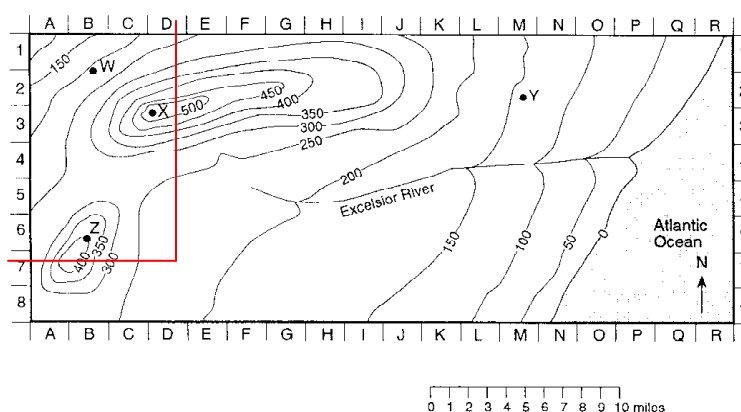


Yet another Field Map and Isolines Review ...

Review Packet #2

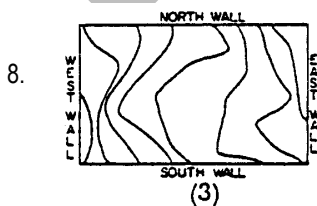
- (2) 2250 m - The interval of the map is 500. That places point A between the 2000 and 2500 lines.



- (4) 230 ft - Using the grid as shown above, 7-D brings you between the 200 and 250 ft lines.
- (2) 548 ft - This is the top of the hill. The interval of the map is 50ft, therefore the elevation has to be higher than 500, but not 550.
- (4) southeast - If you so trial and error, the only direction that an increase in elevation will occur is traveling SE from point W.
- (2) 11 ft/mi - Gradient = change in field value / distance. It looks like the river starts at an elevation of about 220 ft and ends at sea level (0ft). Using the scales of miles, the length of the river is 20 miles.

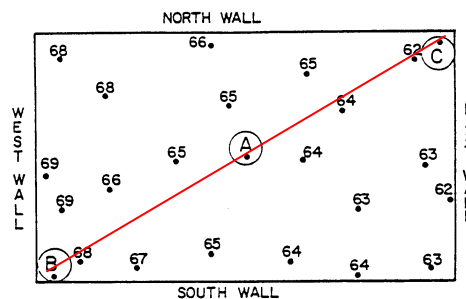
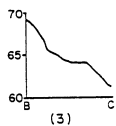
$$G = \frac{\Delta FV}{\text{Dist}} = \frac{220-0 \text{ ft}}{20 \text{ miles}} = 11 \text{ ft/mile}$$

- (2) west to east - Rivers must flow downhill - the elevations get lower towards the east side of the map. Also, you can see the bends in the contour lines - contour lines bend upstream. The bends of the lines point west (upstream), this means downstream is to the east.
- (2) 64.5 - Point A falls directly between the 64 and 65 isolines.

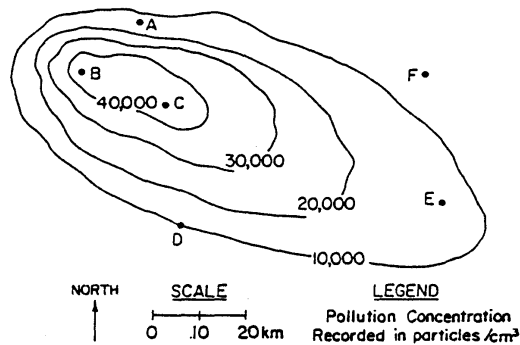


- When you connect the points at an interval of 1, it looks just like choice 3

- A straight line from A to B shows the values to continually decrease.



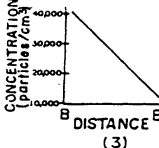
- (4) west wall - the highest values are near the west wall




11. 49,999 particles/cm³ – Since the interval is going by 10,000, the highest possible value for point B would be 1 less than the next line that would be drawn. The next line in the interval would be 50,000, so the highest possible value is 49,999

12. northwest – The lines are closest together in the northwest (upper left) part of the map.

13. Any number from 1 – 9,999 particles/cm³ would be correct. The number has to be less than 10,000, but can't be 0

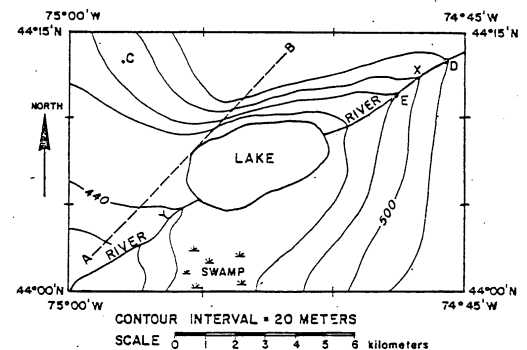
14.  The concentration of pollutants continually decrease as you move from point B to point E. Choice 3 is the only graph that shows that.

15.  If the mound was worn away by rainstorms, the mound would be smaller. Only choice 2 shows the top of the mound to be lower.

16. (1) north – The lines are closest together right above the lake on the map.

17. (2) 490 meters – Point C falls between the 480m and 500m contour lines.

18. (3) an outlet for the lake – River Y is flowing out of the lake. The elevation values get lower toward the southwest and rivers must flow downhill. Also the contour lines around River Y make “V” patterns with the open part of the “V” pointing southwest.




19. (3) 20 m/km

Gradient = $\frac{\text{change in field value}}{\text{distance}}$ (find the elevations of points D and E)
(measure using the map scale)

$$= \frac{520 - 480\text{m}}{2\text{km}}$$

$$= 20 \text{ m/km}$$

20.  As you proceed from A to B, you are going uphill – this narrows the answer to either choice 2 or choice 4. Choice 4 is the answer because the steep part of the hill is closer to point B (as indicated by the close spacing of isolines near B).