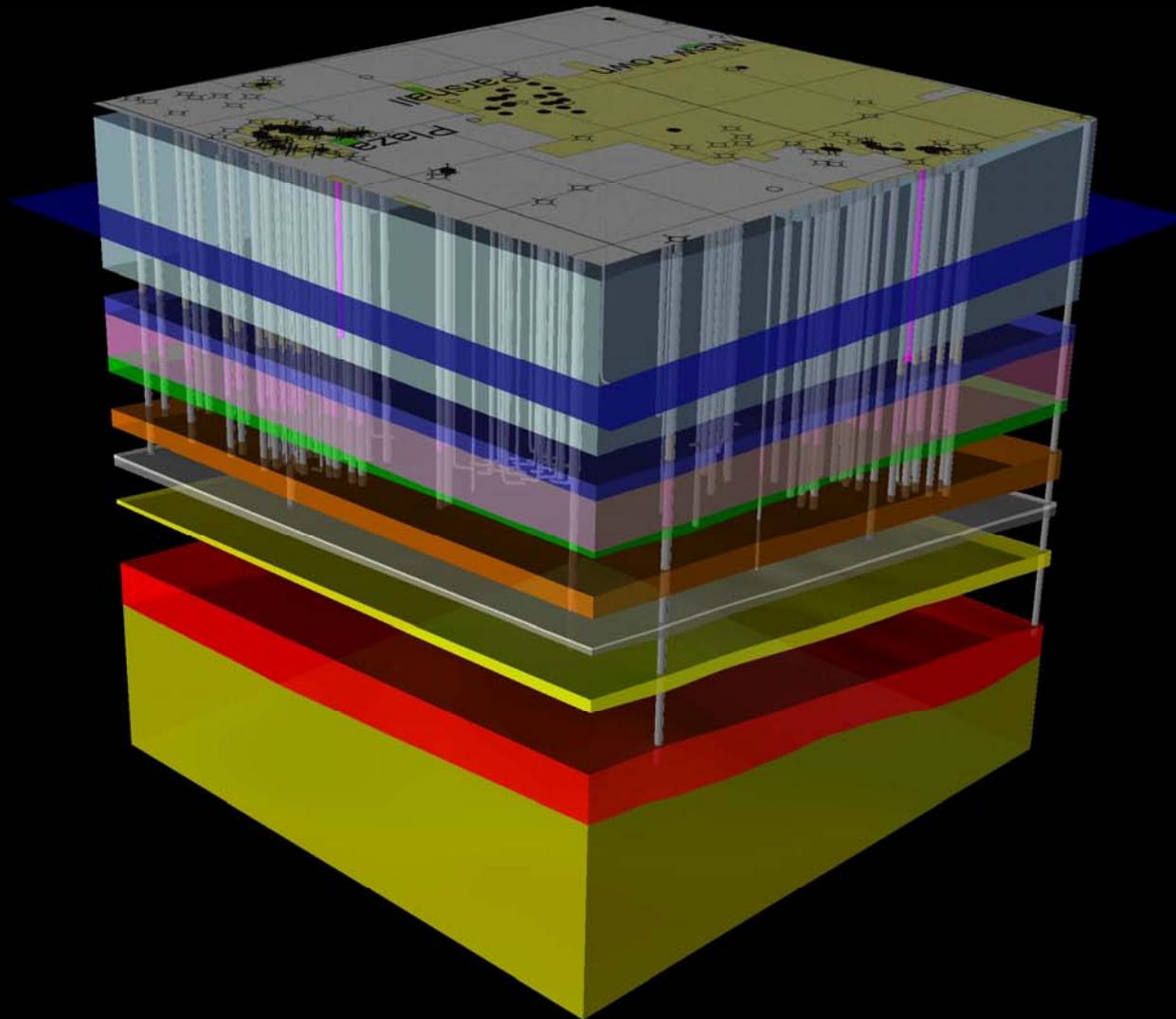
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Geological Survey**





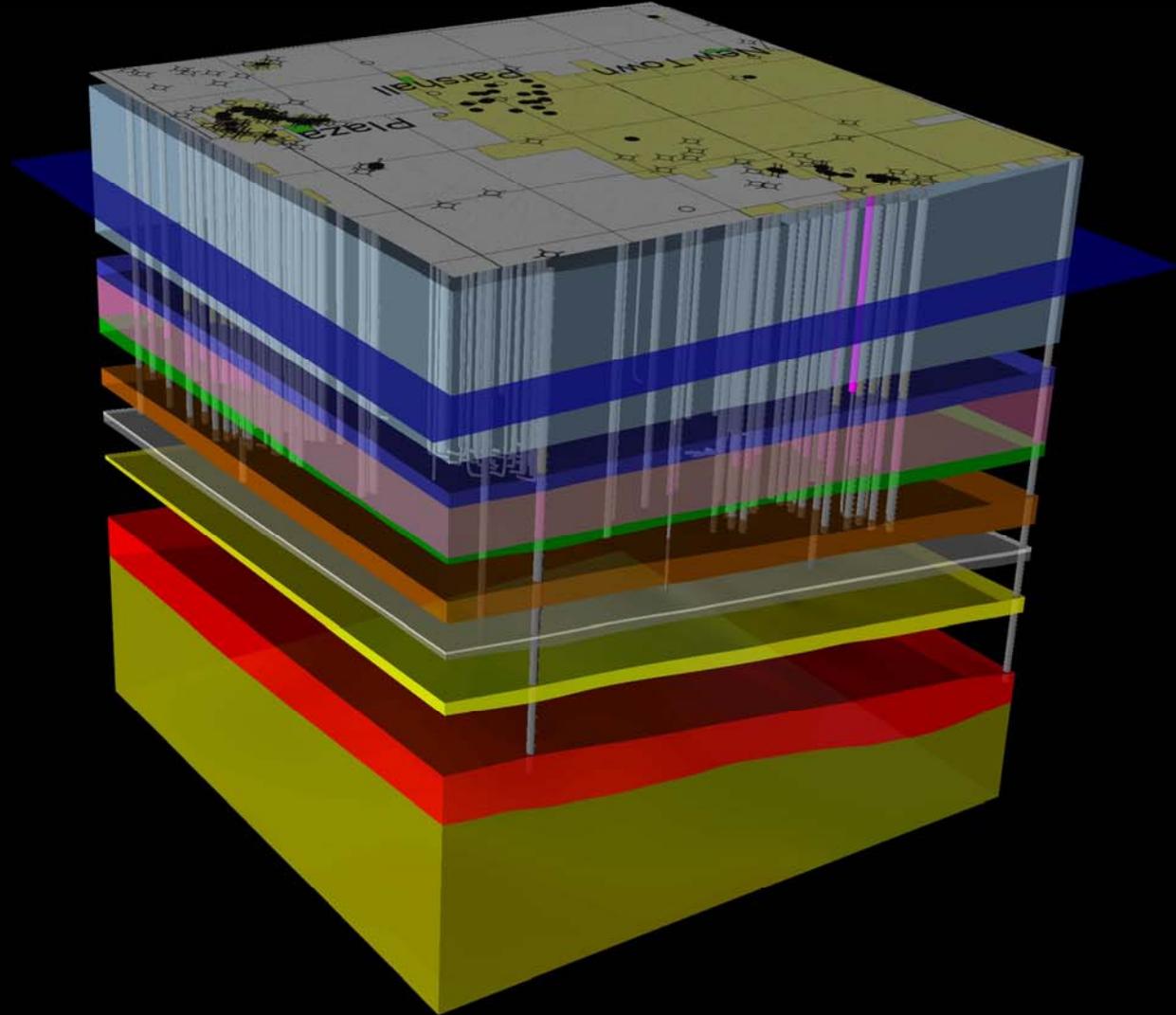


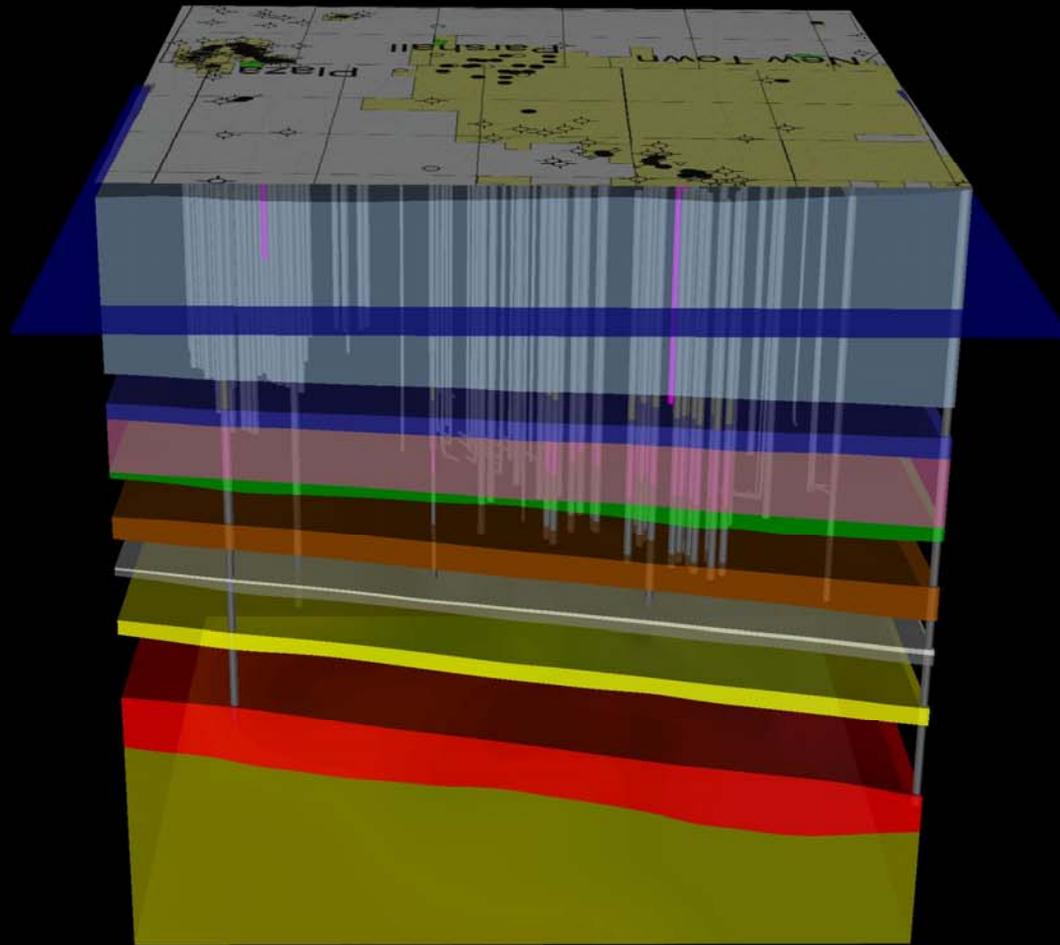
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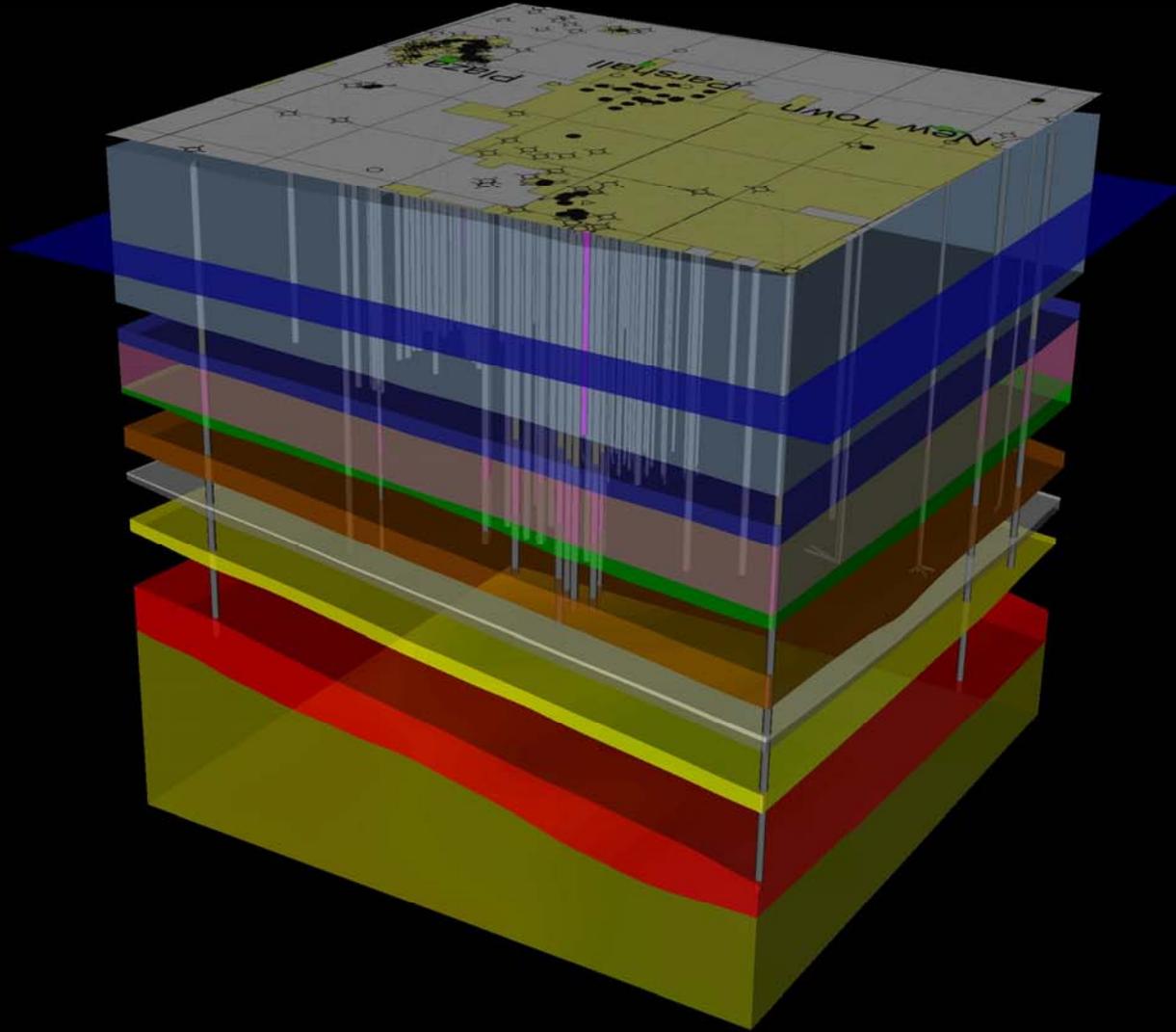
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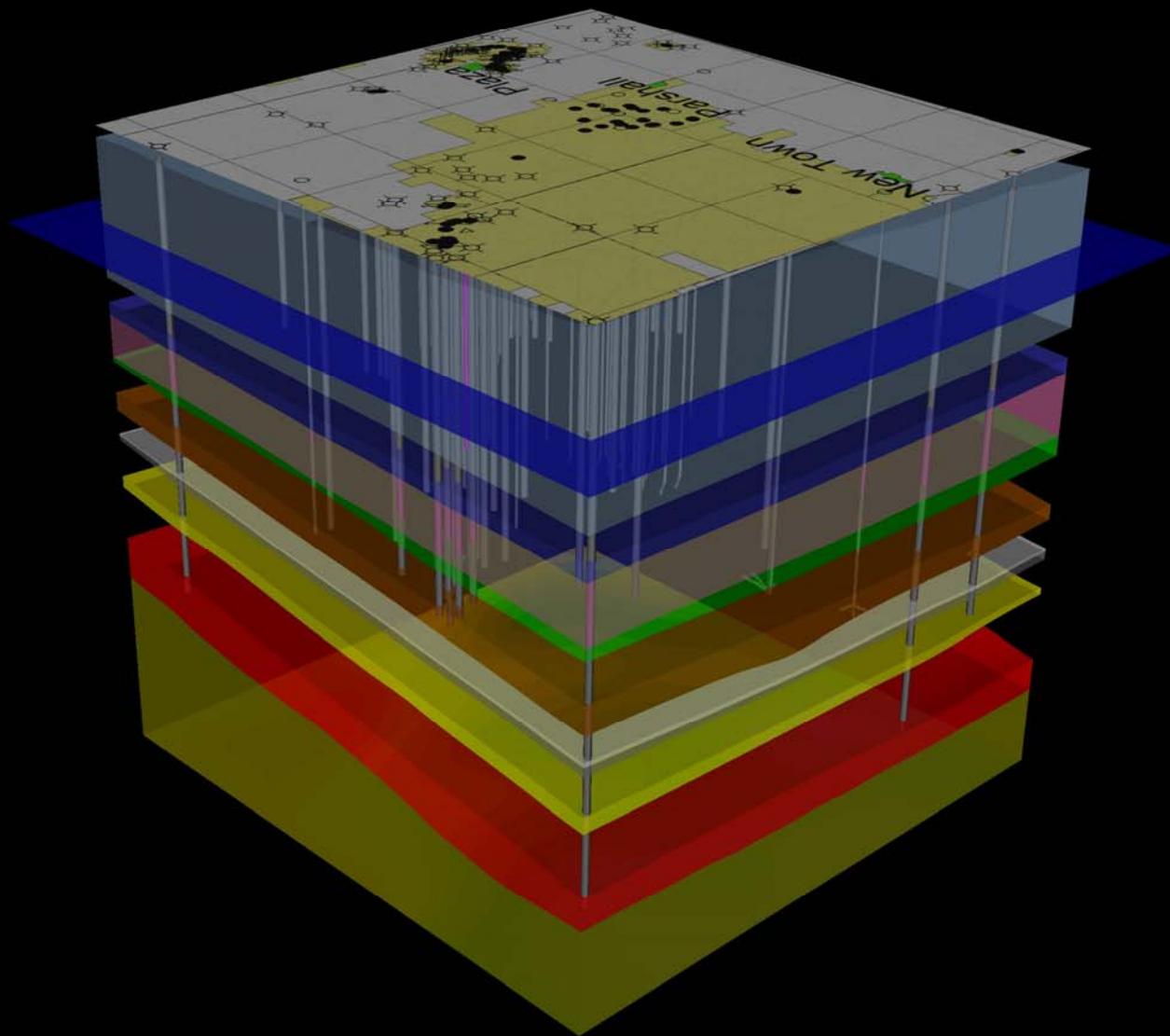
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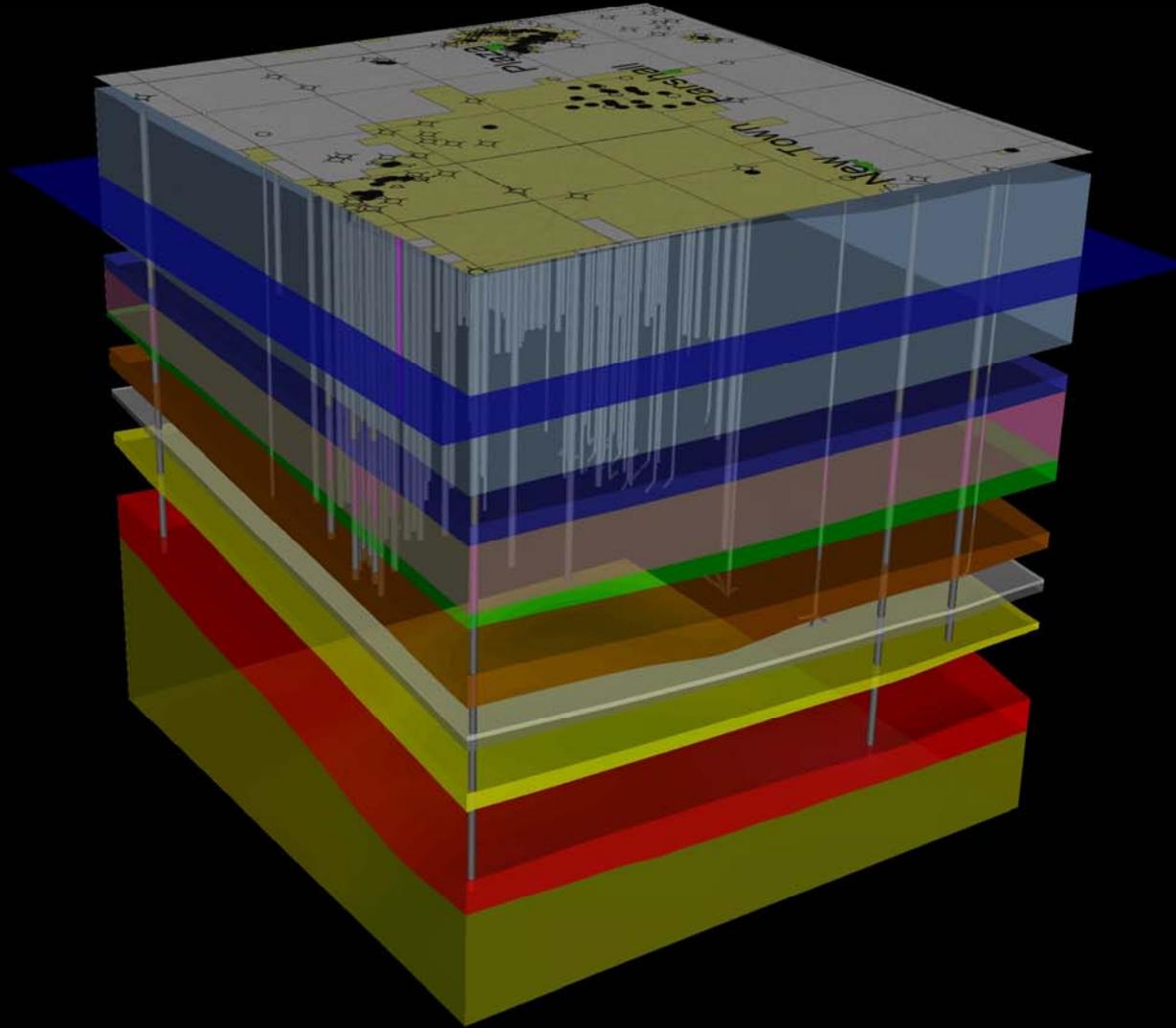


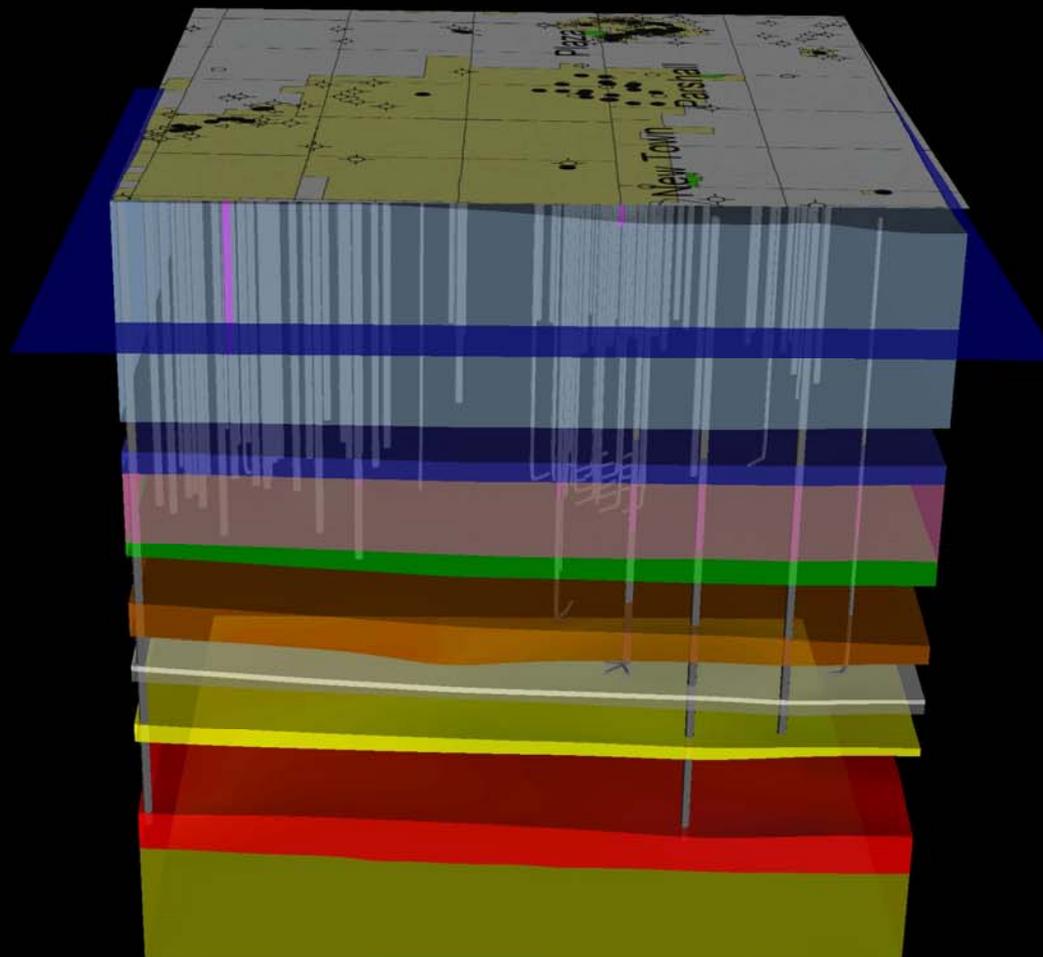
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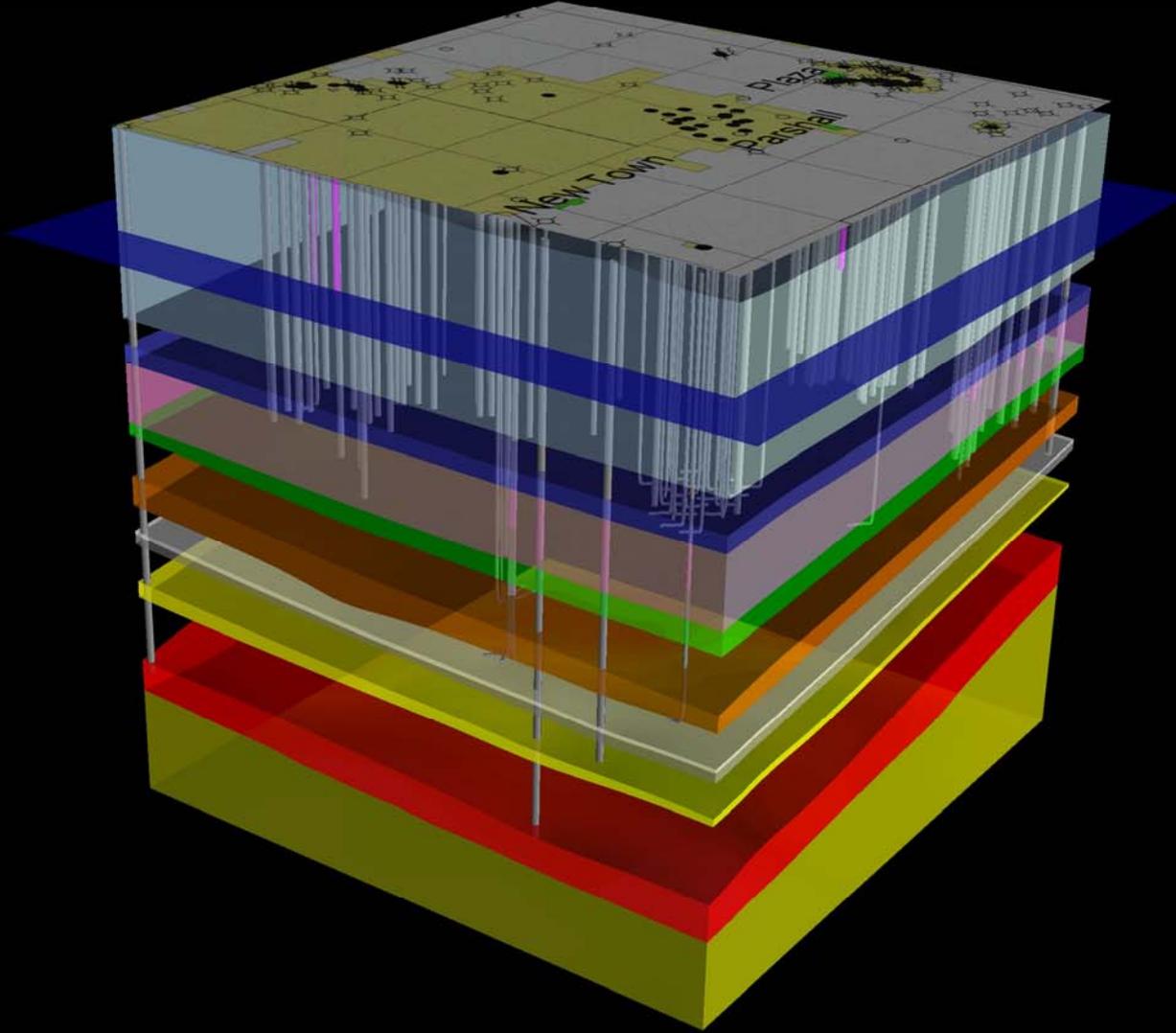
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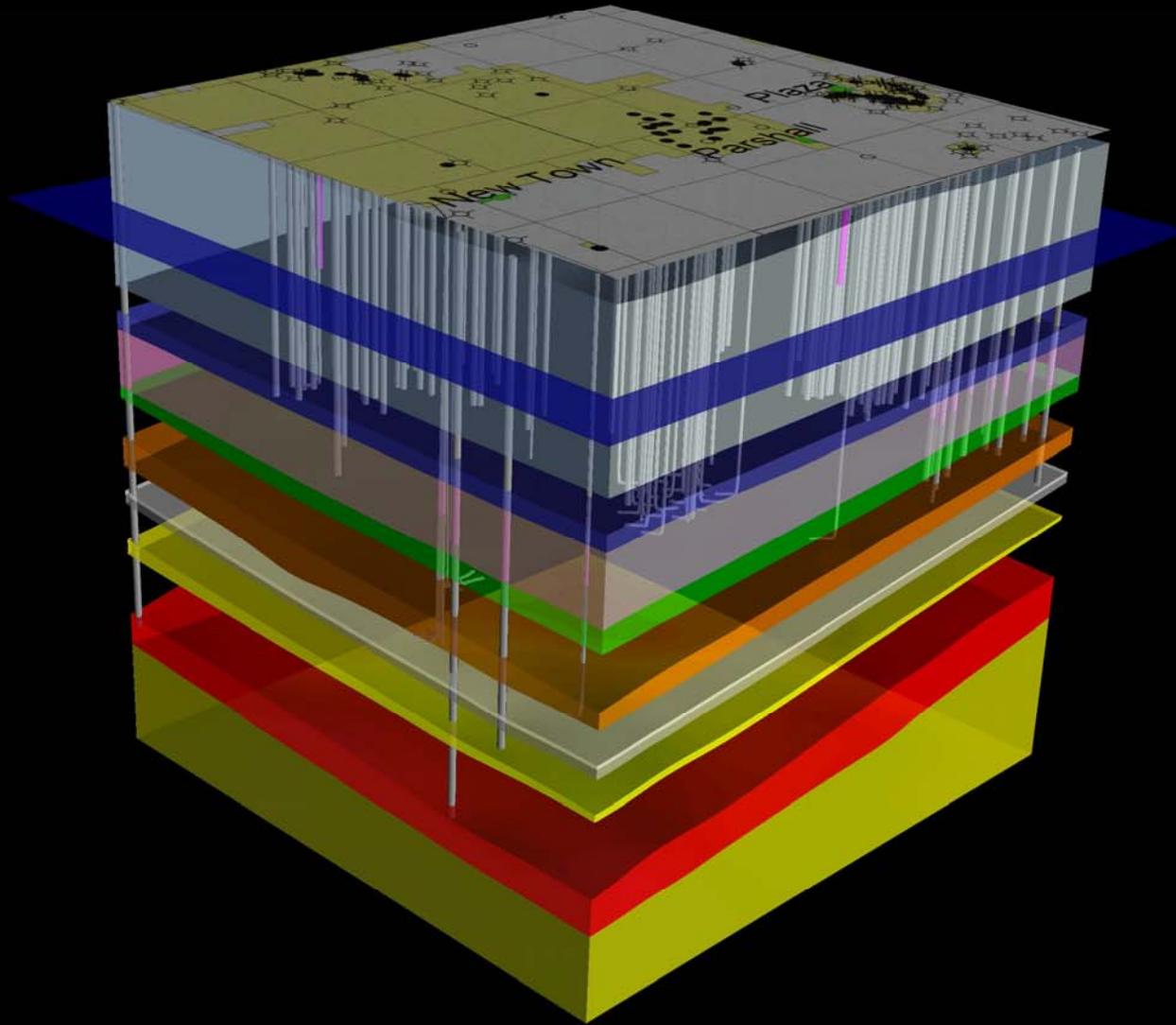
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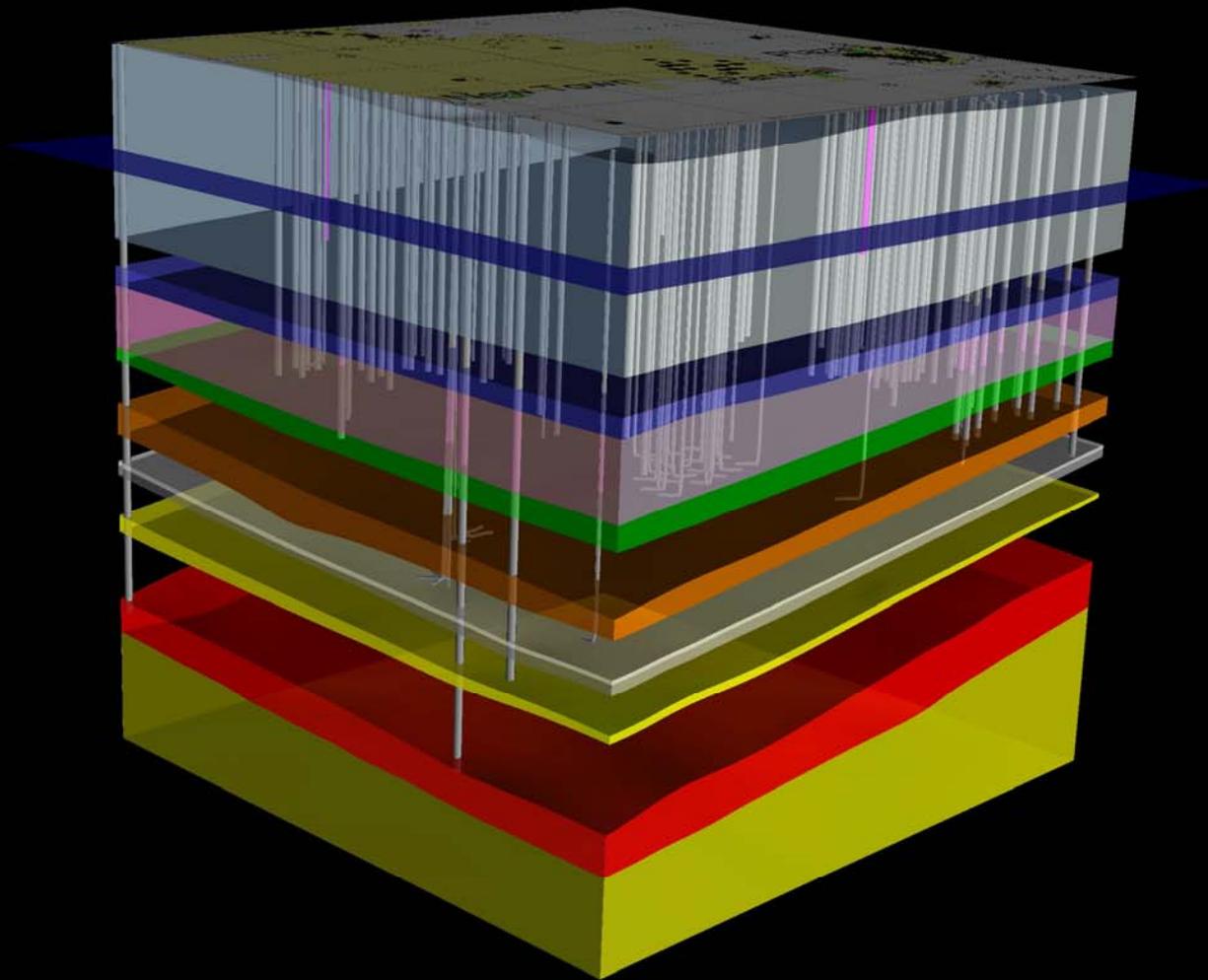


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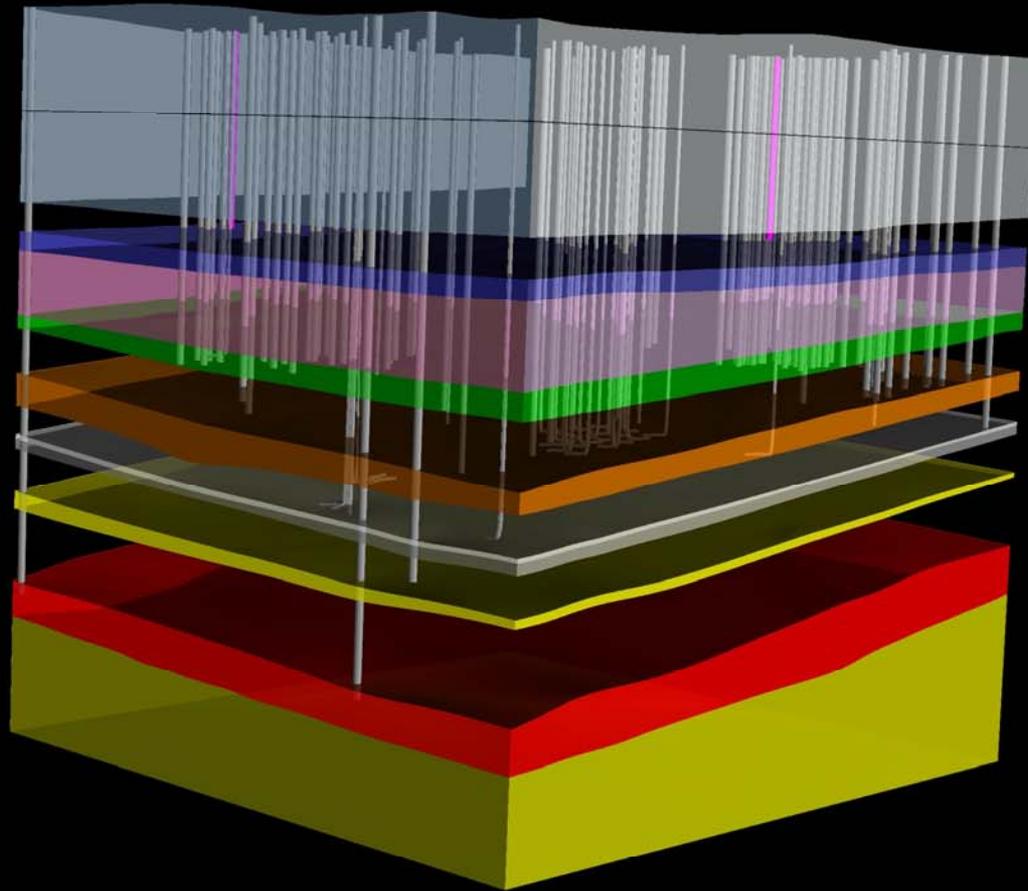


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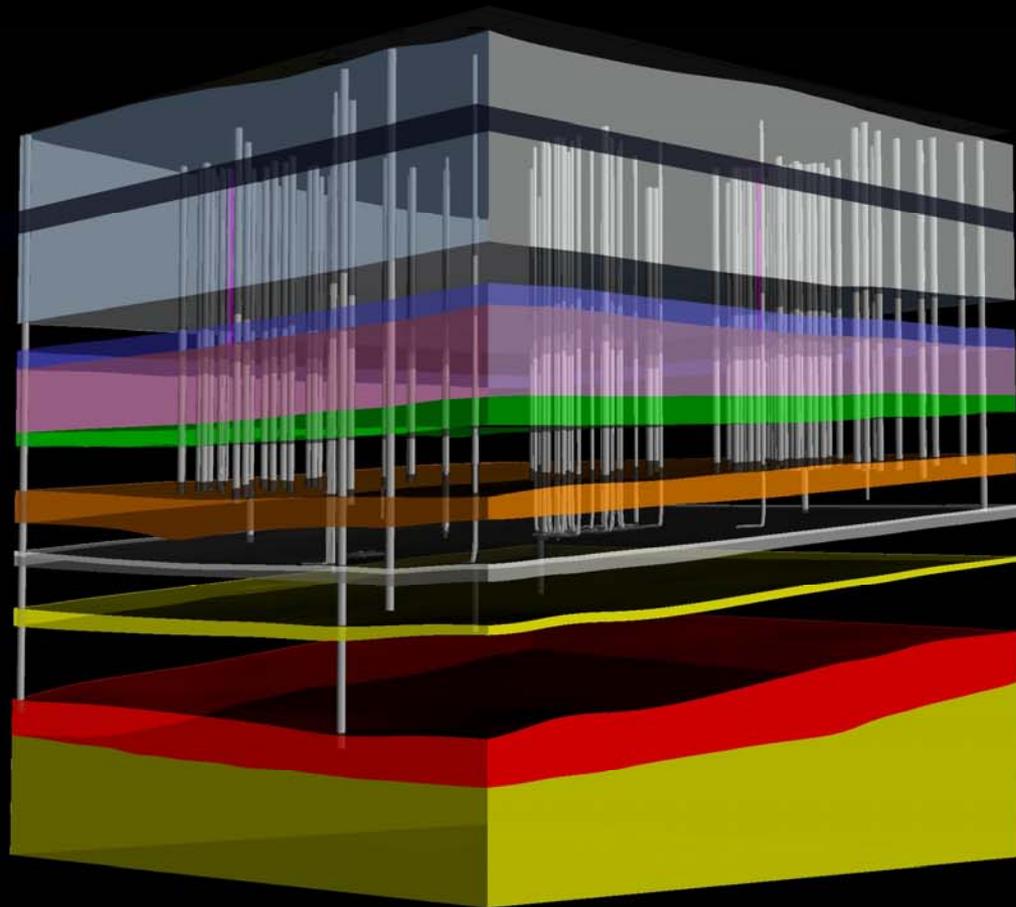


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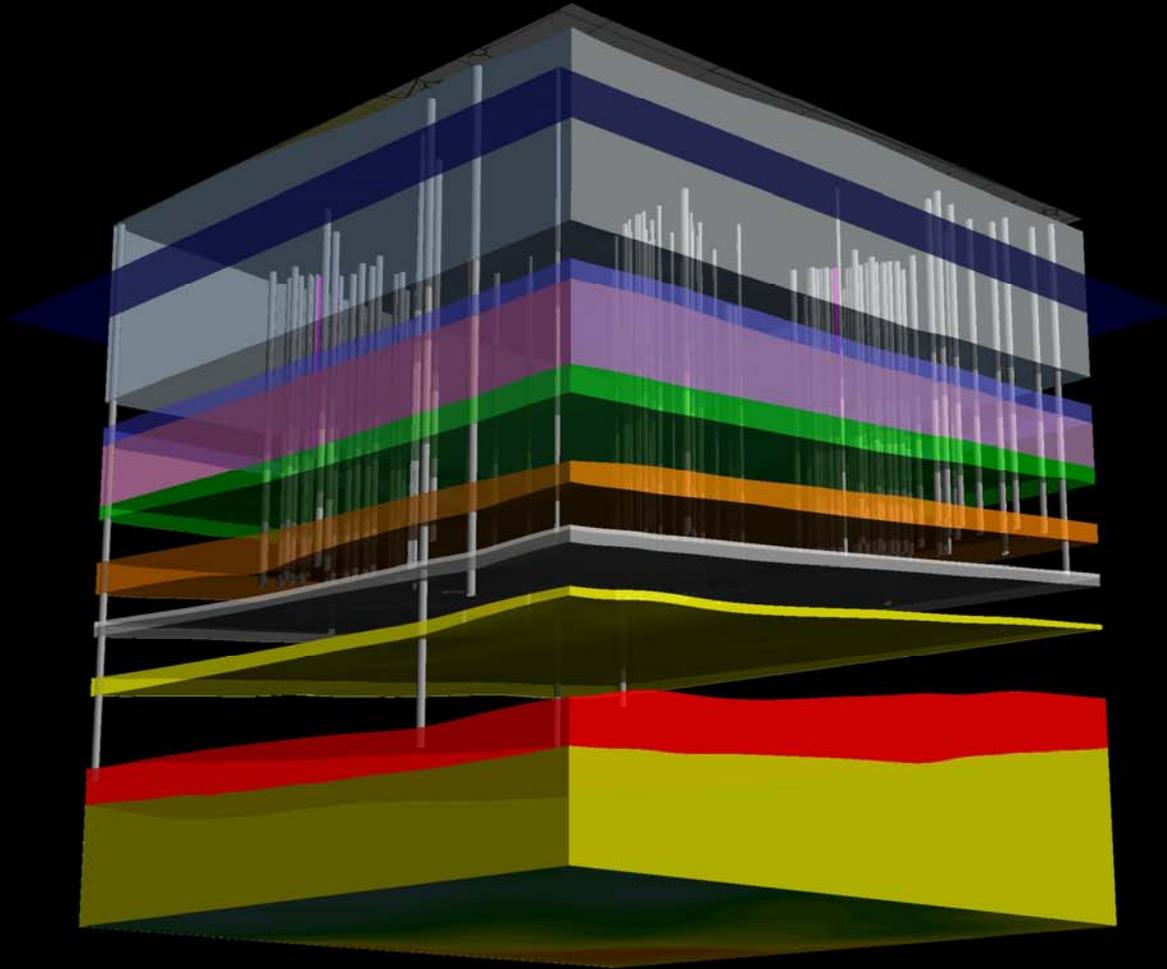


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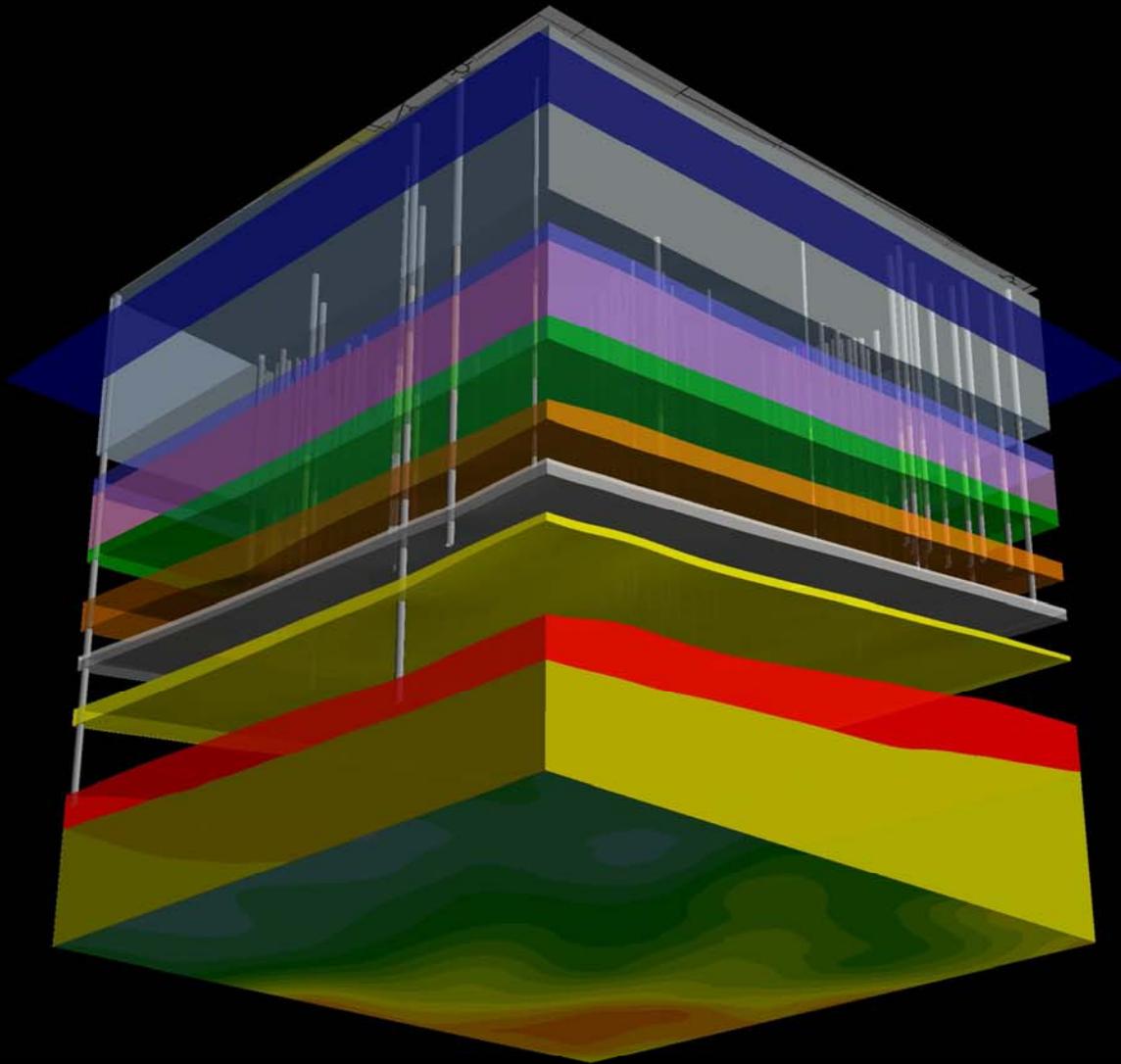


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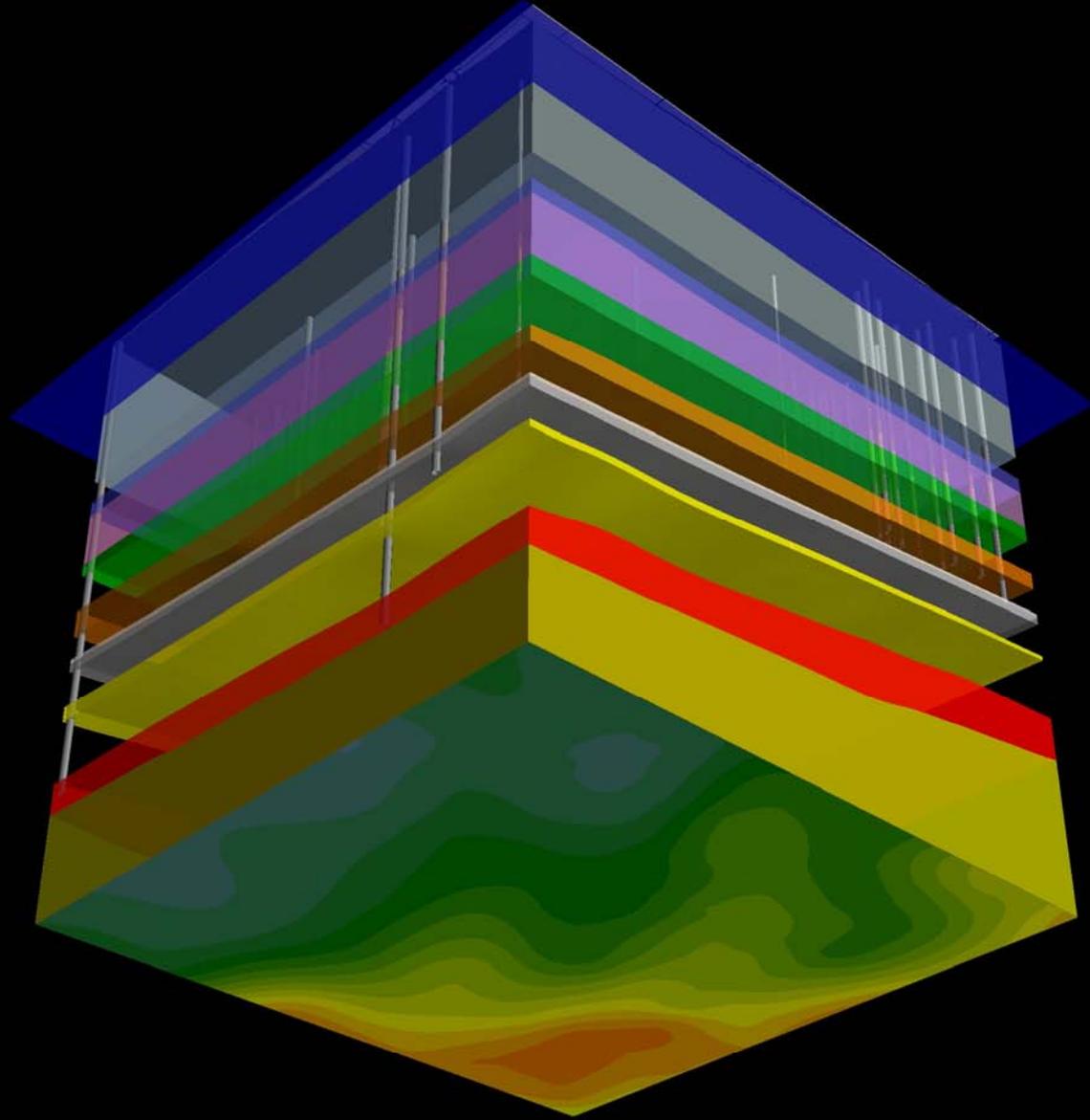


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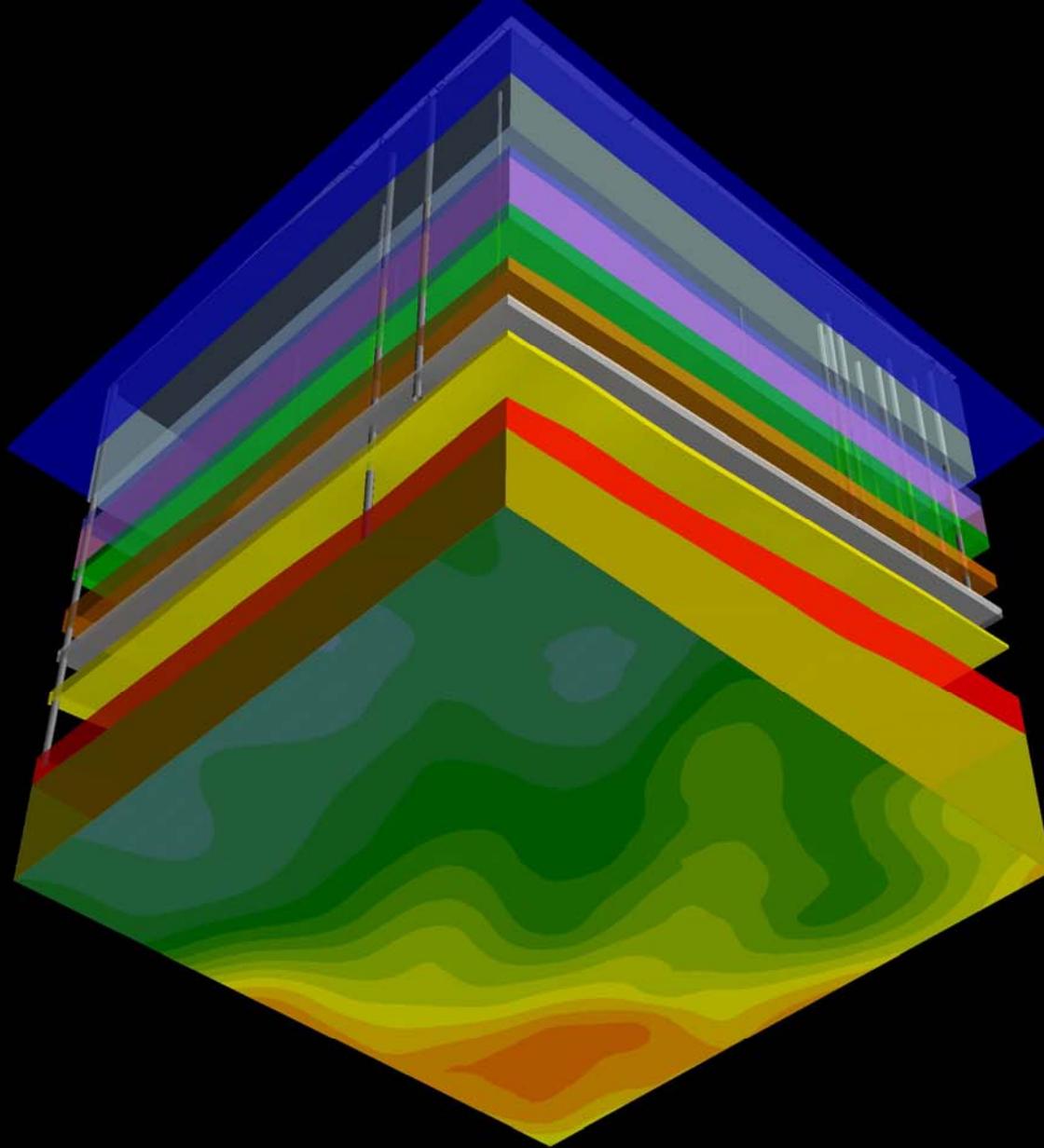


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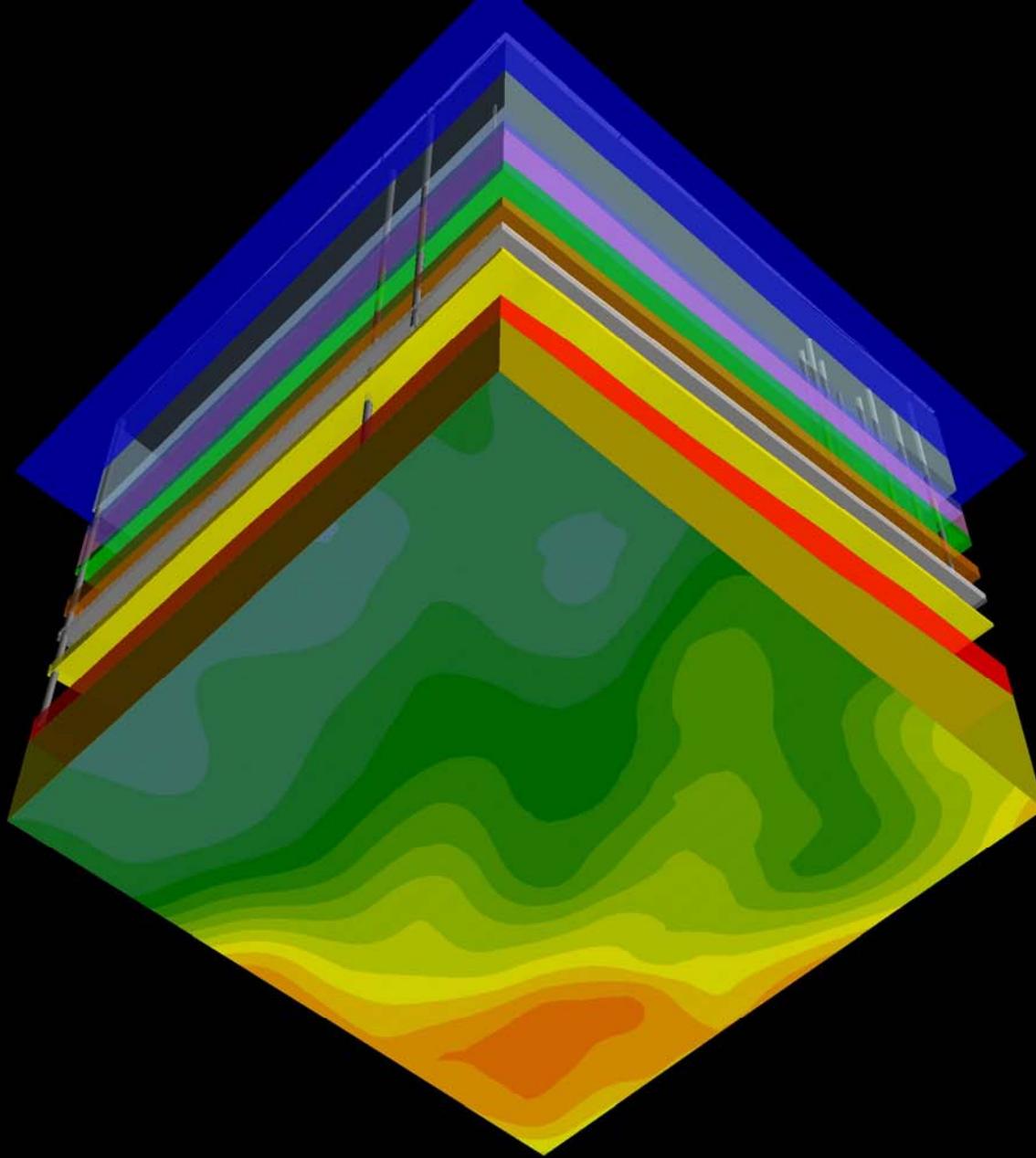


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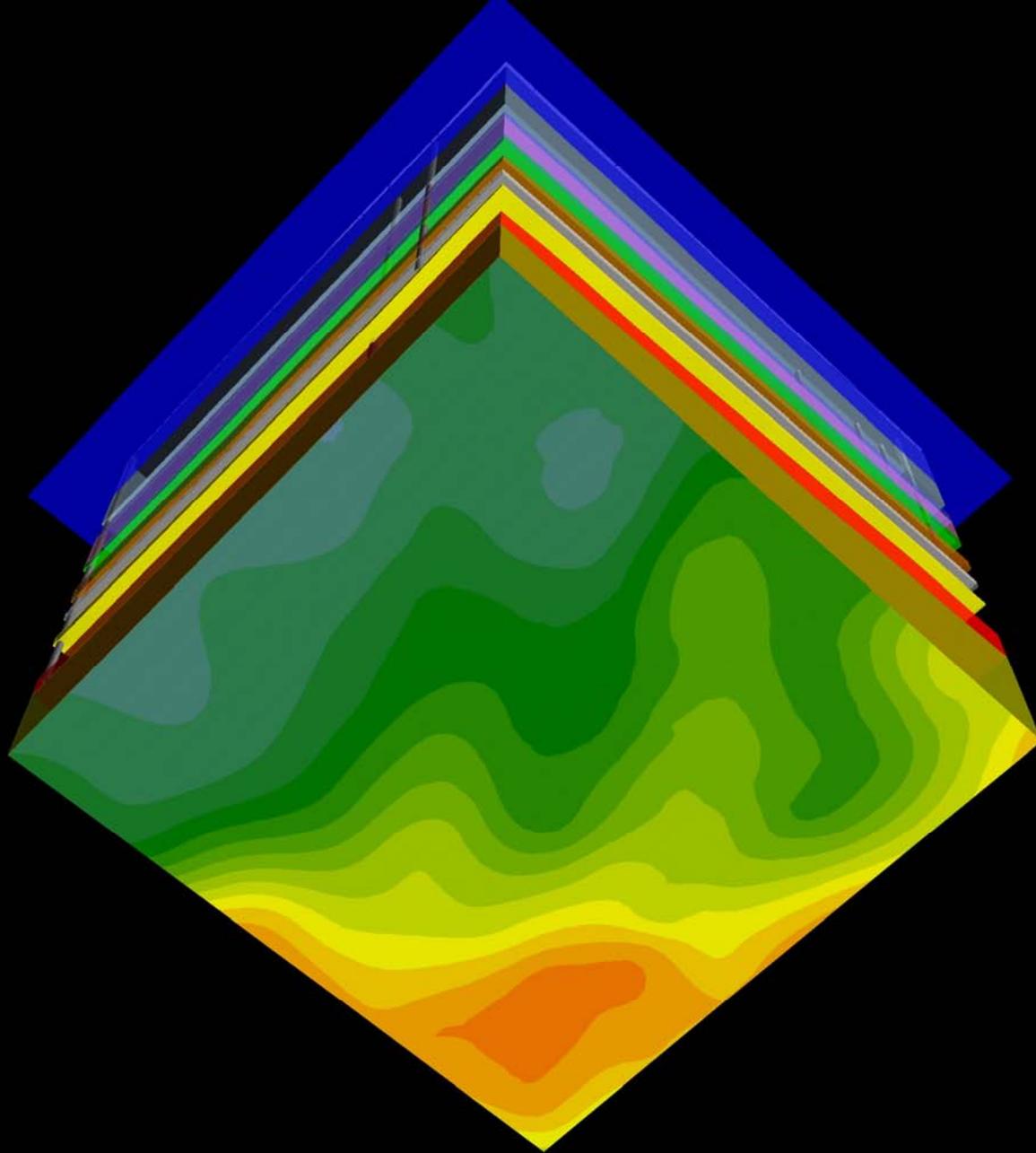


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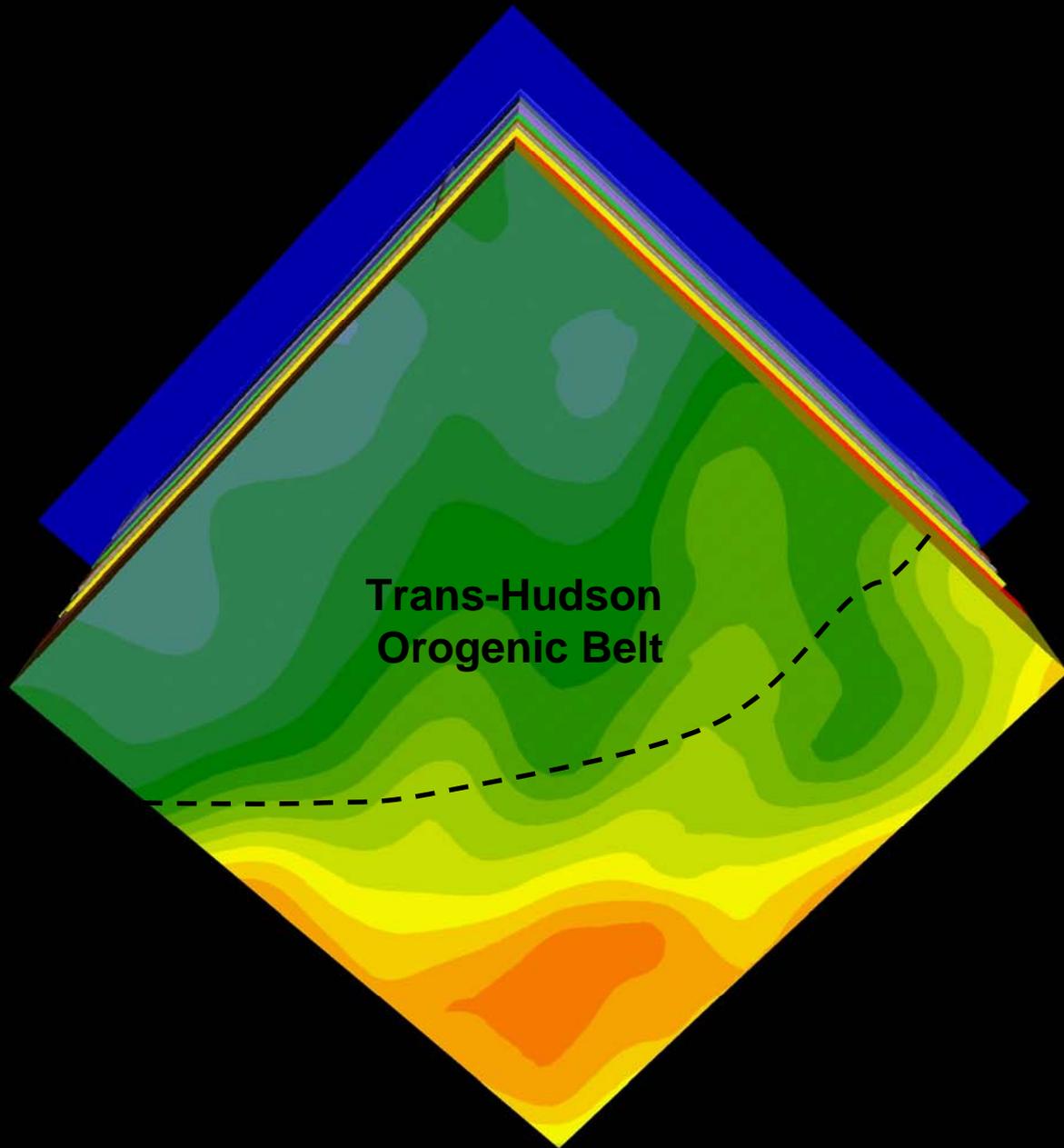


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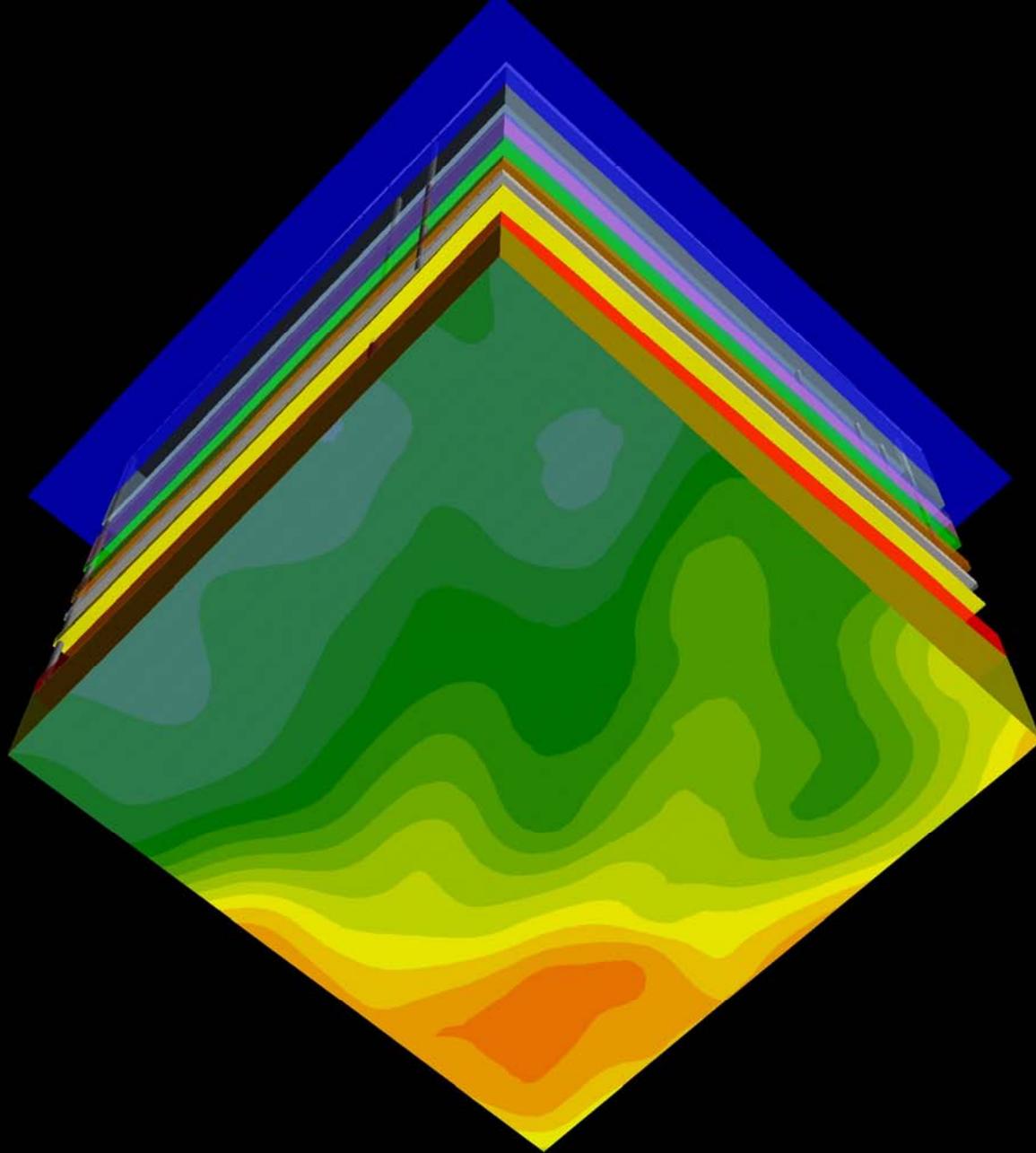
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**Trans-Hudson  
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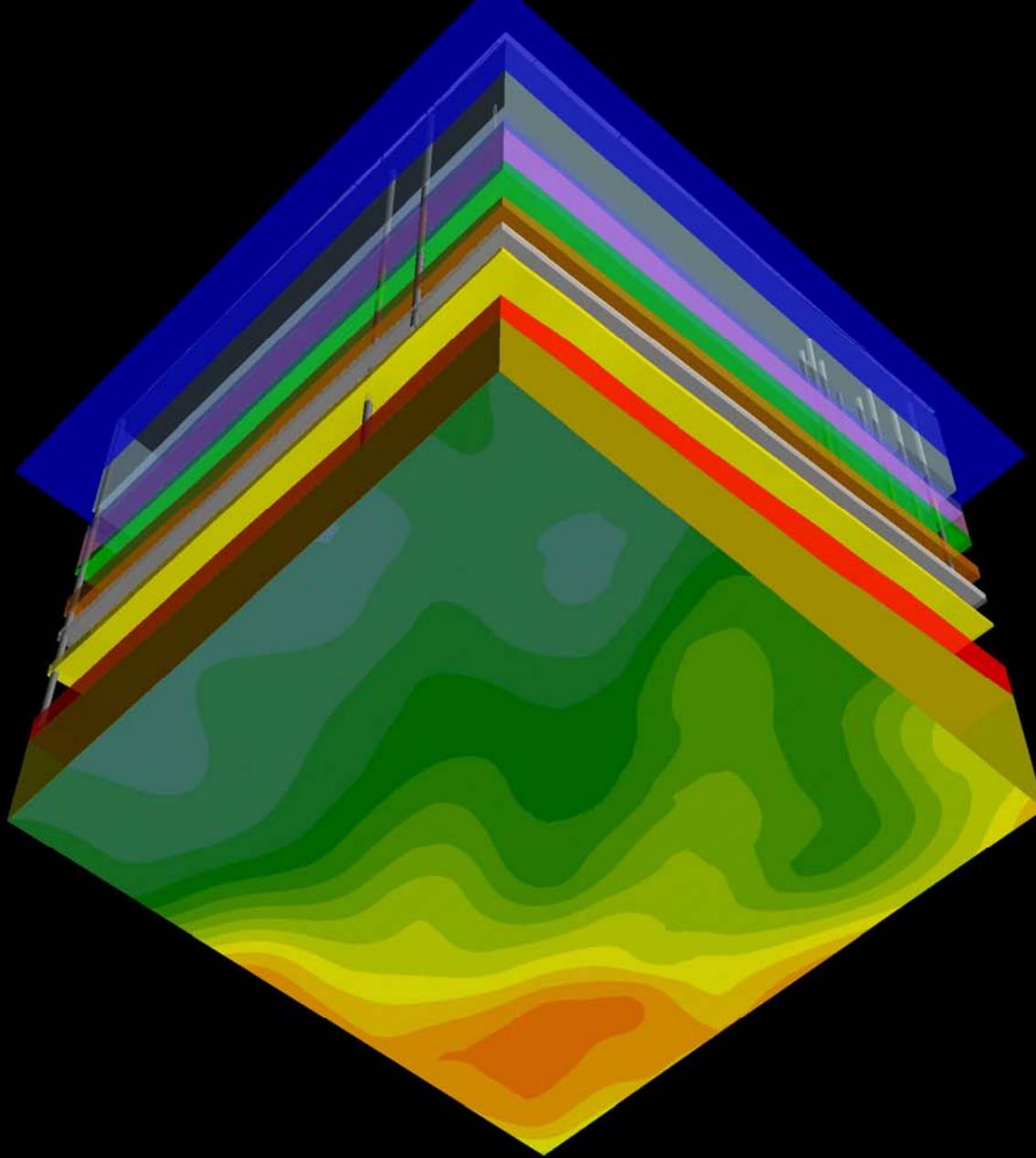


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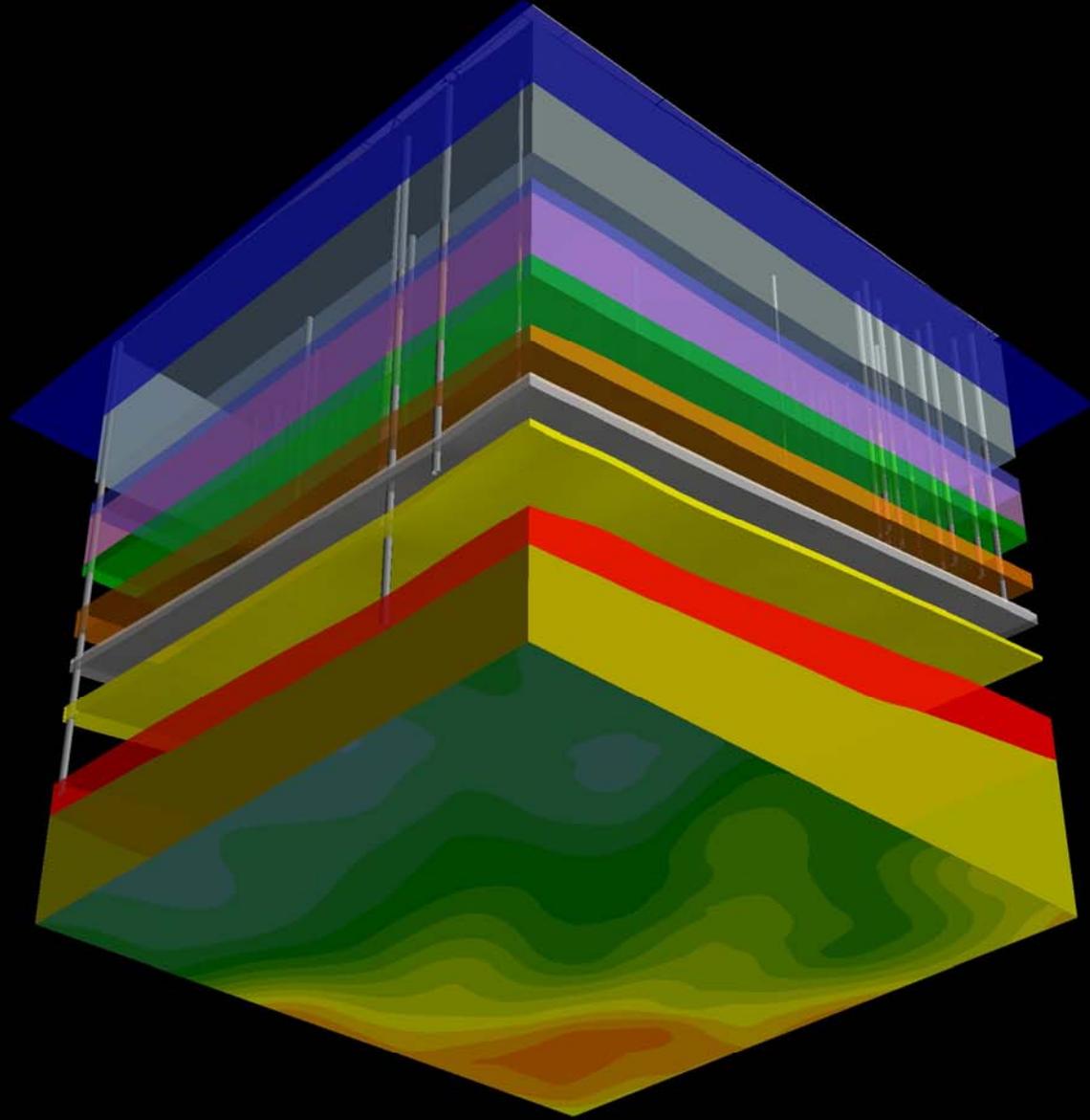
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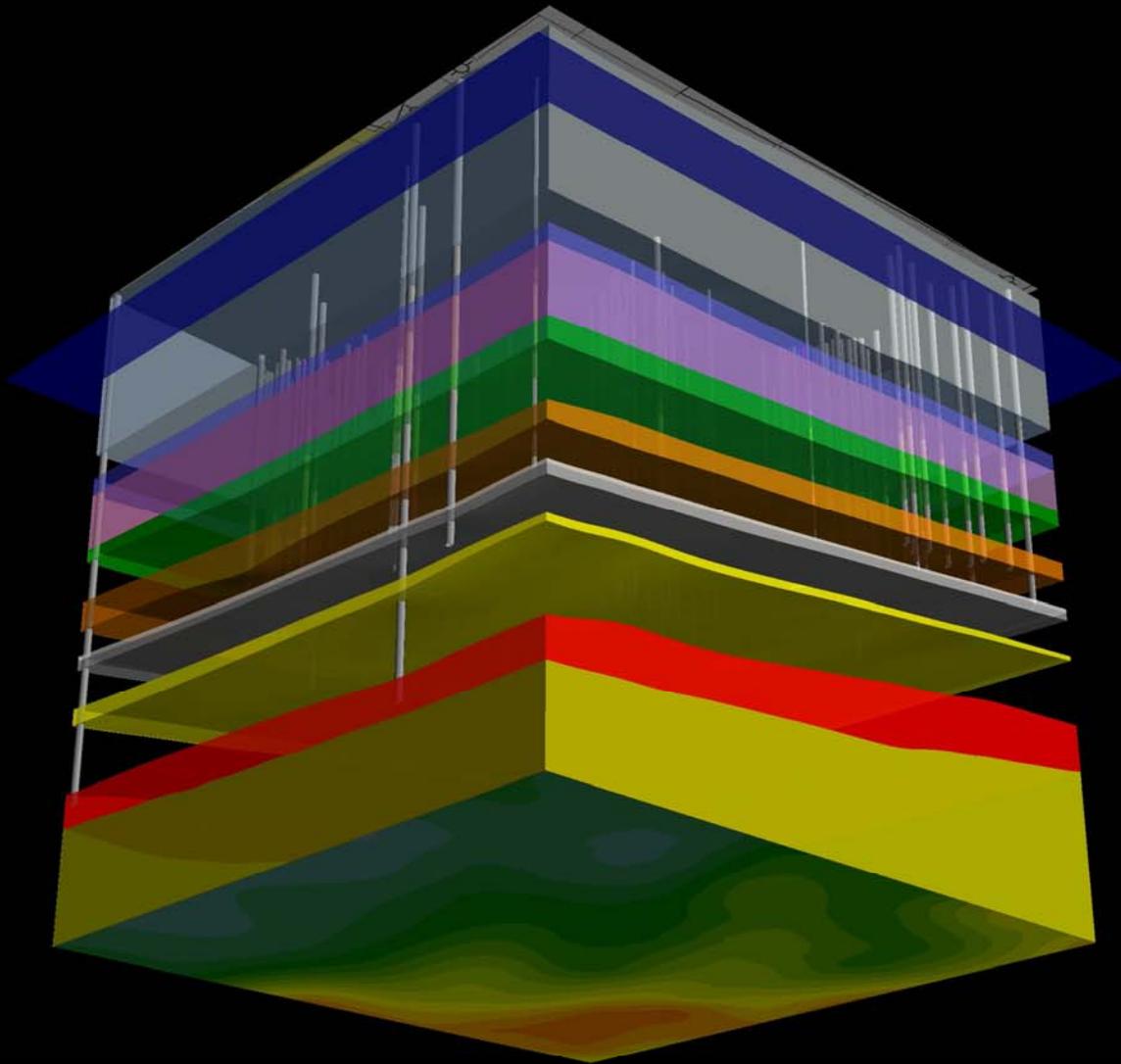


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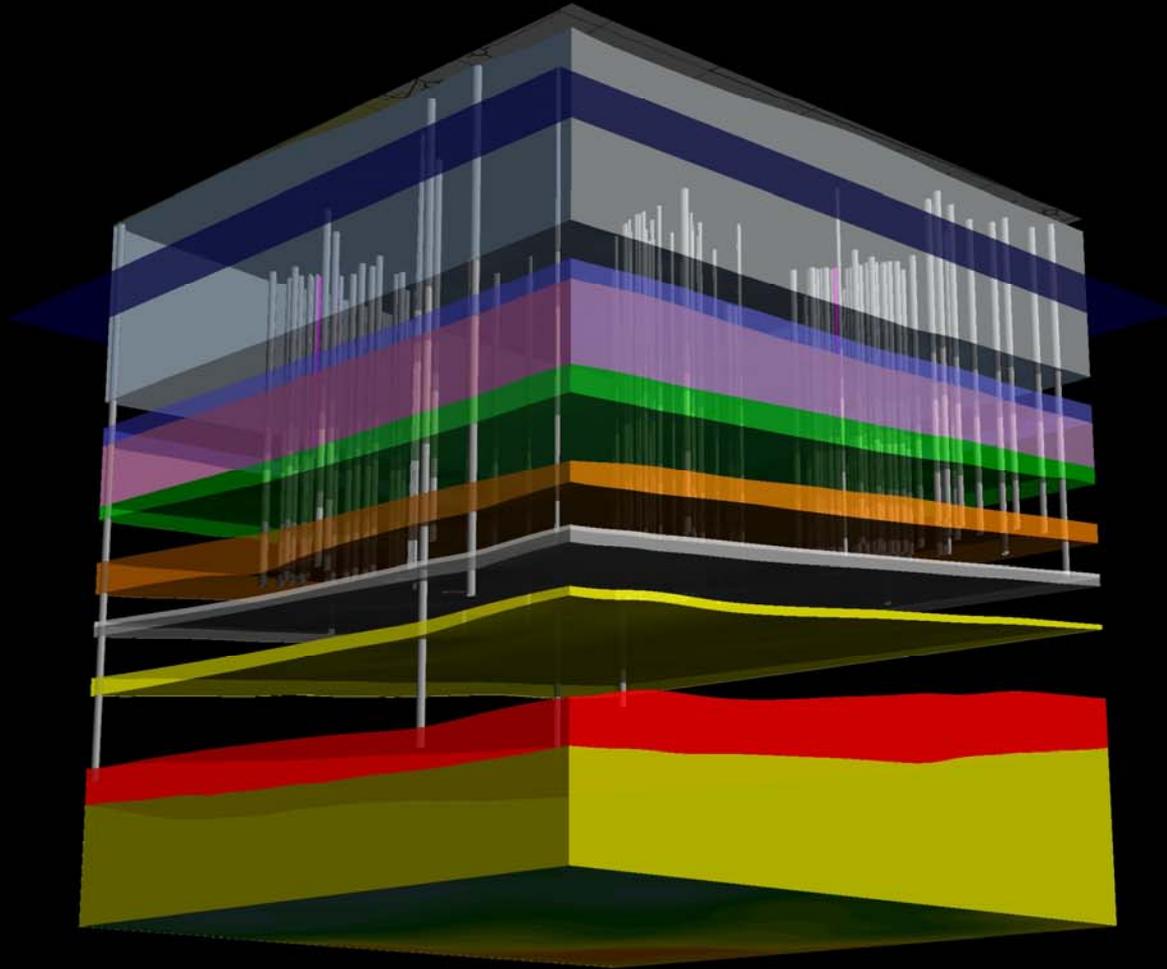


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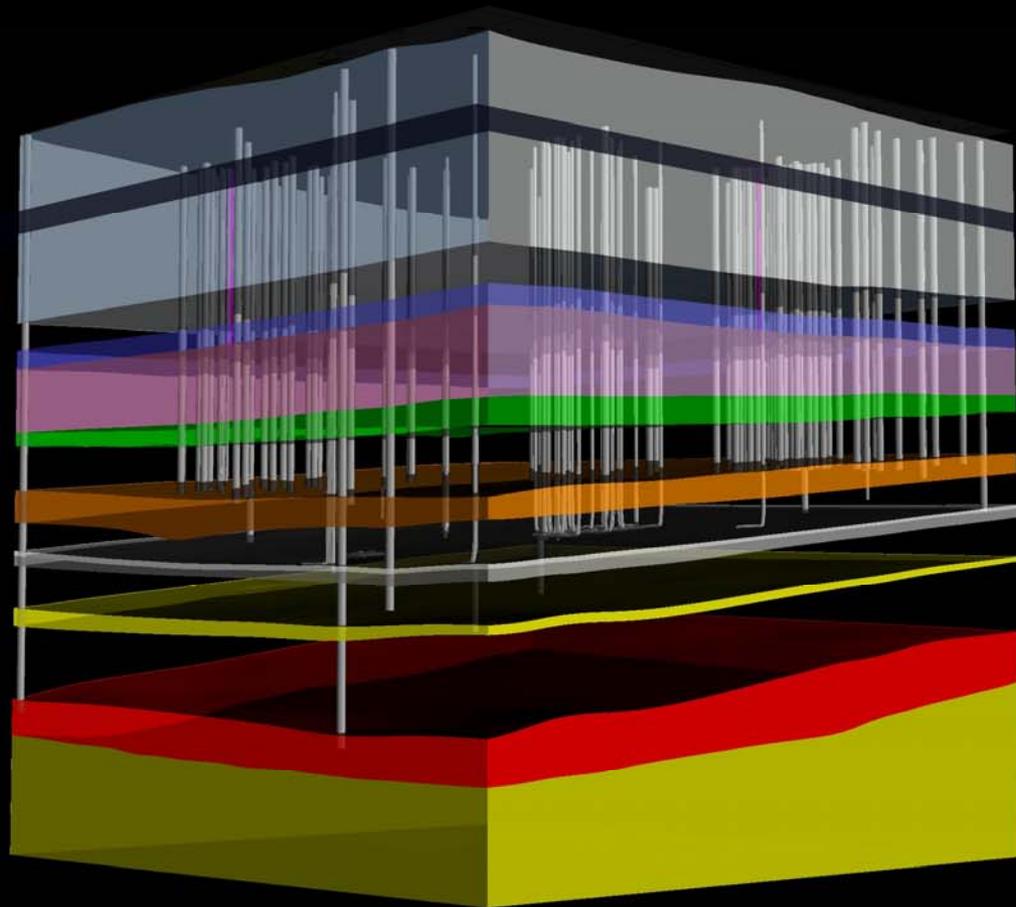


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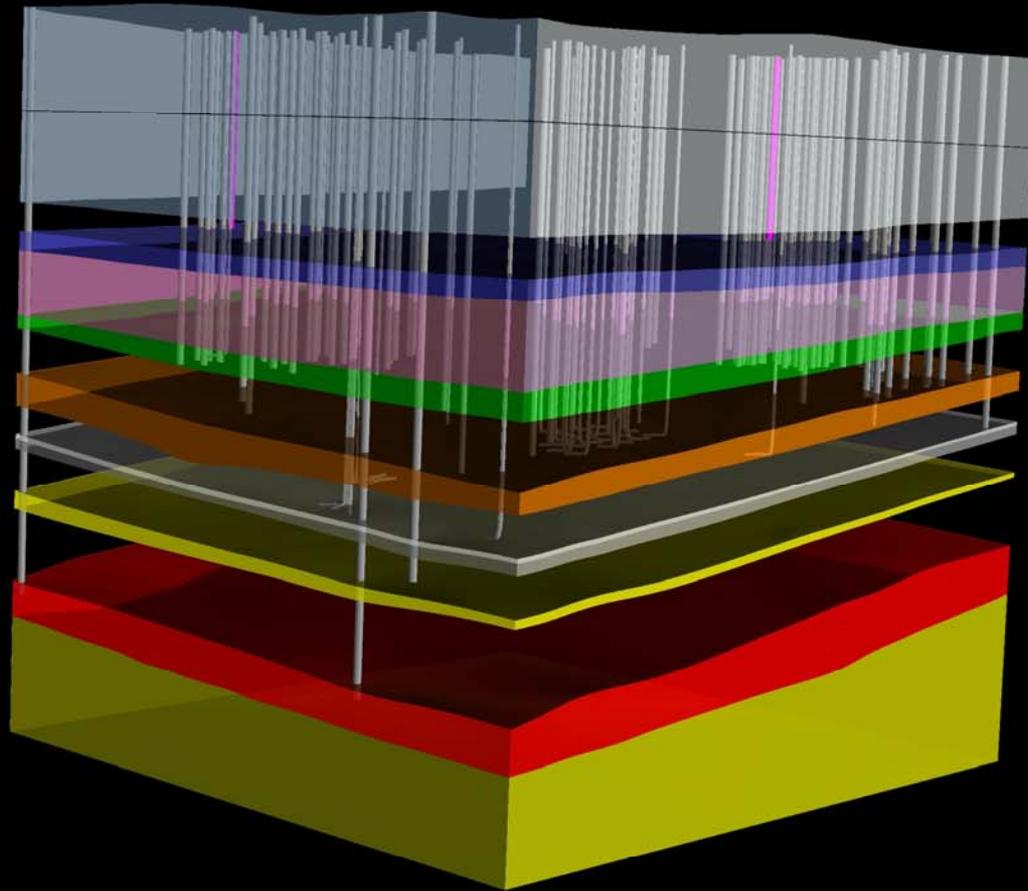


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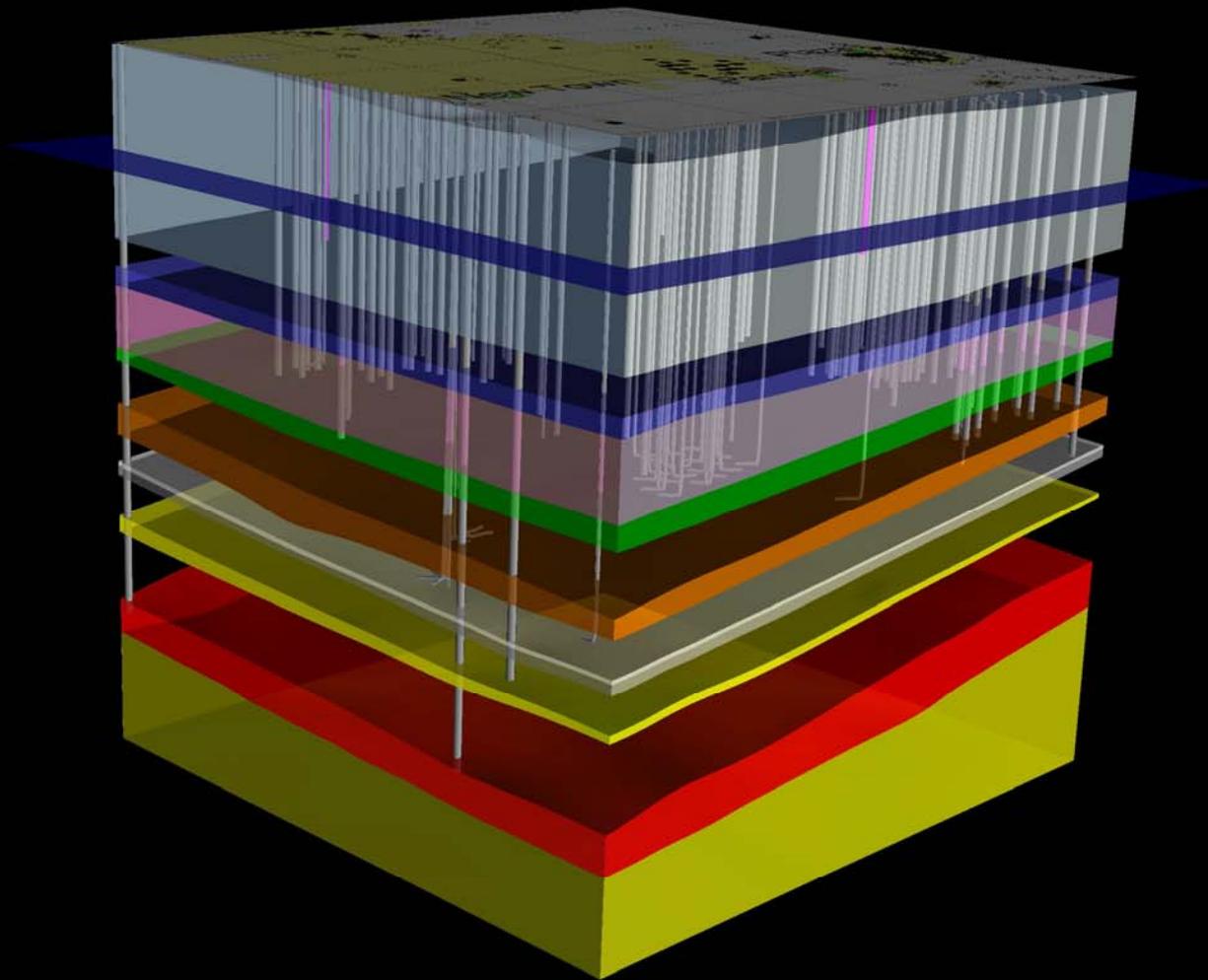


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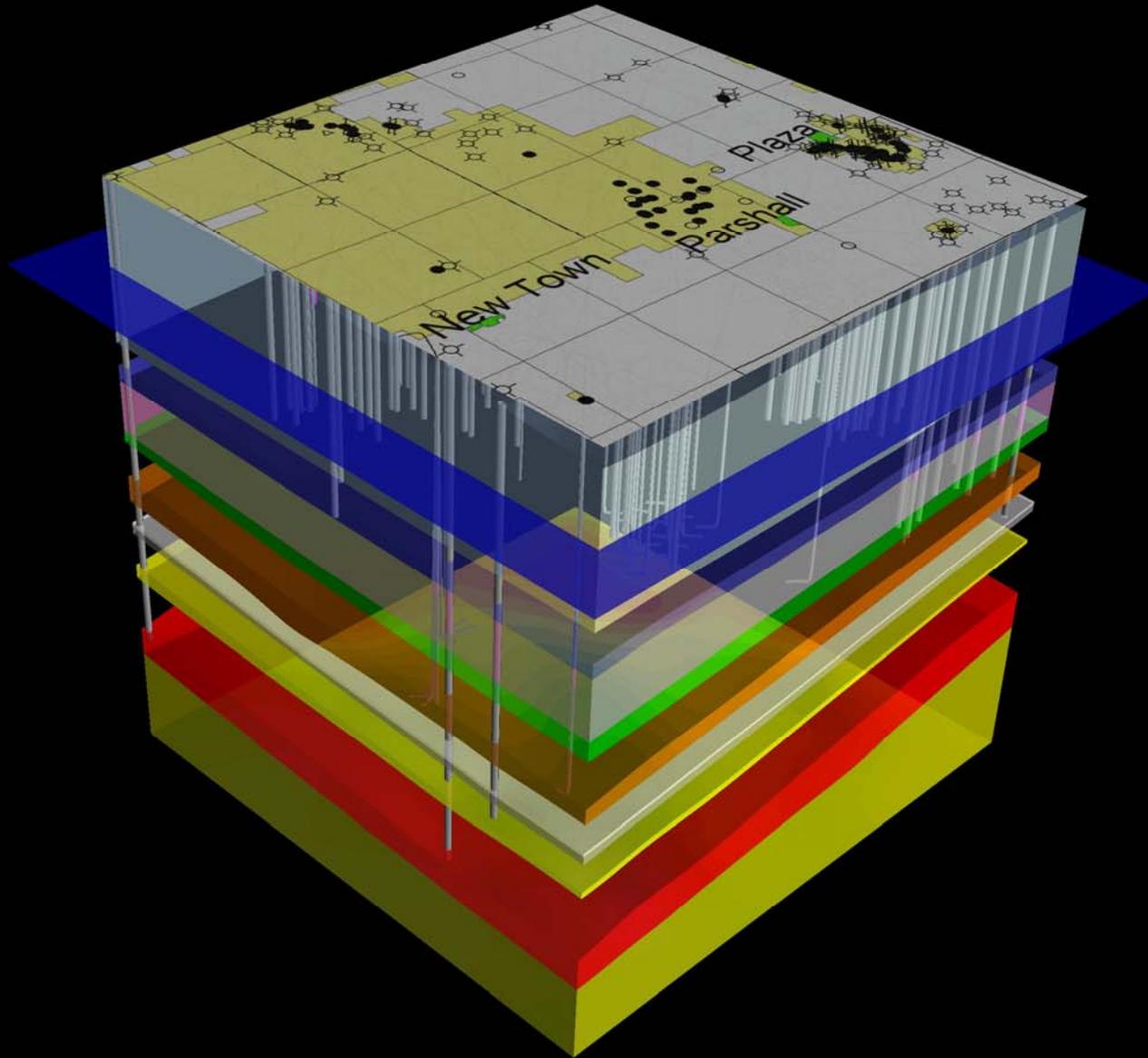


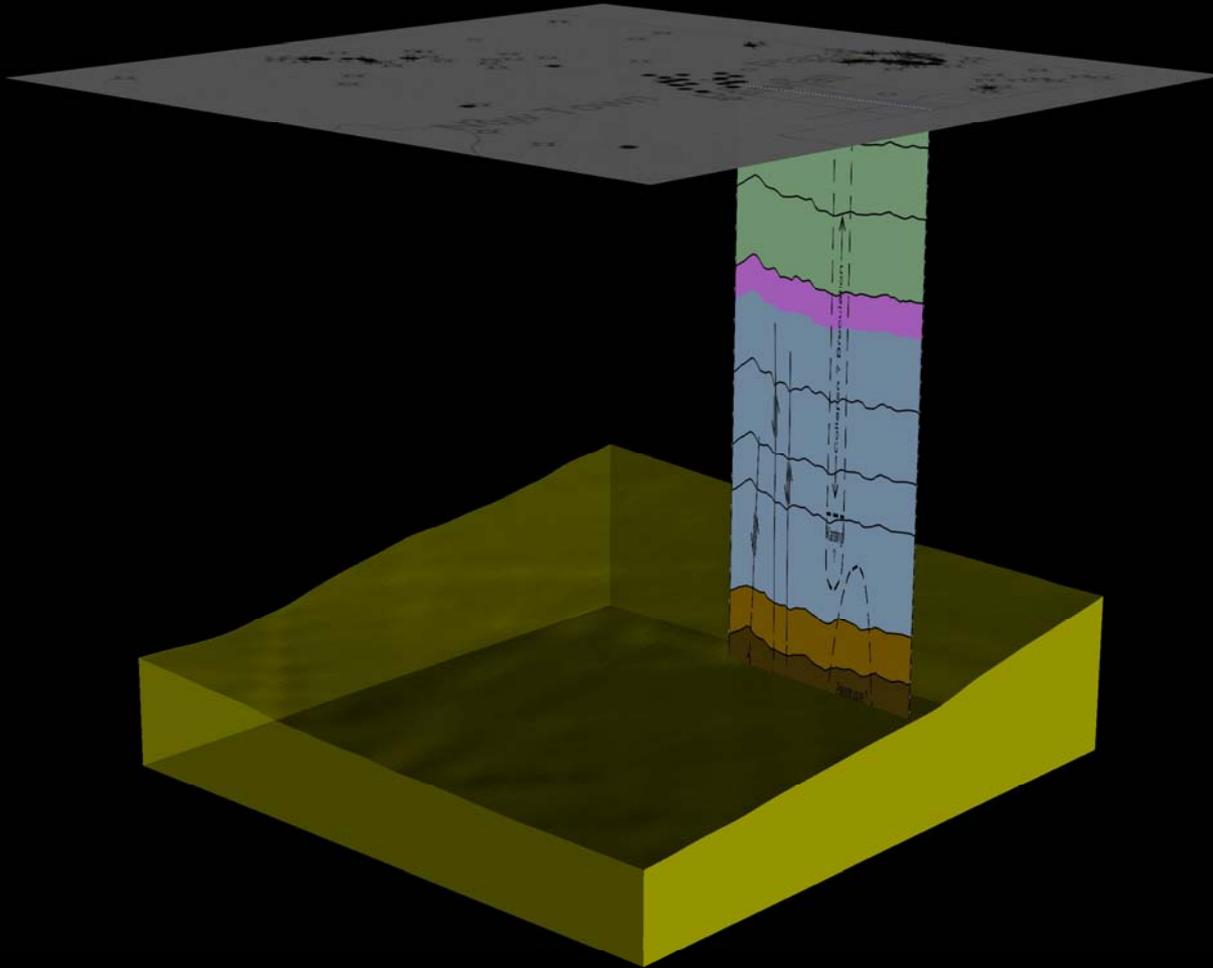
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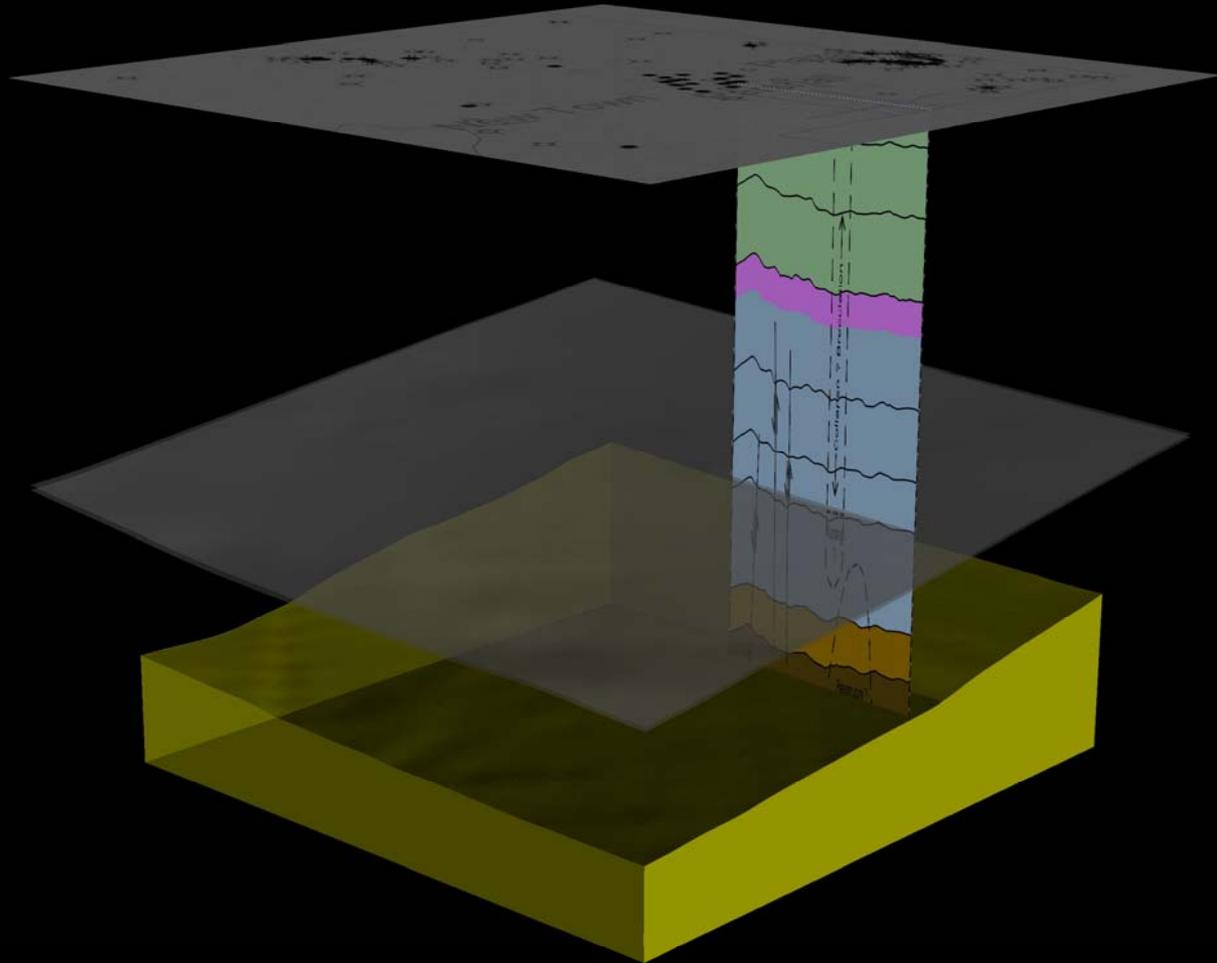
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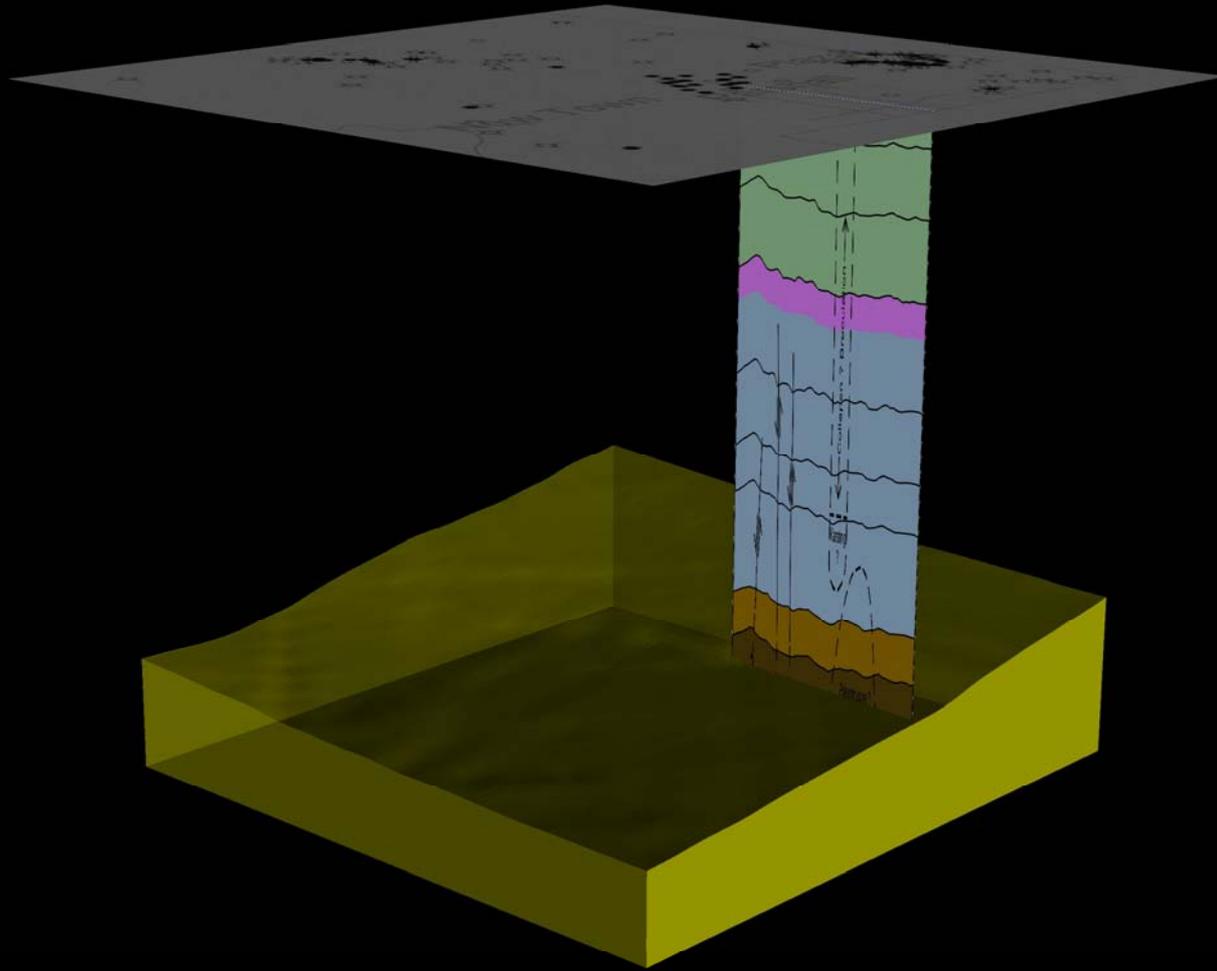
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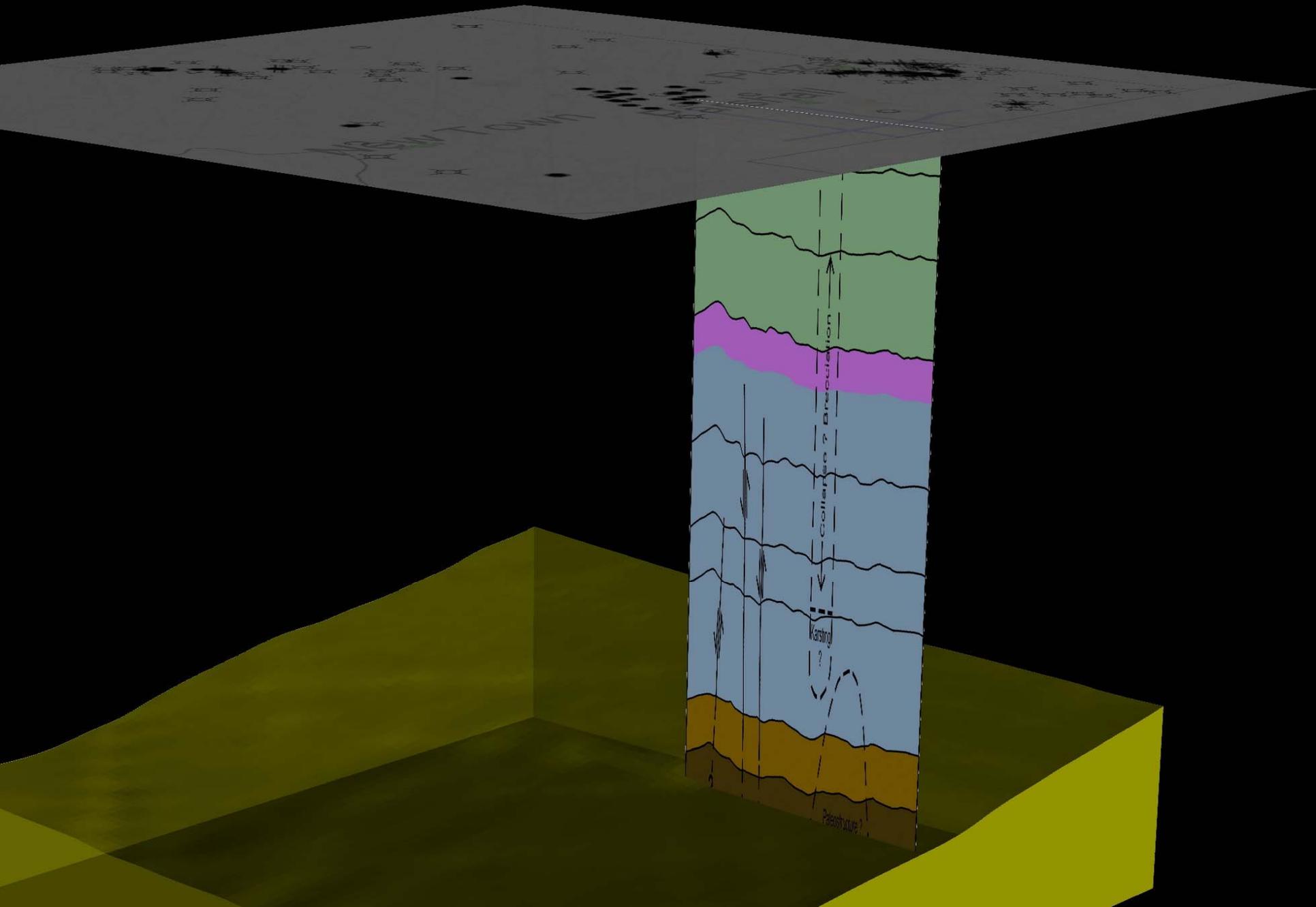




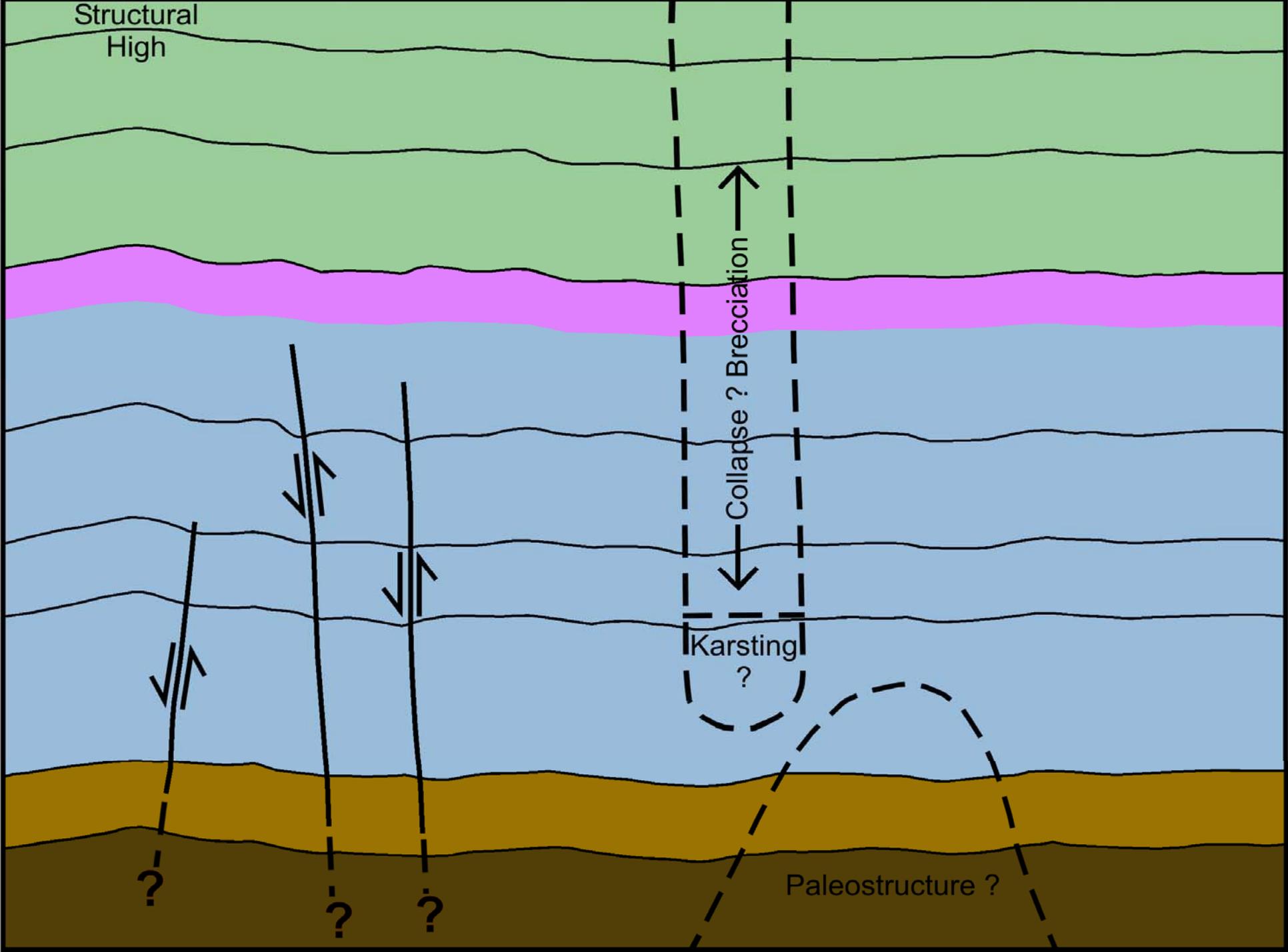


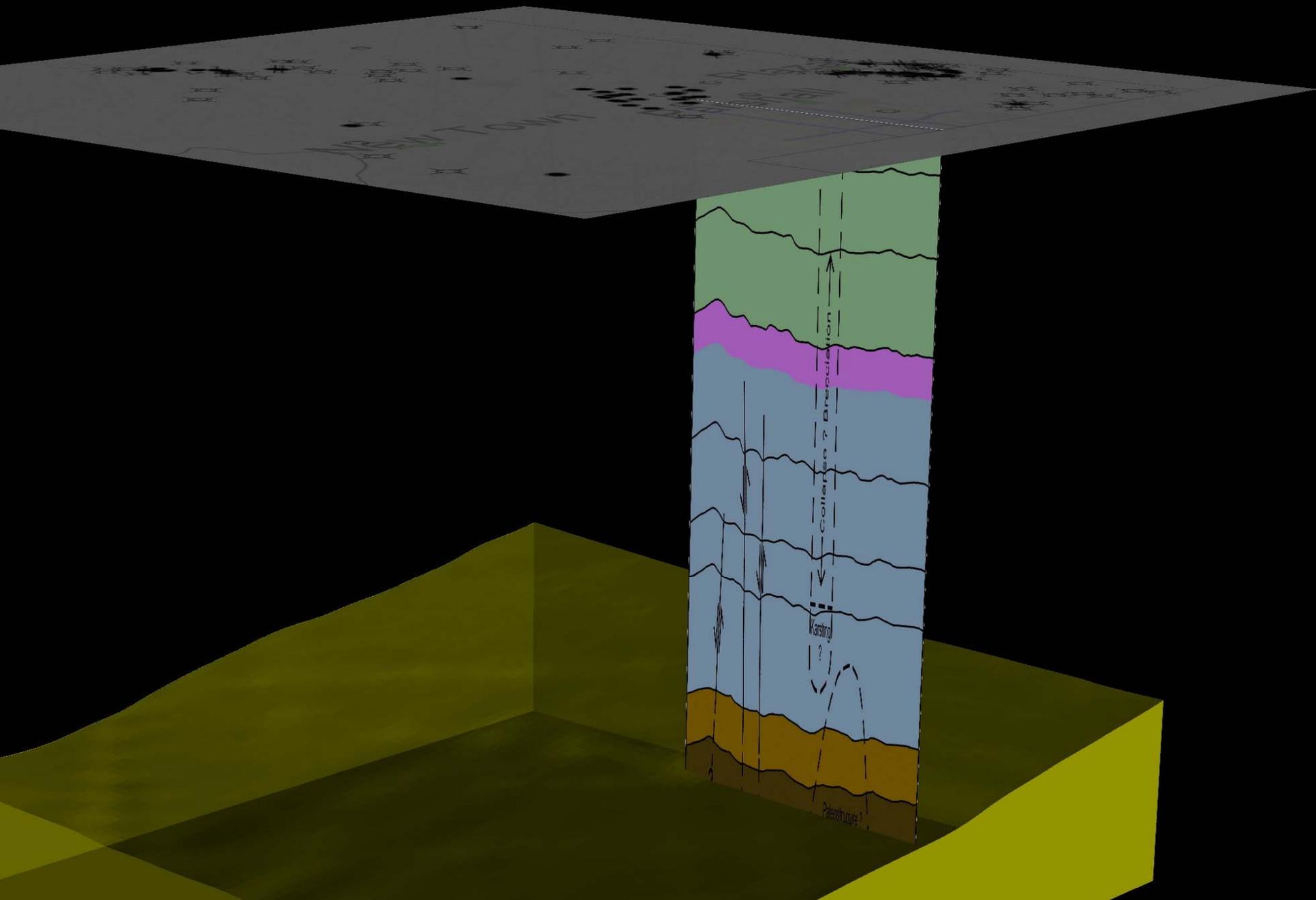


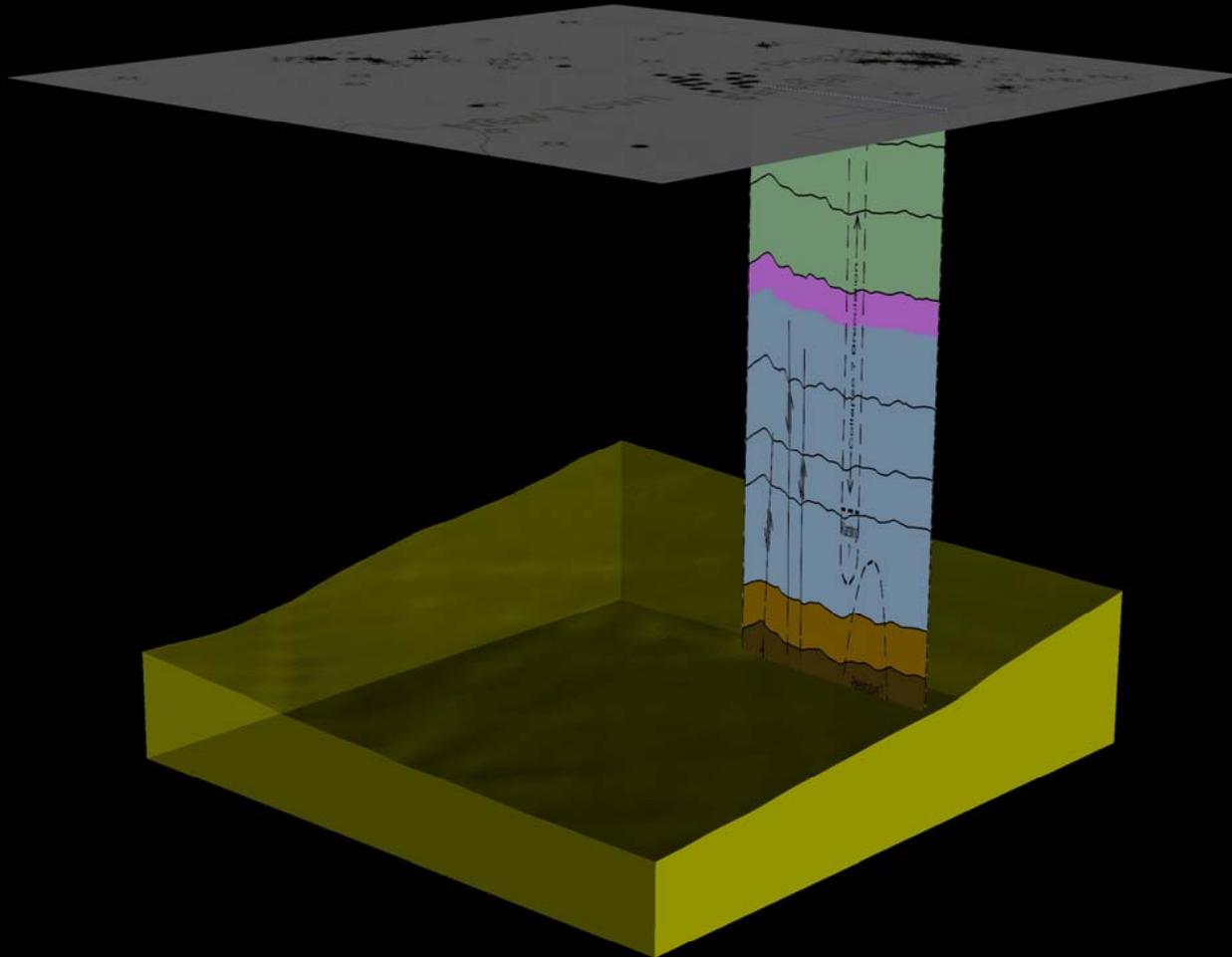


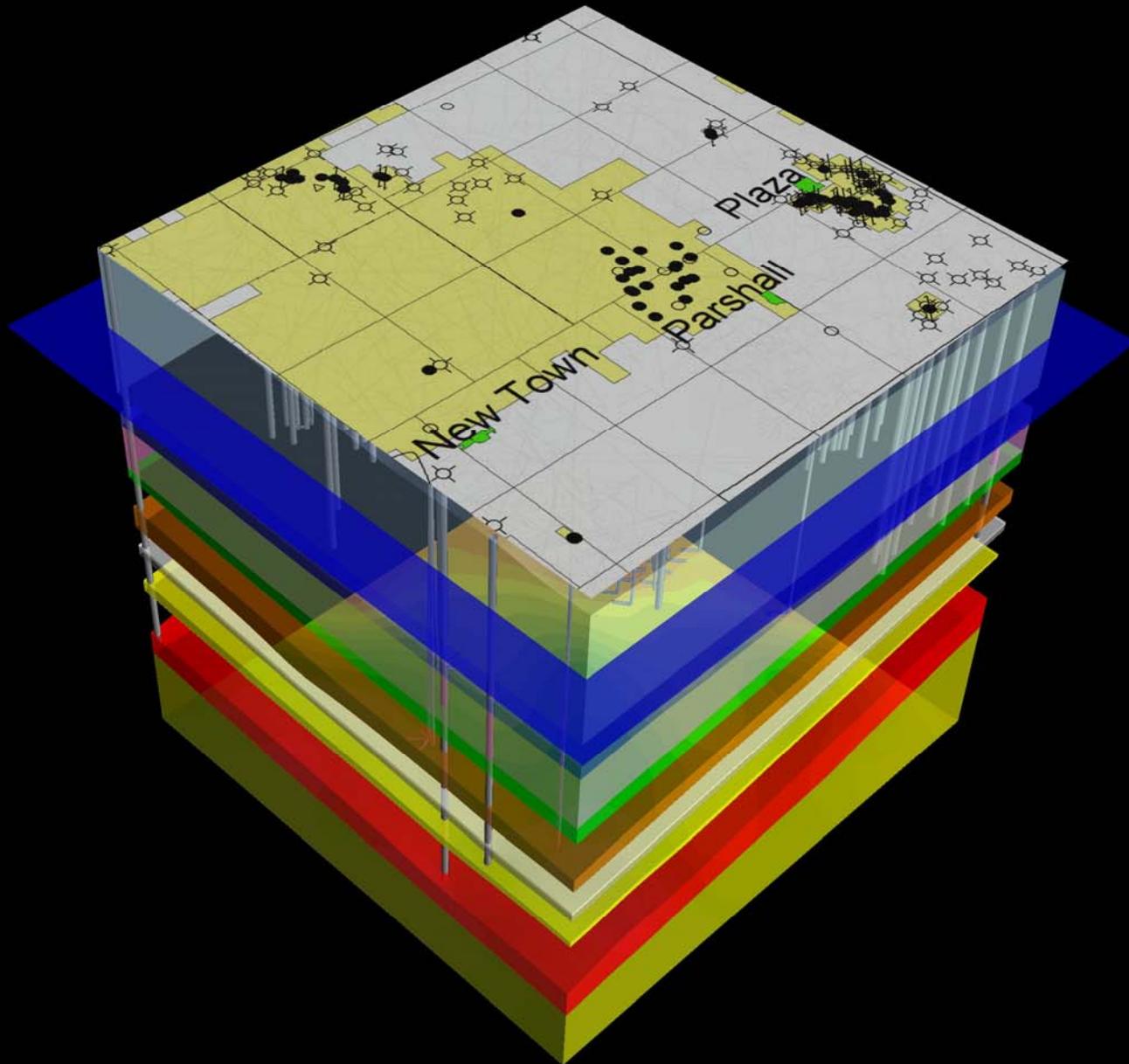


Structural  
High







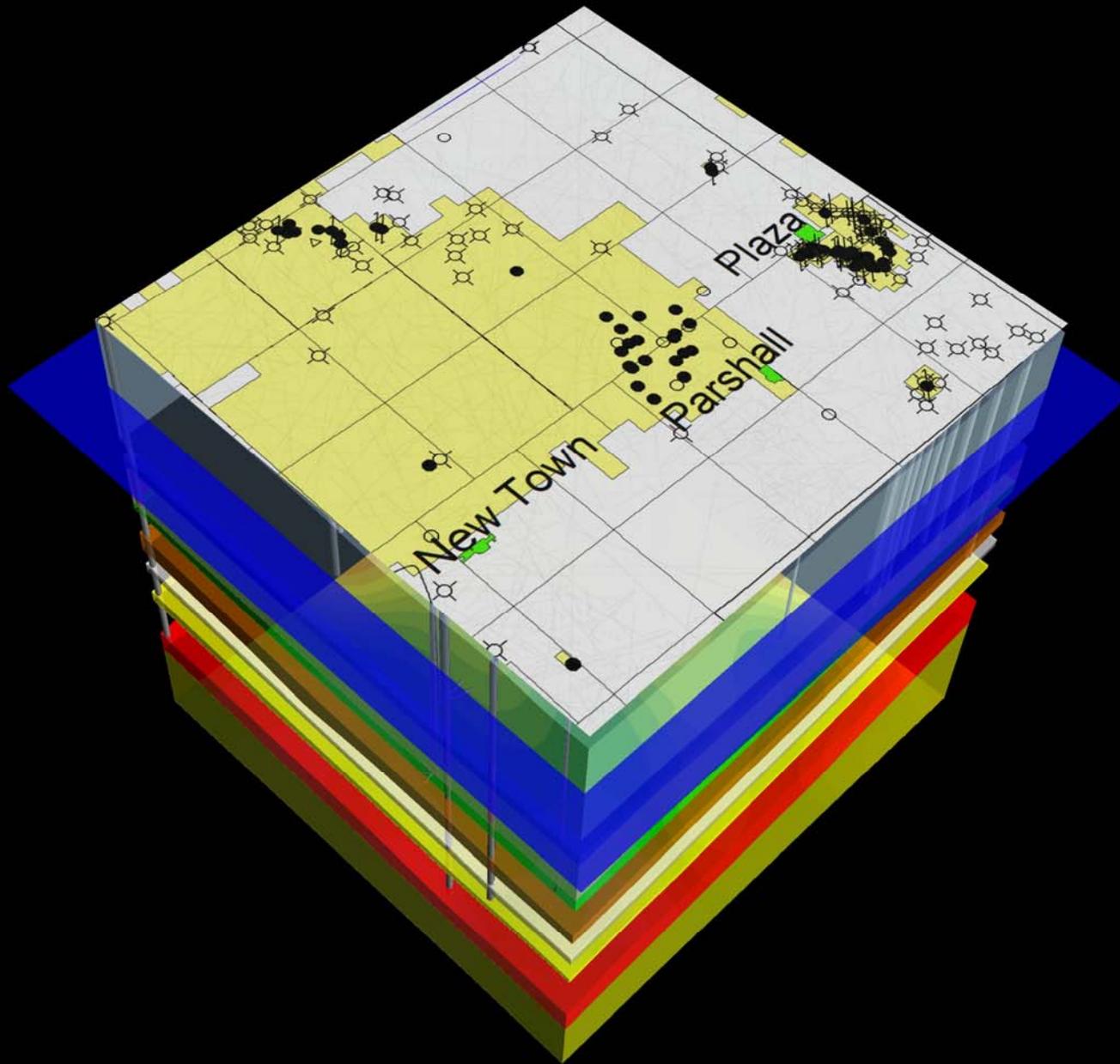


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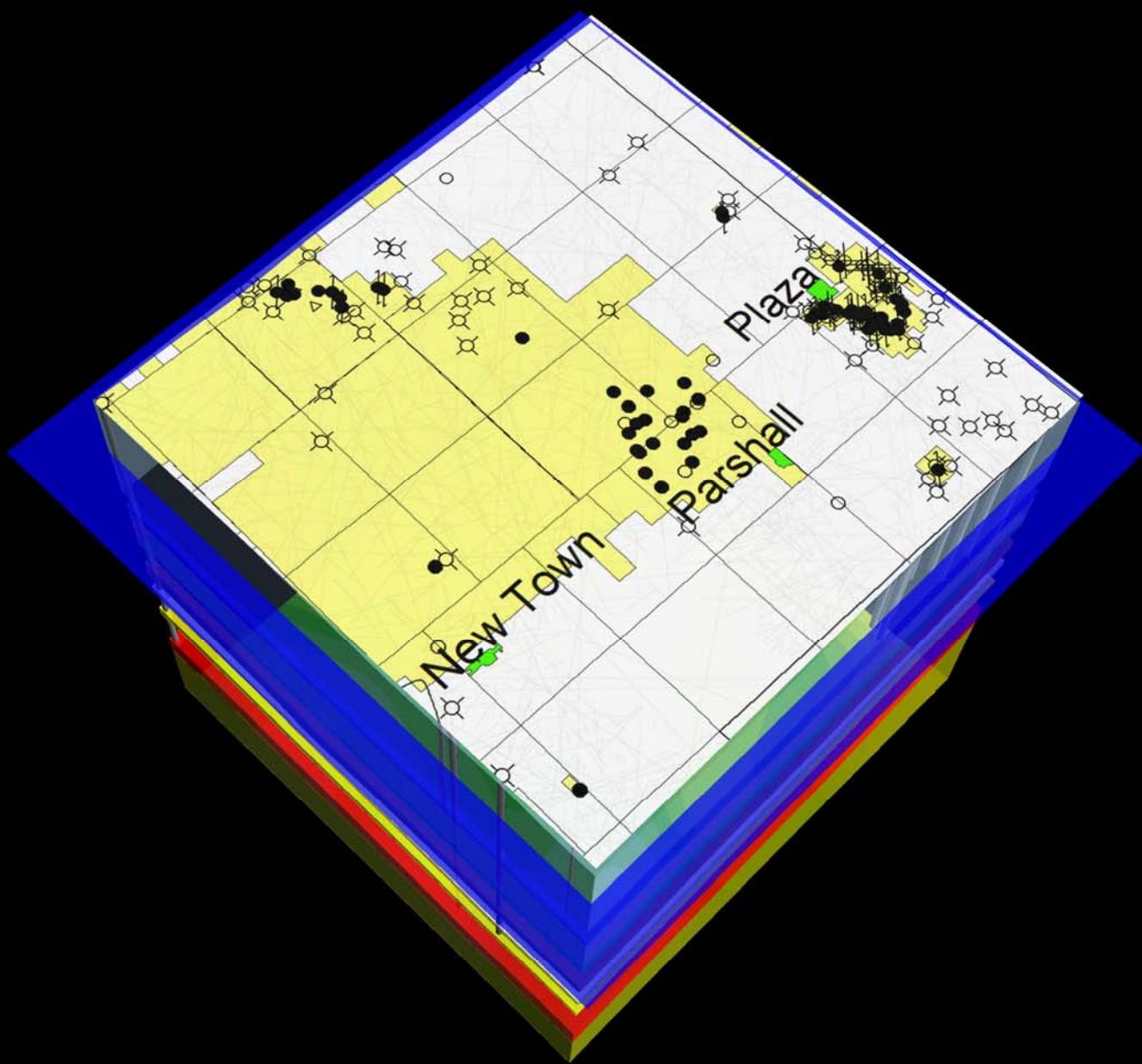


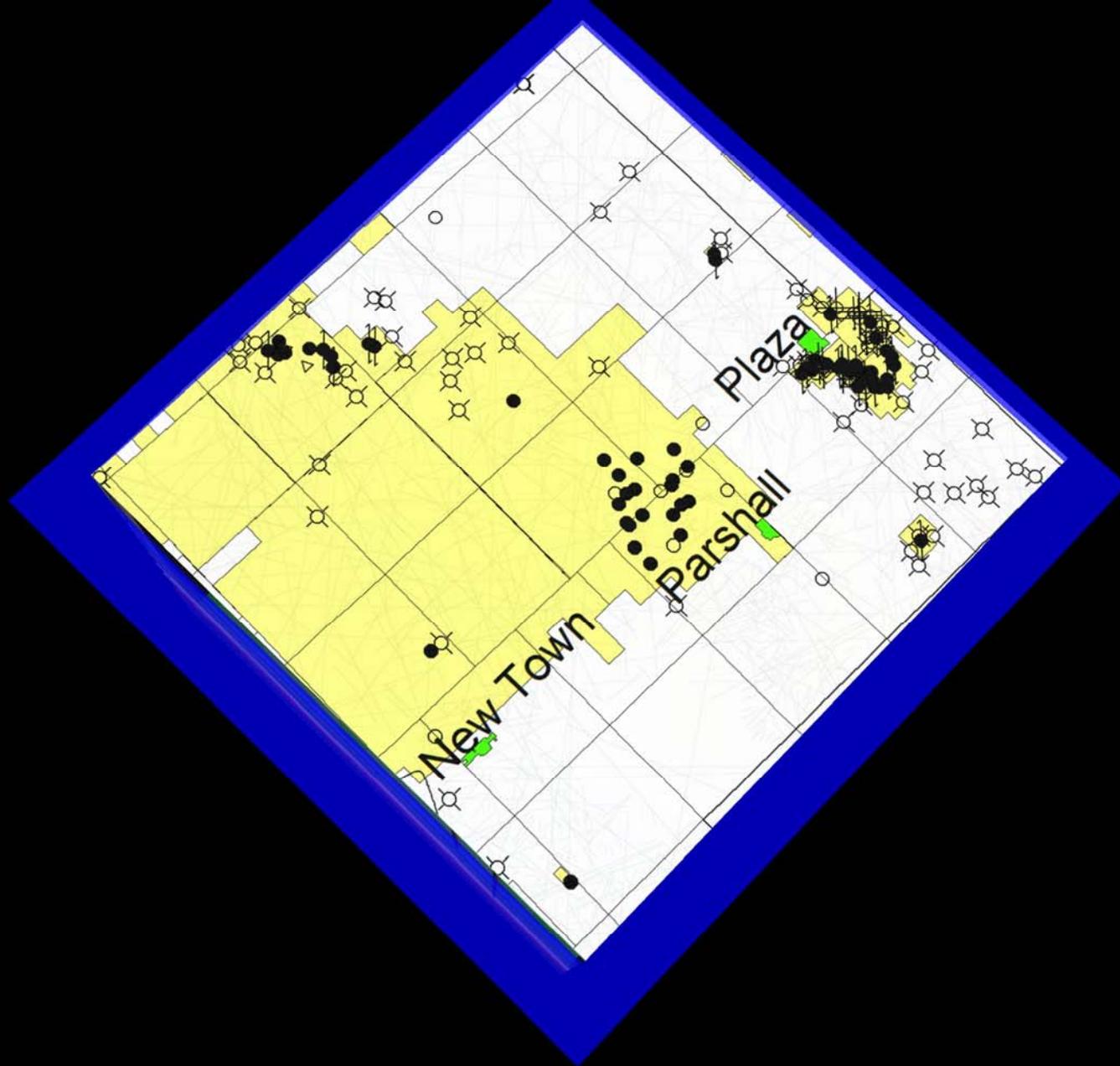
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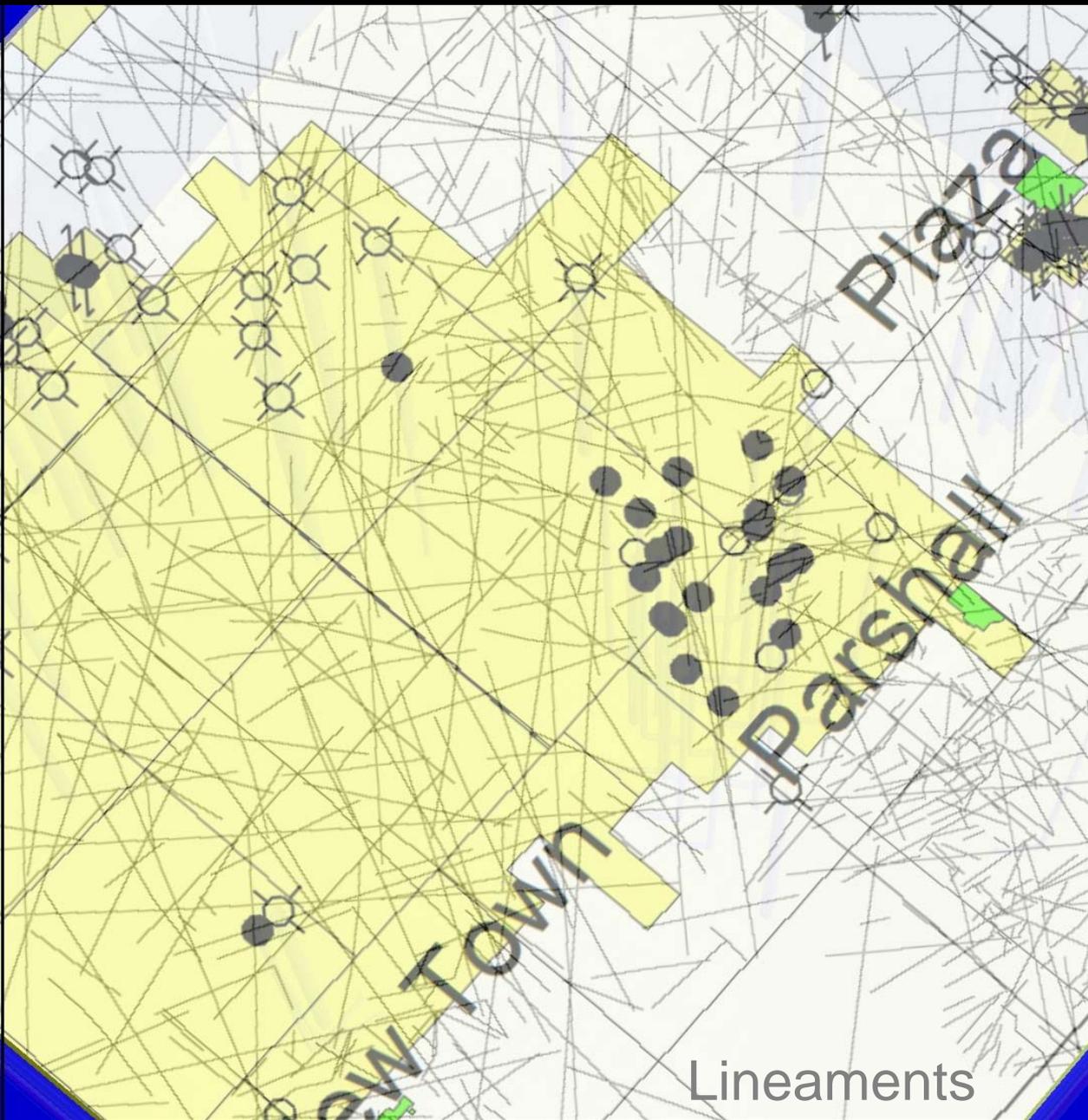
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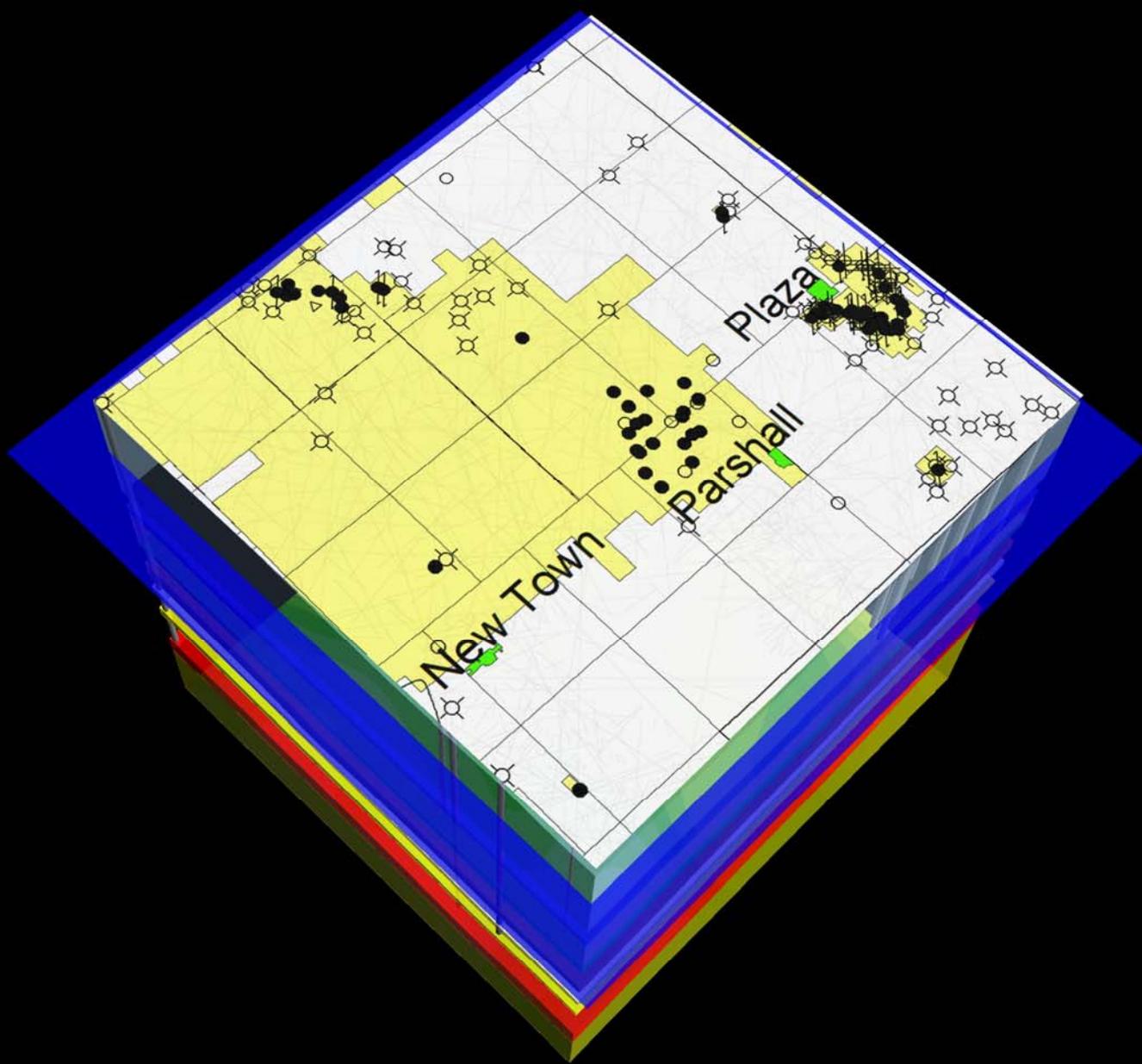


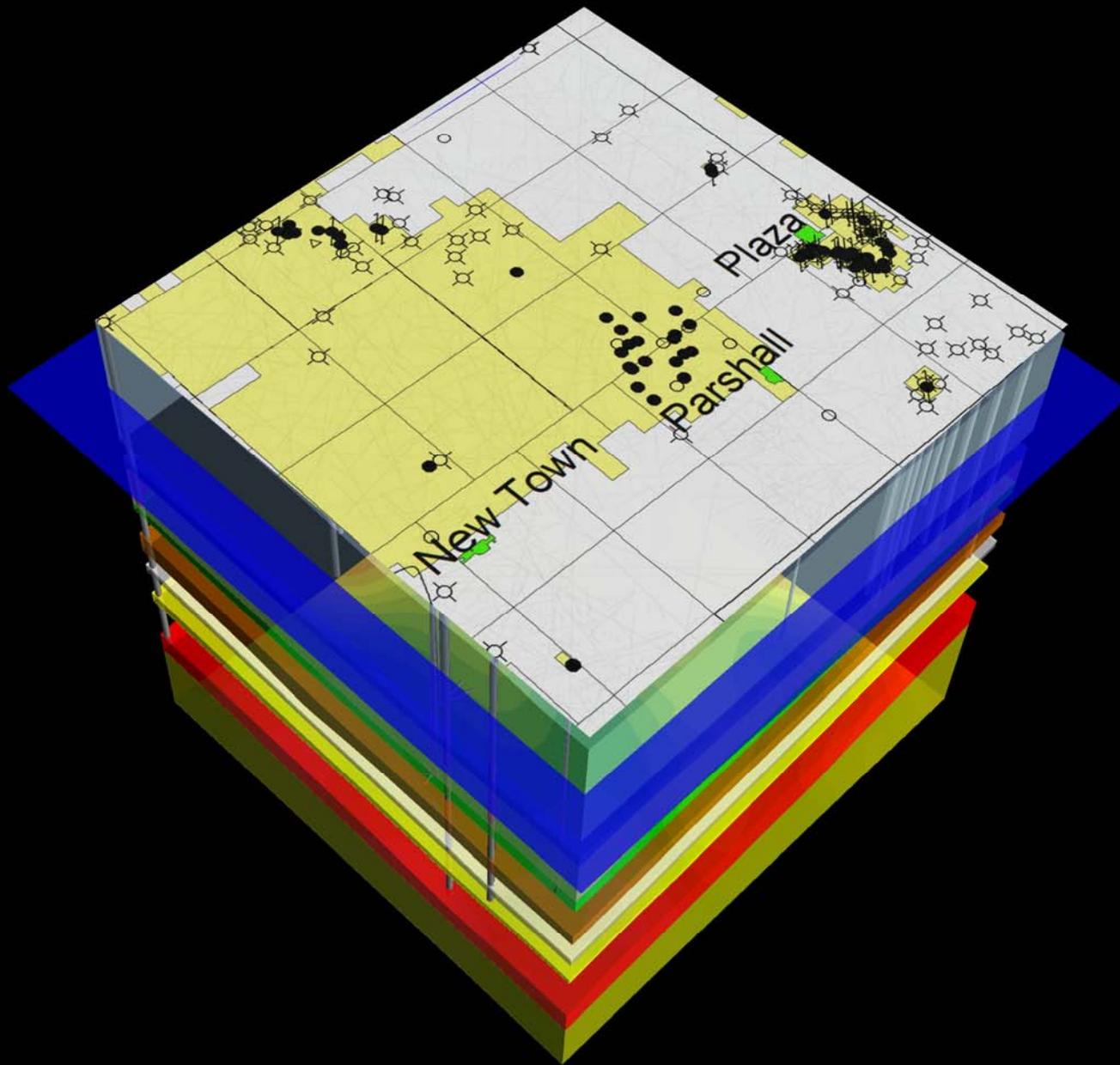






Lineaments



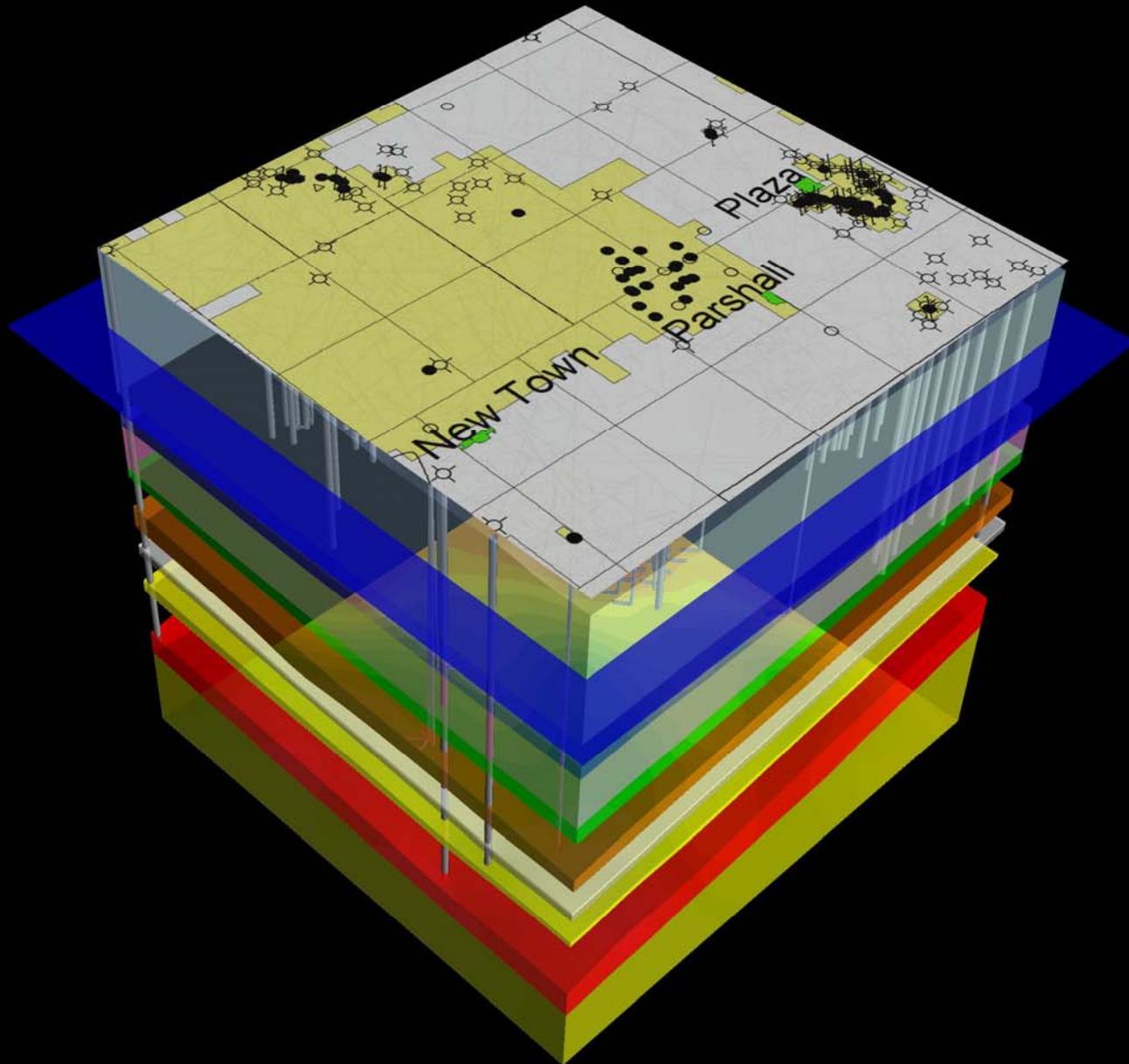


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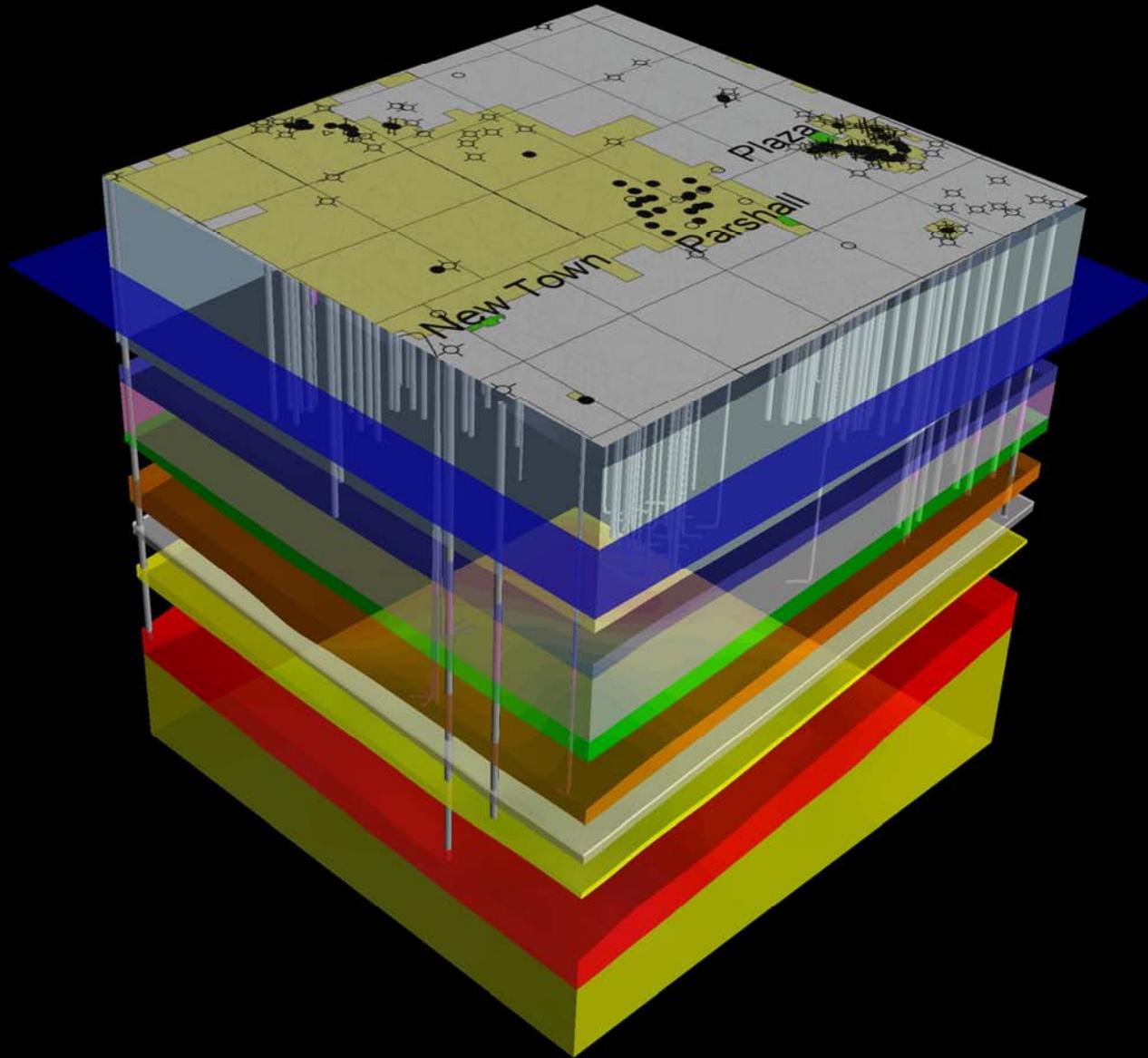


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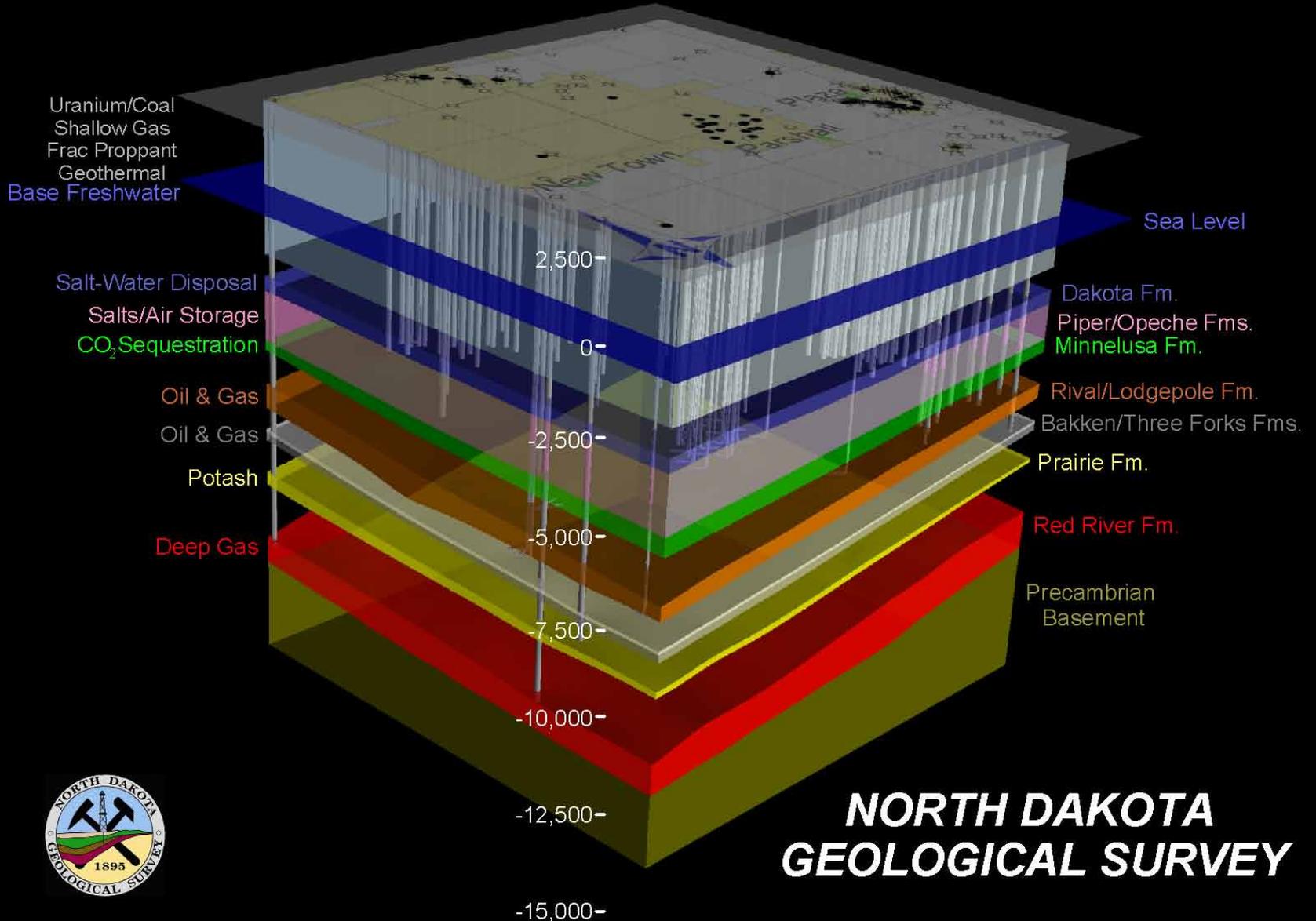
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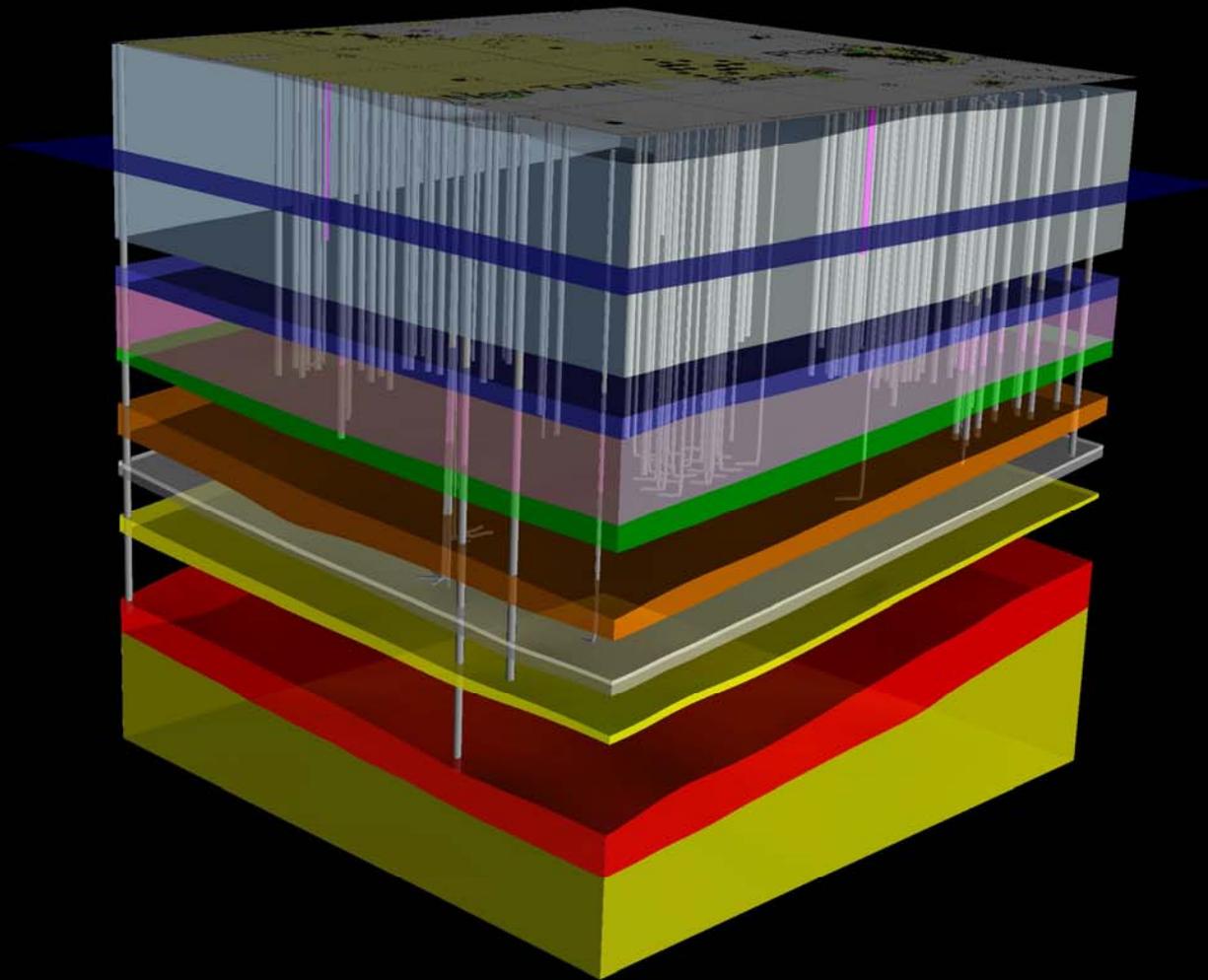
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Geological Survey**



# Three-Dimensional Geologic Model of the Parshall Area





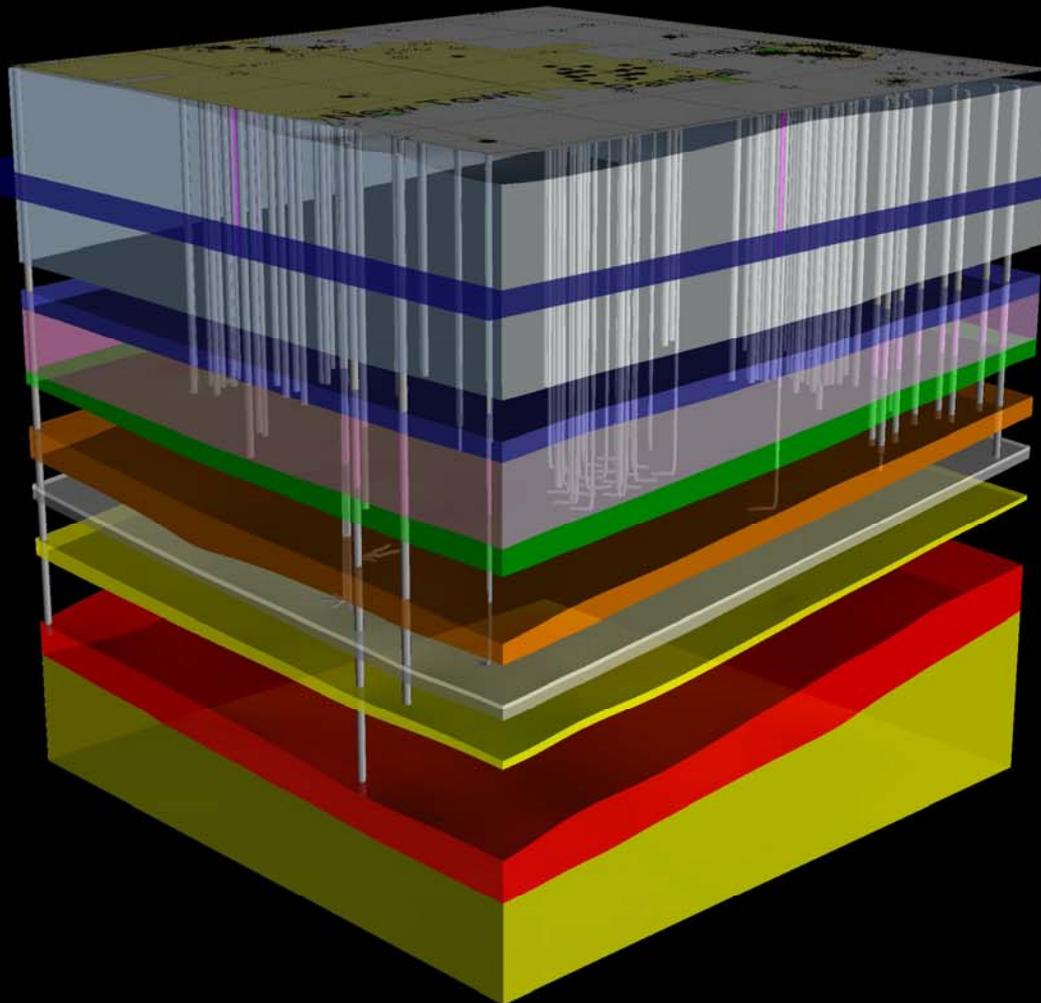
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**North Dakota  
Geological Survey**



Uranium/Coal  
Shallow Gas  
Frac Proppant  
Geothermal



Sea Level

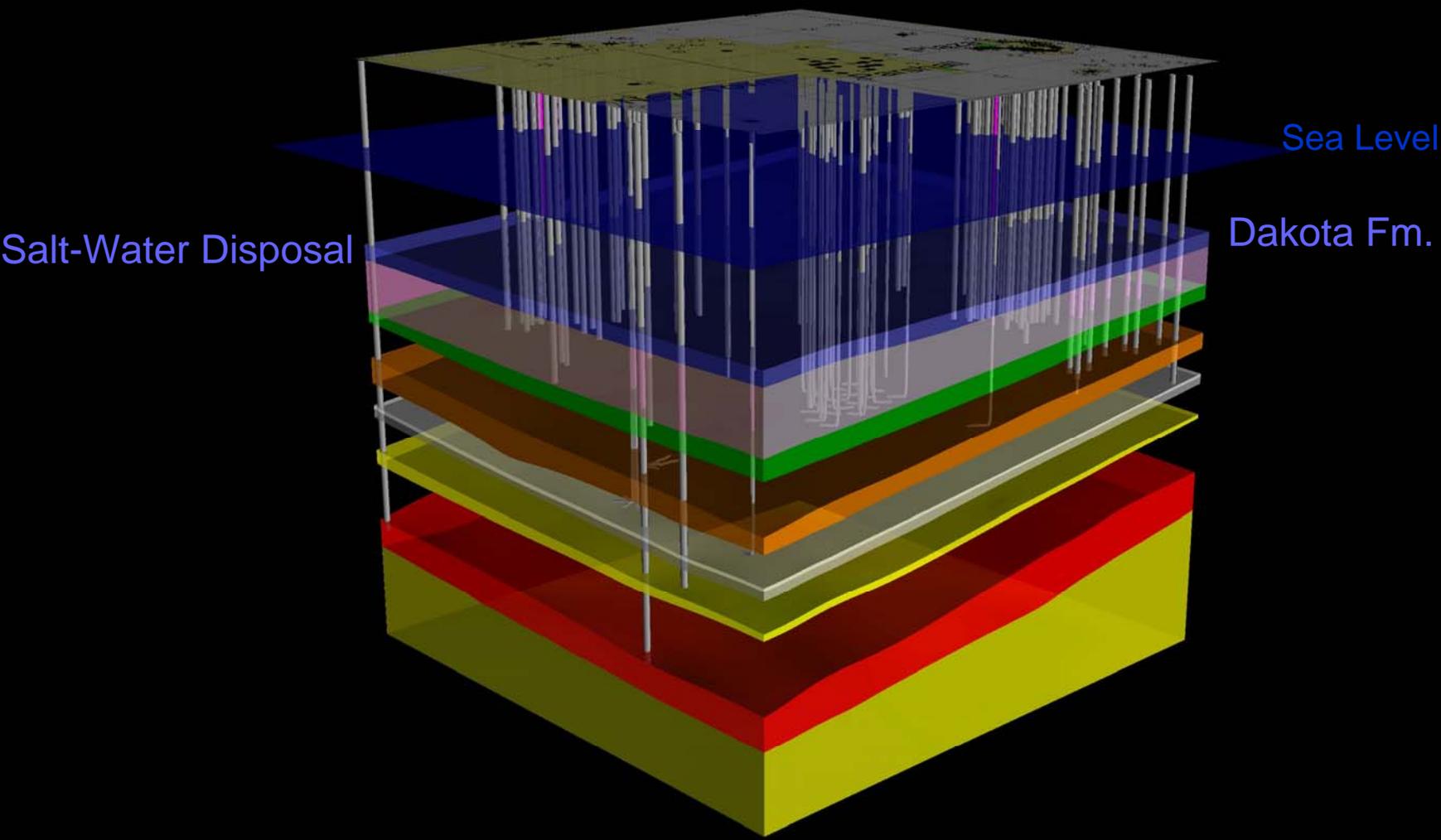


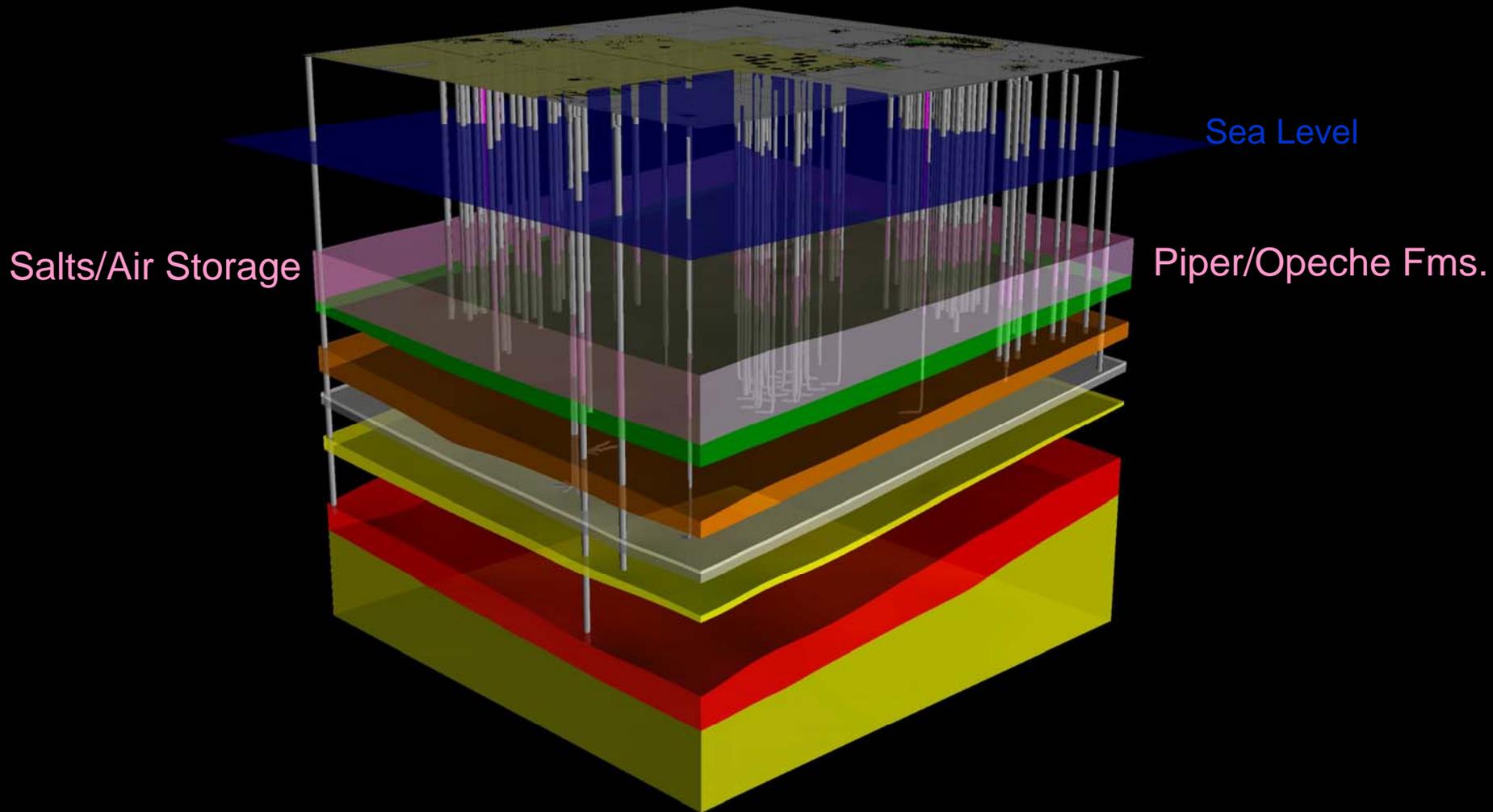
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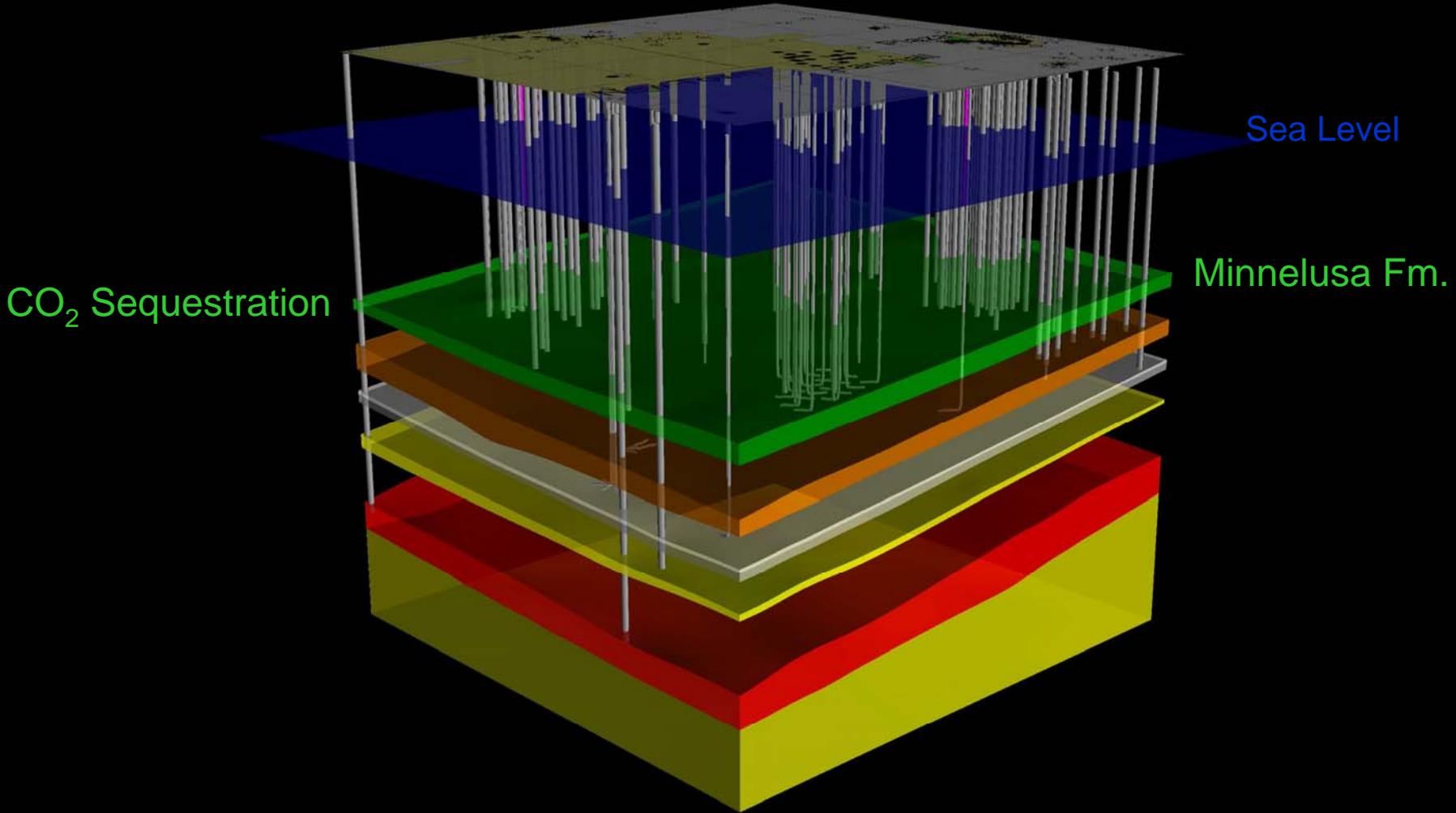
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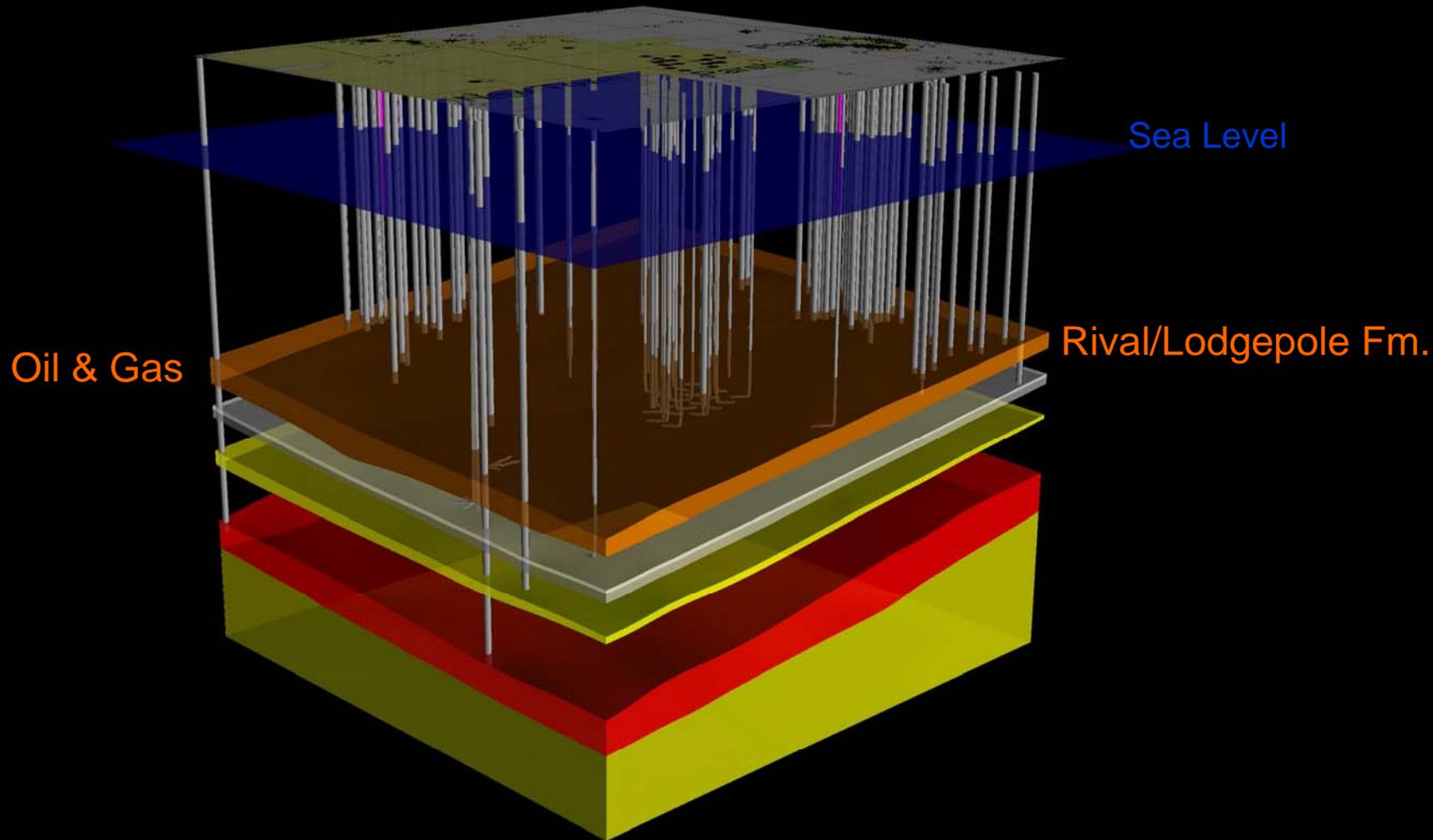
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Geological Survey**

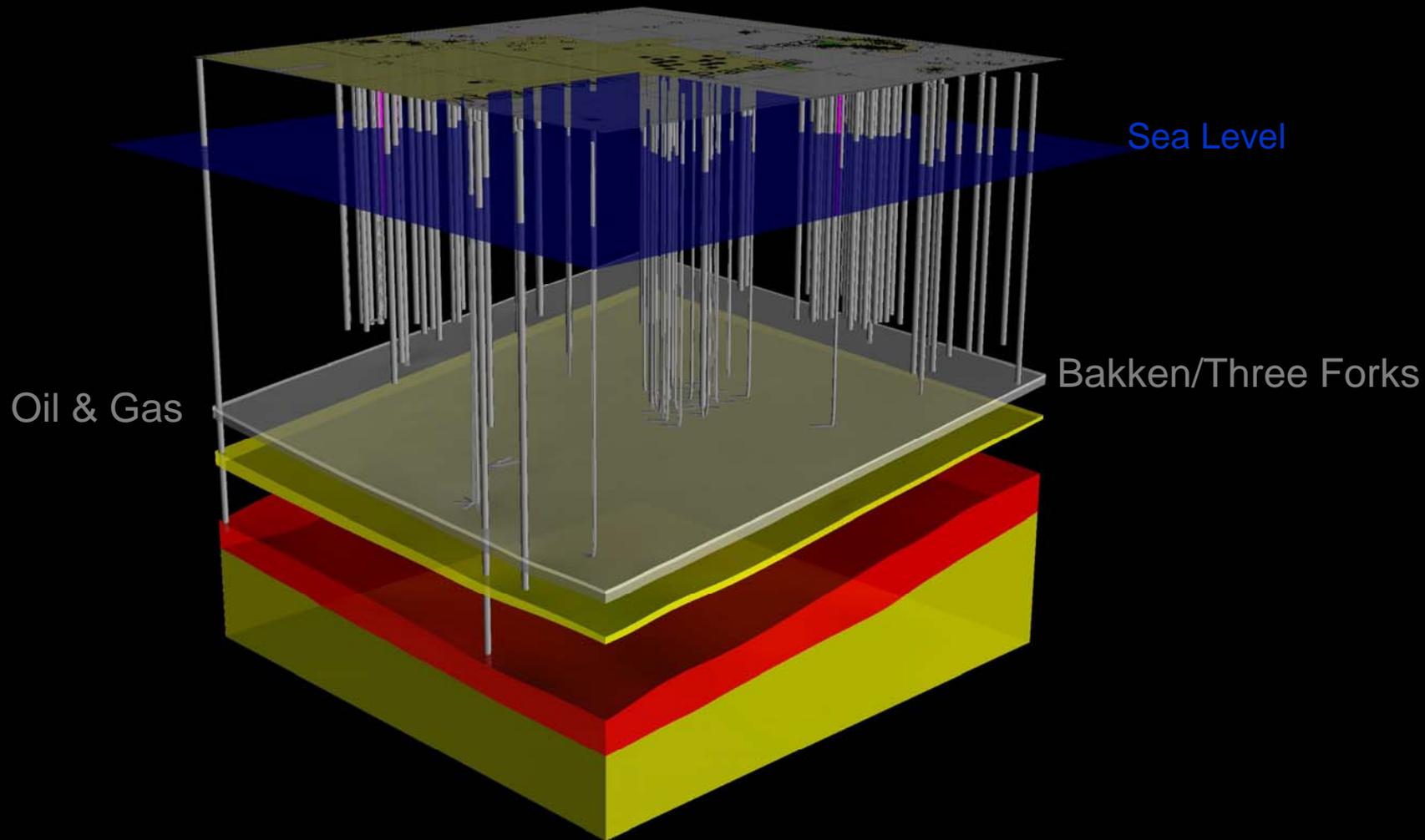


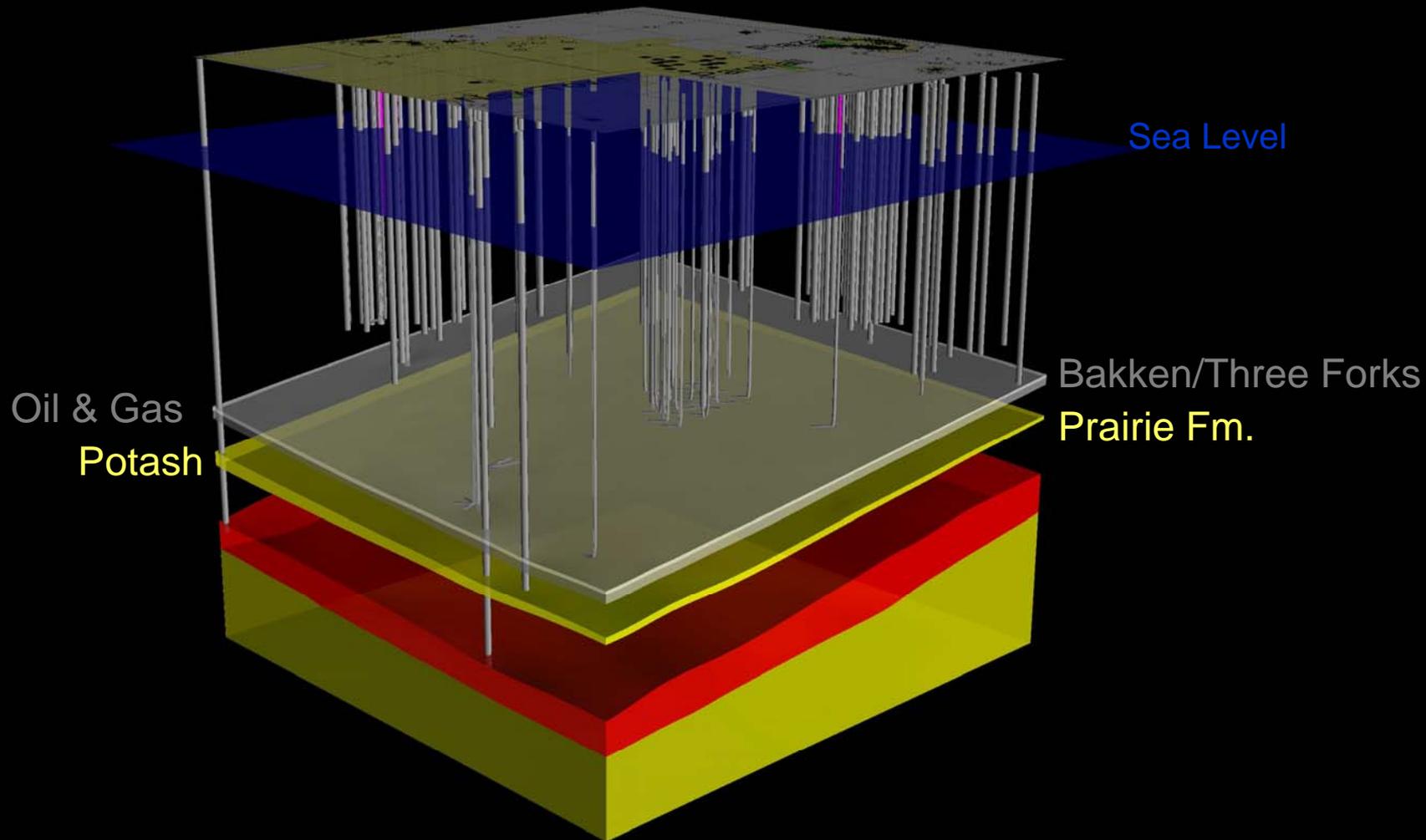


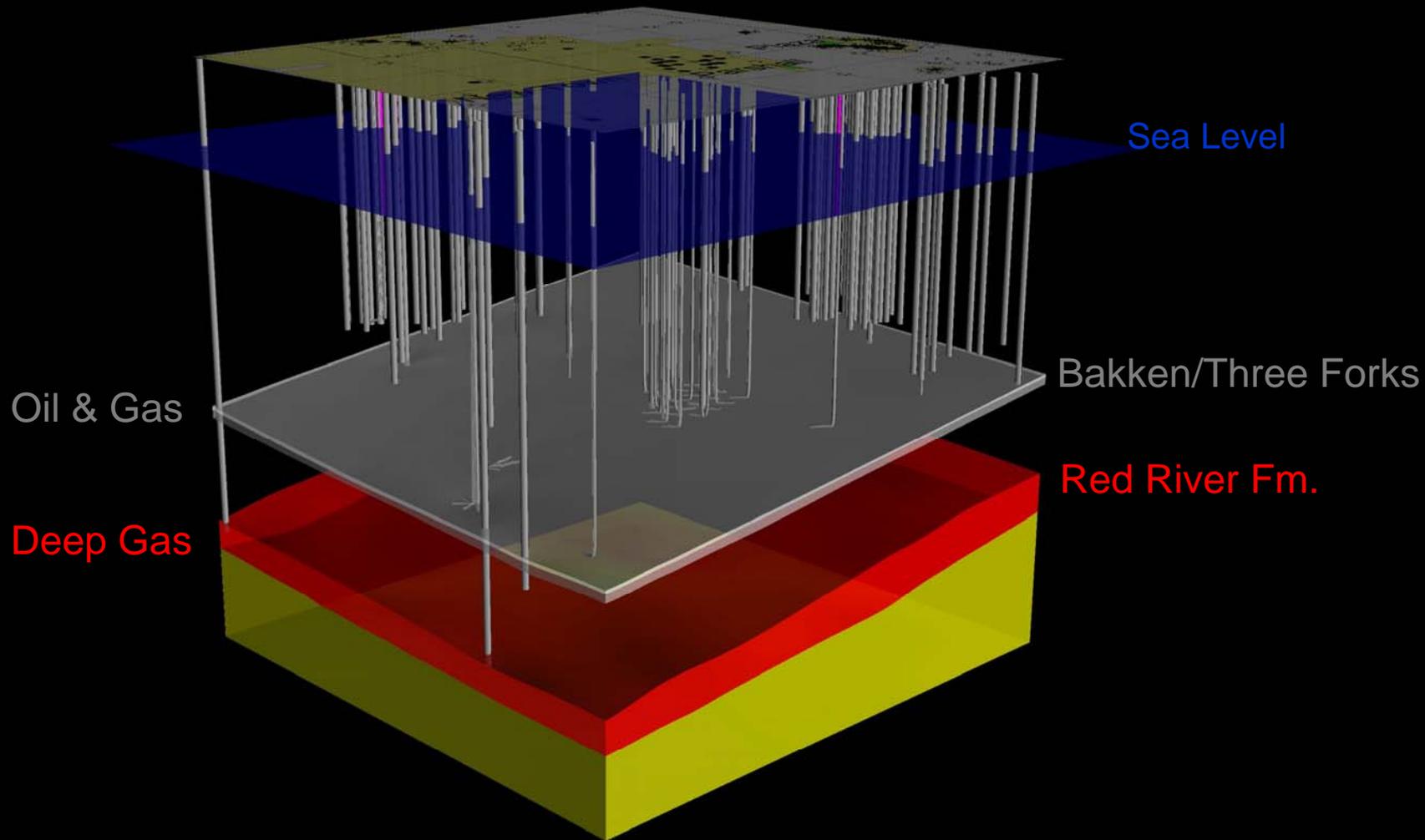


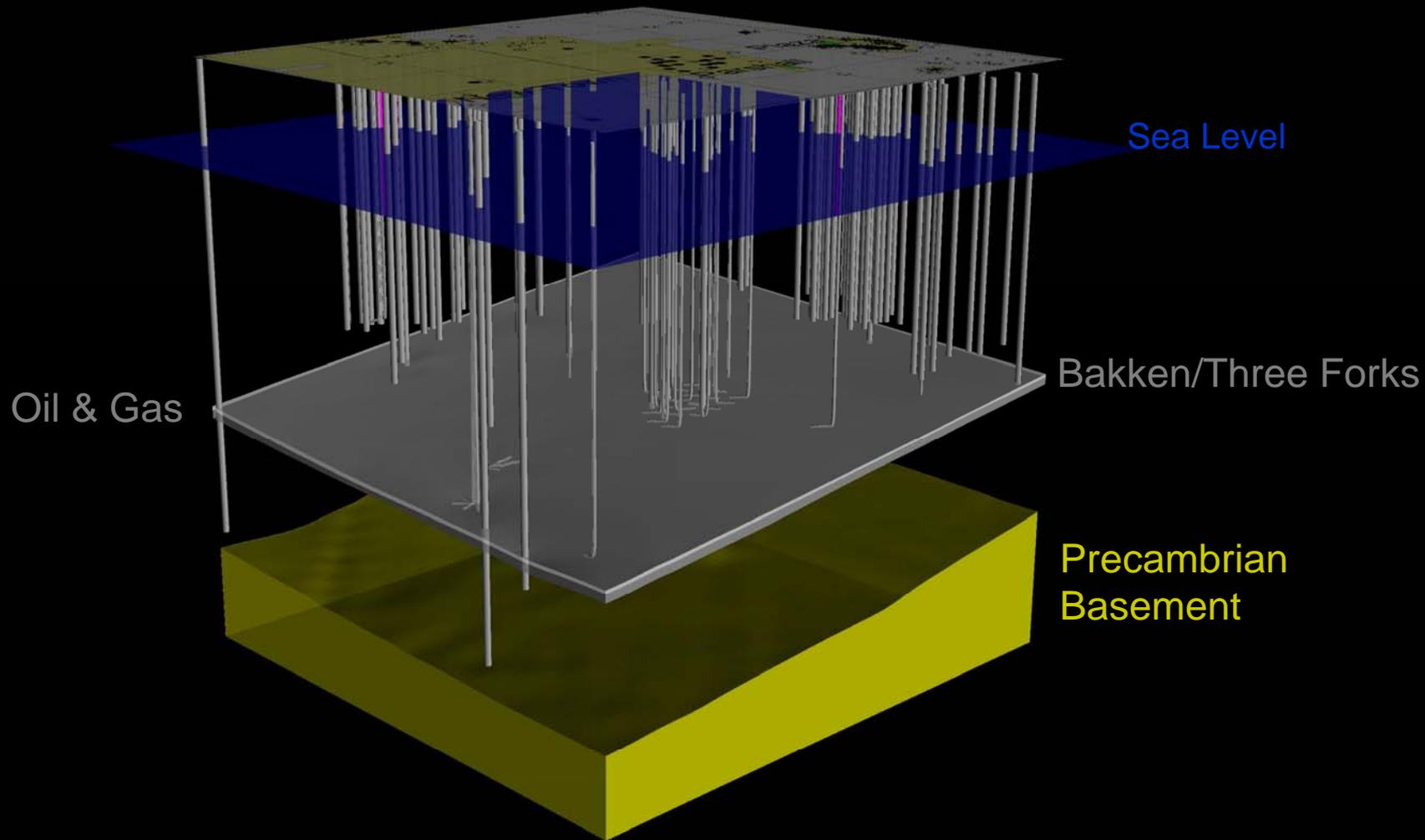












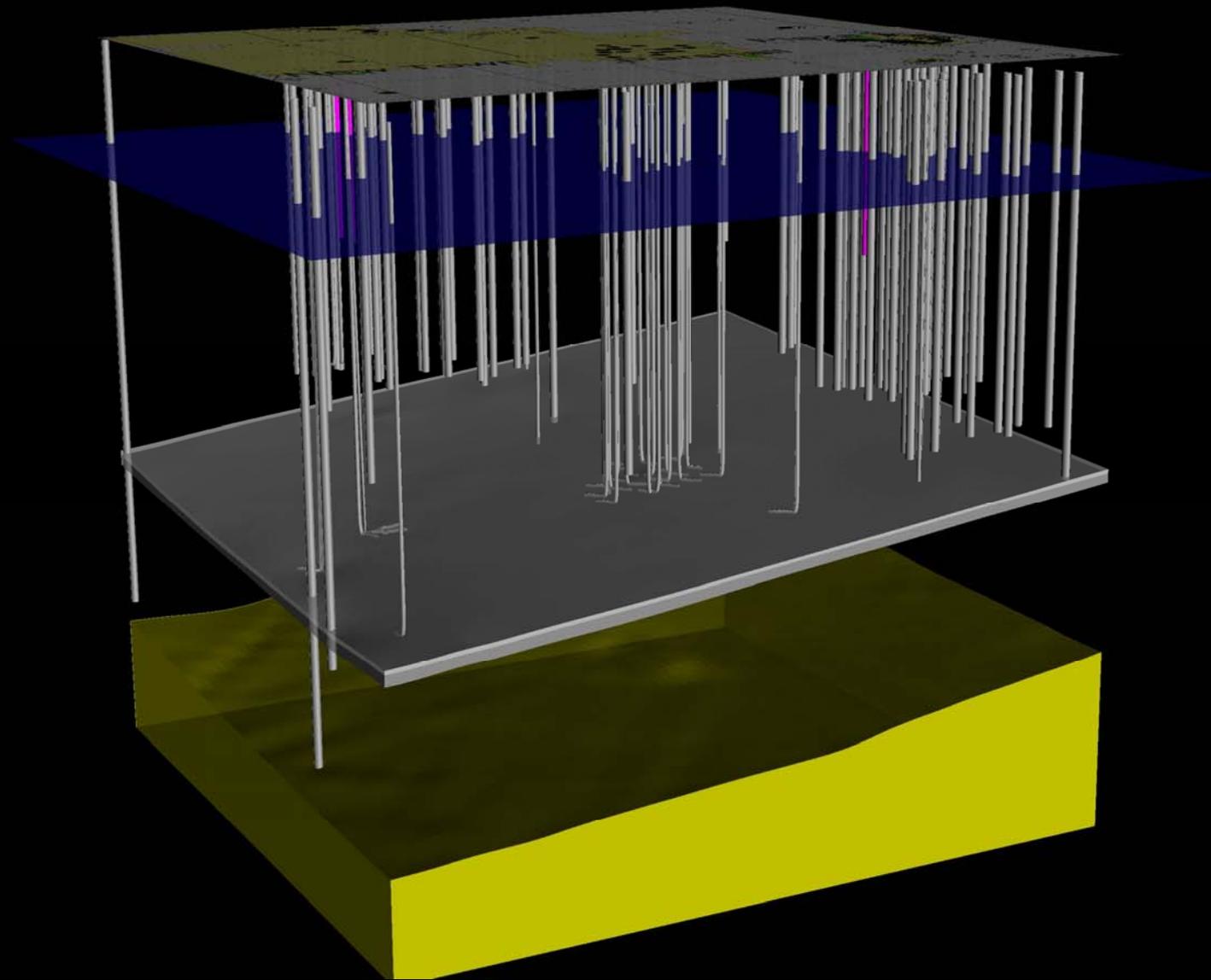
Oil & Gas

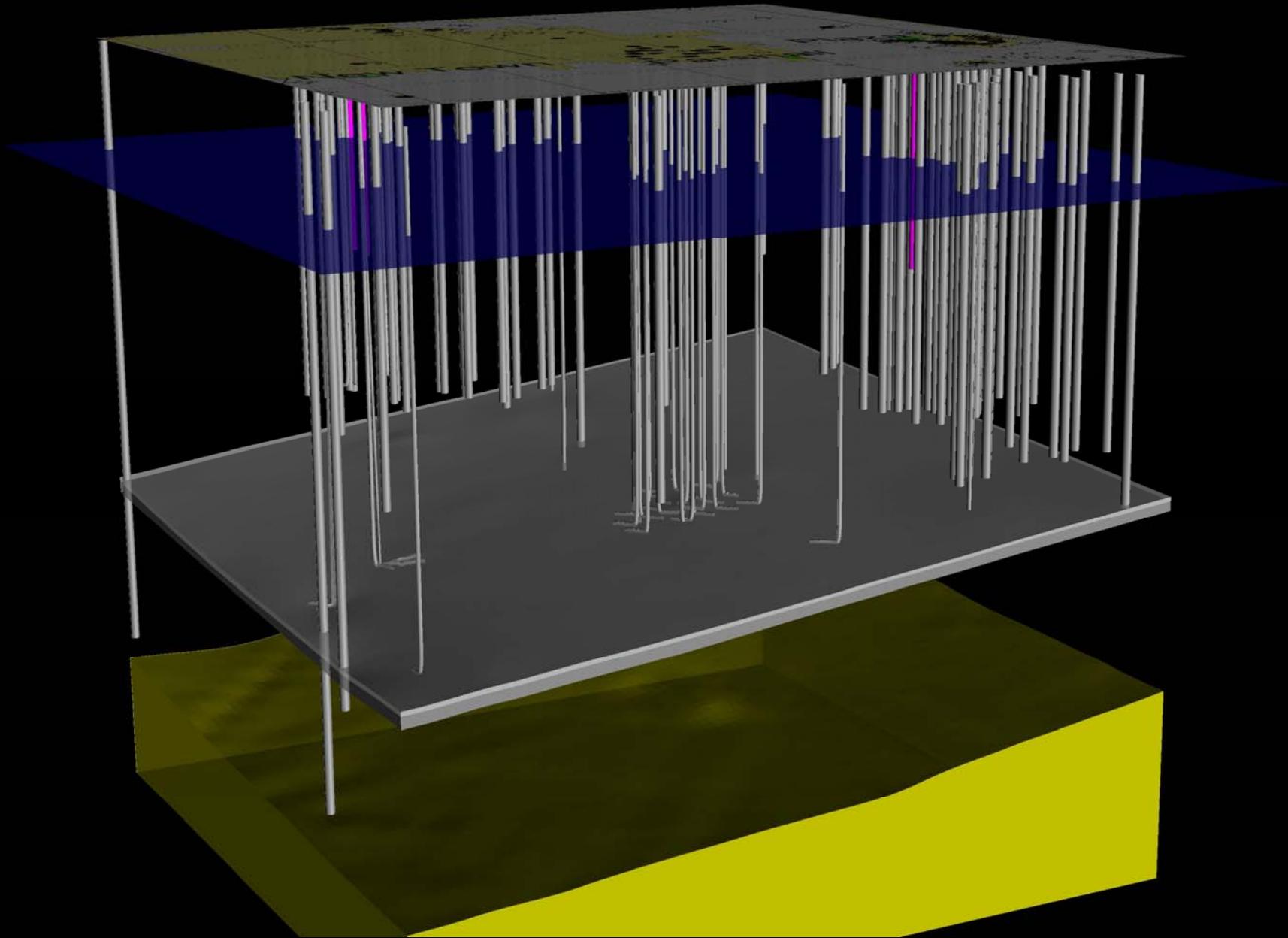
Sea Level

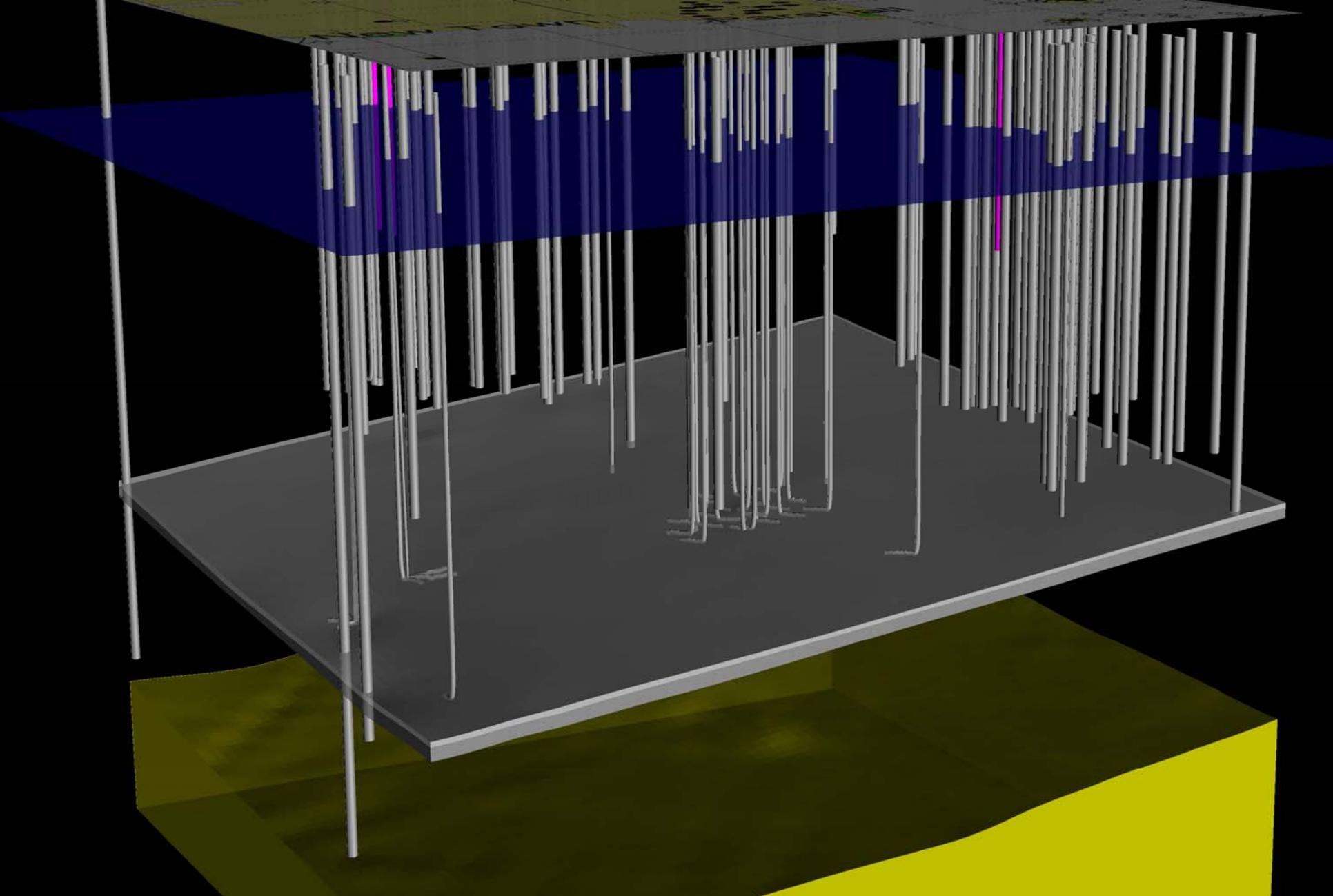
Bakken/Three Forks

Precambrian  
Basement







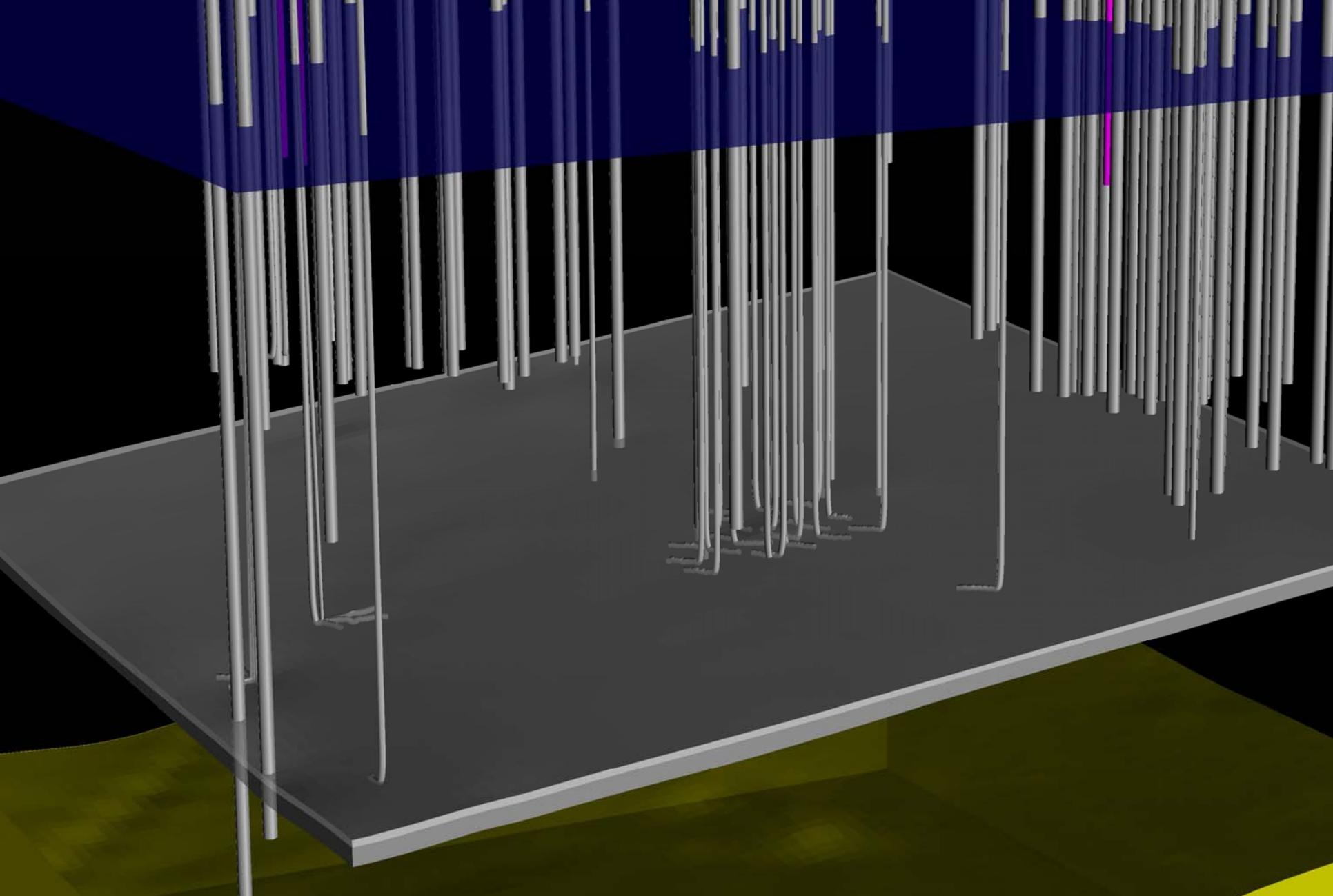


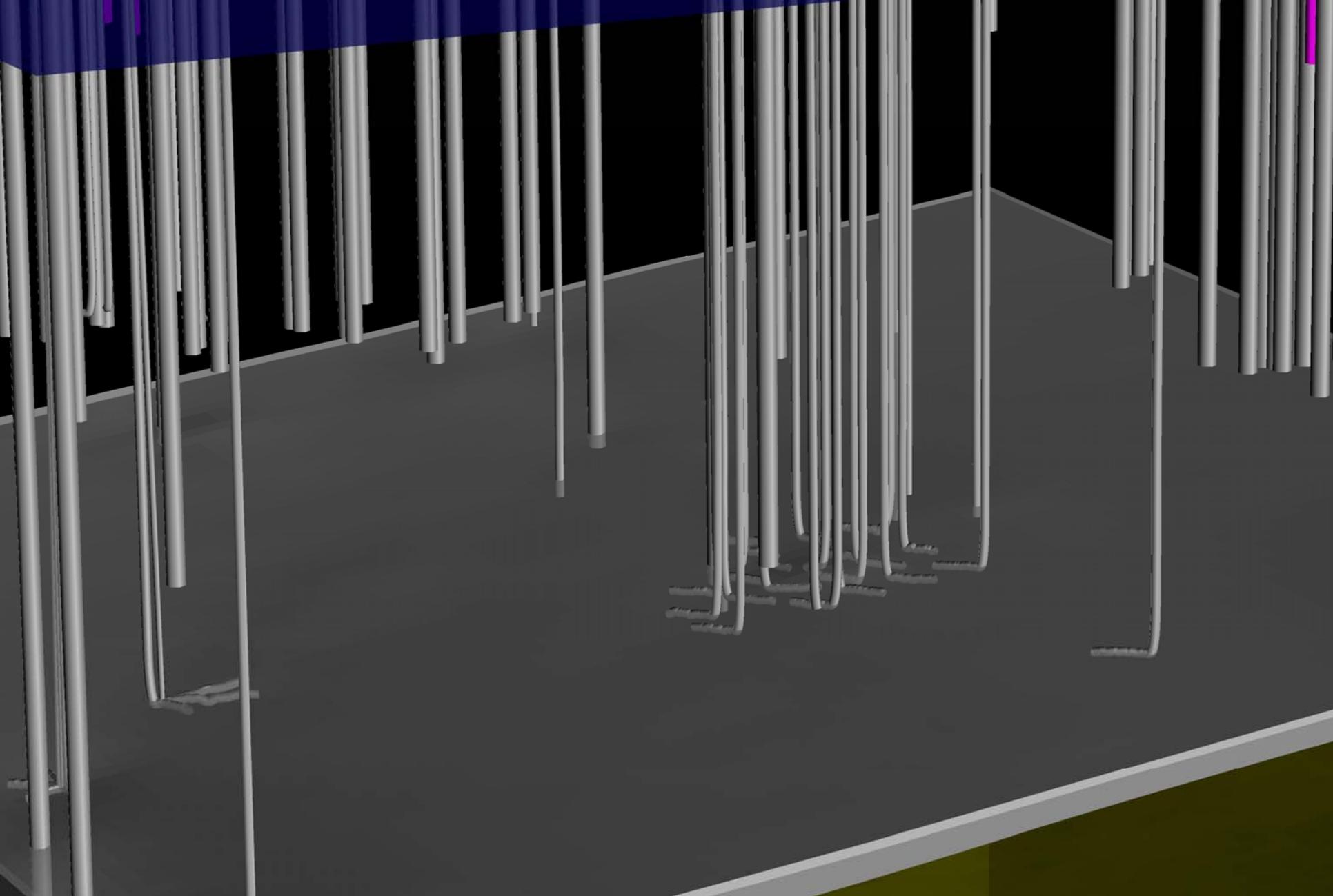
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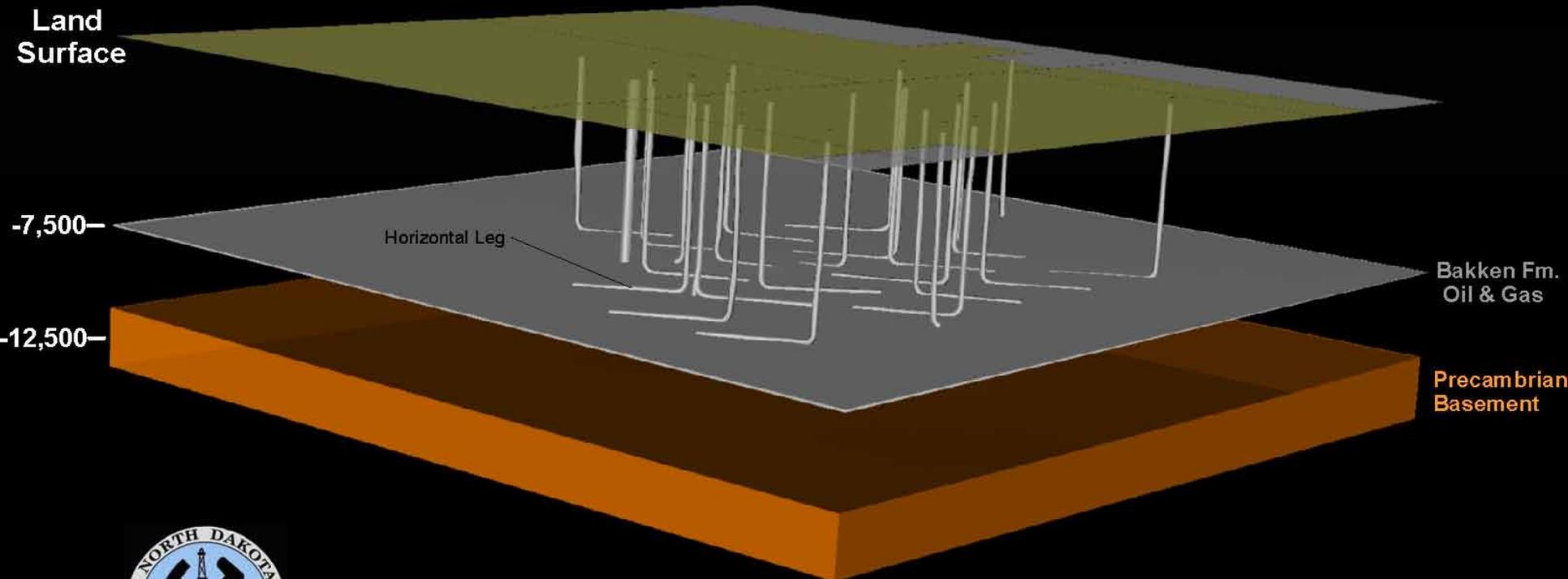
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# Three Dimensional Geologic Model of the Parshall Area



**NORTH DAKOTA  
GEOLOGICAL SURVEY**