Natural Resource and Energy Lab

Name _____   **Period** _____

Objective: Allow students to understand the relationship between underground deposits of energy and minerals. Student will graph data and develop a map of underground deposits. After excavating a section of the model they will relate it the economic development.

Materials:
Model of mineral deposits
Brass core drill
Wooden dowel core extractor
 Graph paper
Layer map of deposits

Procedure:
Locate no more than eight core sample. Record the location from the grid on the model and plot it on the graph paper. Extract the core samples and recording the layers in the worksheet. Use the recorded deposits to construct a map of the layers.

Excavate two grid sections based on the best core sample. Project the economic cost and benefits of the resource.

Results: What did each core sample look like? Draw the layer in each sample

#1	#2	#3	#4	#5	#6	#7	#8

Core Sample Grid
Graph the locations of the core samples on this sheet of paper.

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

What conditions were encountered that would pose a problem to extraction?

_____ _____

_____
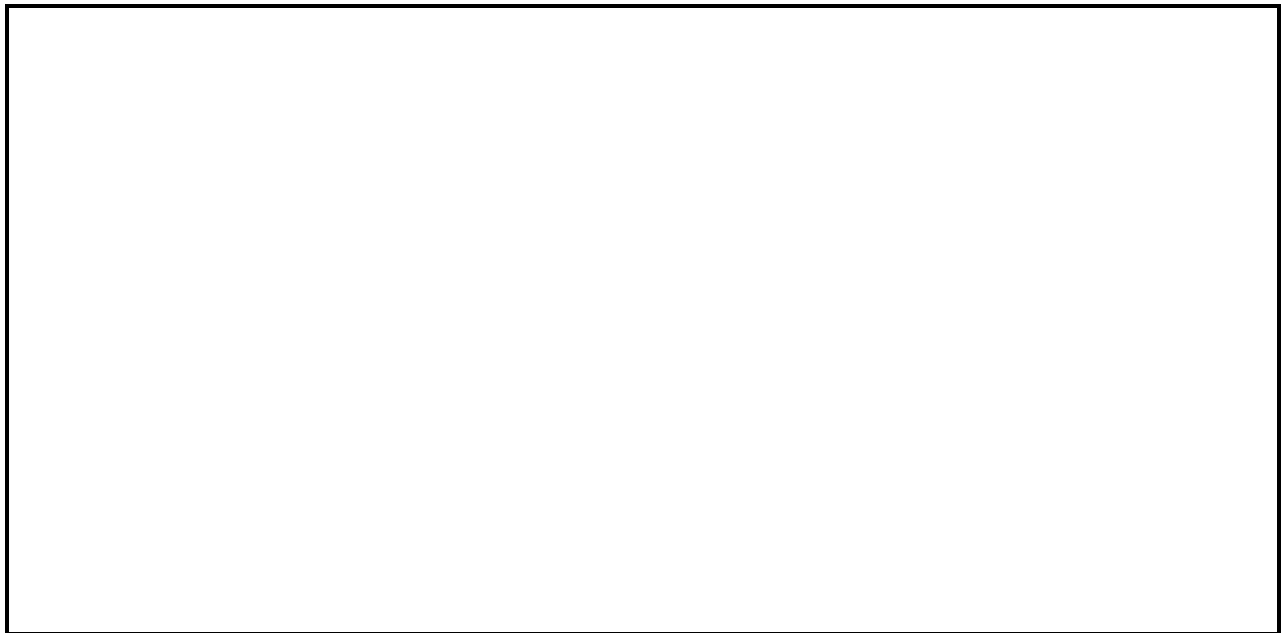
What can be done to improve the results of the core sampling? _____

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Draw a vertical map of the layers from the core samples.

Excavation Select two grid section that have the most potential based on the core samples. Determine the best way to remove the resource. Measure the amount of the resource (ex 2cm^3 of simulated coal) and project how much revenue would the resource generate based on the current rate (at the time of the lab).

Conclusion What can you conclude about the prospecting of natural resources, energy reserves, and economic development in the state of California?

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