17. A non-transitory program carrier device tangibly carrying computer executable instructions for identifying geological core areas, the instructions being executable to implement:

normalizing rock property values over a range of estimated rock property values;

computing a rock property metric for each cell in a study area using the normalized rock property values;

computing a probability map of the rock property metric(s);

correlating each permitted well in the study area with the probability map;

computing a probability distribution and variance of the rock property metric(s) within each leasehold in the study area;

ranking each leasehold according to its assigned category of cumulative probability distribution and variance; and

planning a drilling program for the study area based on the rank of each leasehold, a location of each permitted well and an anticipated production performance associated with each ranked leasehold.

18. The program carrier device of claim 17, wherein the anticipated production performance is indicated by the correlation of each permitted well in the study area with the probability map.

19. The program carrier device of claim 17, wherein the range of estimated rock property values is estimated by a depth for each layer in each permitted well in the study area.

17. A non-transitory program carrier device tangibly carrying computer executable instructions for identifying geological core areas, the instructions being executable to implement:

normalizing core property values over a range of estimated rock property values;

computing a rock property metric for each cell in a study area using the normalized rock property values;

computing a probability map of the rock property metric(s);

correlating each permitted well in the study area with the probability map;

computing a probability distribution and variance of the rock property metric(s) within each leasehold in the study area;

ranking each leasehold according to its assigned category of cumulative probability distribution and variance; and

planning a drilling program for the study area based on the rank of each leasehold, a location of each permitted well and an anticipated production performance associated with each ranked leasehold.

18. The program carrier device of claim 17, wherein the anticipated production performance is indicated by the correlation of each permitted well in the study area with the probability map.

19. The program carrier device of claim 17, wherein the range of estimated rock property values is estimated by a depth for each layer in each permitted well in the study area.