

1  
Slab INFORMATION : a/l = 0.154, L/l = 7.0, W/l = 7.0

|        |        |         |       |       |       |       |       |      |  |
|--------|--------|---------|-------|-------|-------|-------|-------|------|--|
| 1      | 3      | 0       | 0     |       |       |       |       |      |  |
| 31     |        |         |       |       |       |       |       |      |  |
| 31     |        |         |       |       |       |       |       |      |  |
| 1      | 0      | 200.00  |       |       |       |       |       |      |  |
| 6      | 1      | 0.05    | 0.05  | 0     |       |       |       |      |  |
| 000000 | 40     |         |       |       |       |       |       |      |  |
|        | 0.0    | 1.3     | 2.6   | 3.9   | 5.2   | 6.5   | 9.0   | 12.0 |  |
|        | 16.0   | 20.0    | 24.0  | 28.0  | 32.0  | 36.0  | 40.0  | 45.0 |  |
|        | 50.0   | 55.0    | 60.0  | 65.0  | 70.0  | 75.0  | 81.0  | 87.0 |  |
|        | 93.0   | 99.0    | 105.0 | 112.0 | 119.0 | 127.0 | 135.0 |      |  |
|        | 0.0    | 1.3     | 2.6   | 3.9   | 5.2   | 6.5   | 9.0   | 12.0 |  |
|        | 16.0   | 20.0    | 24.0  | 28.0  | 32.0  | 36.0  | 40.0  | 45.0 |  |
|        | 50.0   | 55.0    | 60.0  | 65.0  | 70.0  | 75.0  | 81.0  | 87.0 |  |
|        | 93.0   | 99.0    | 105.0 | 112.0 | 119.0 | 127.0 | 135.0 |      |  |
|        | 10.0   | 5.0E+06 | 0.15  | 0.136 | 0.0   | 0.0   |       |      |  |
|        | 128.02 | 0.0     | 5.2   | 0.0   | 5.2   |       |       |      |  |

註:

$$l = \sqrt[4]{\frac{Eh^3}{12(1-\nu^2)k}} = 38.21 \quad \therefore w=L=270 \text{ in}$$

| NODE | DEFLECTION                | X-ROTATION | Y-ROTATION | SUBGRADE STRESS | SUBGRADE FORCE |
|------|---------------------------|------------|------------|-----------------|----------------|
| 1    | .006068 (d <sub>0</sub> ) | .000000    | .000000    | 1.214           | .513           |
| 218  | .005687 (d <sub>1</sub> ) | .000000    | -.000054   | 1.137           | 2.588          |
| 311  | .004932 (d <sub>2</sub> ) | .000000    | -.000069   | .986            | 2.565          |
| 404  | .004085 (d <sub>3</sub> ) | .000000    | -.000071   | .817            | 2.124          |

結果:

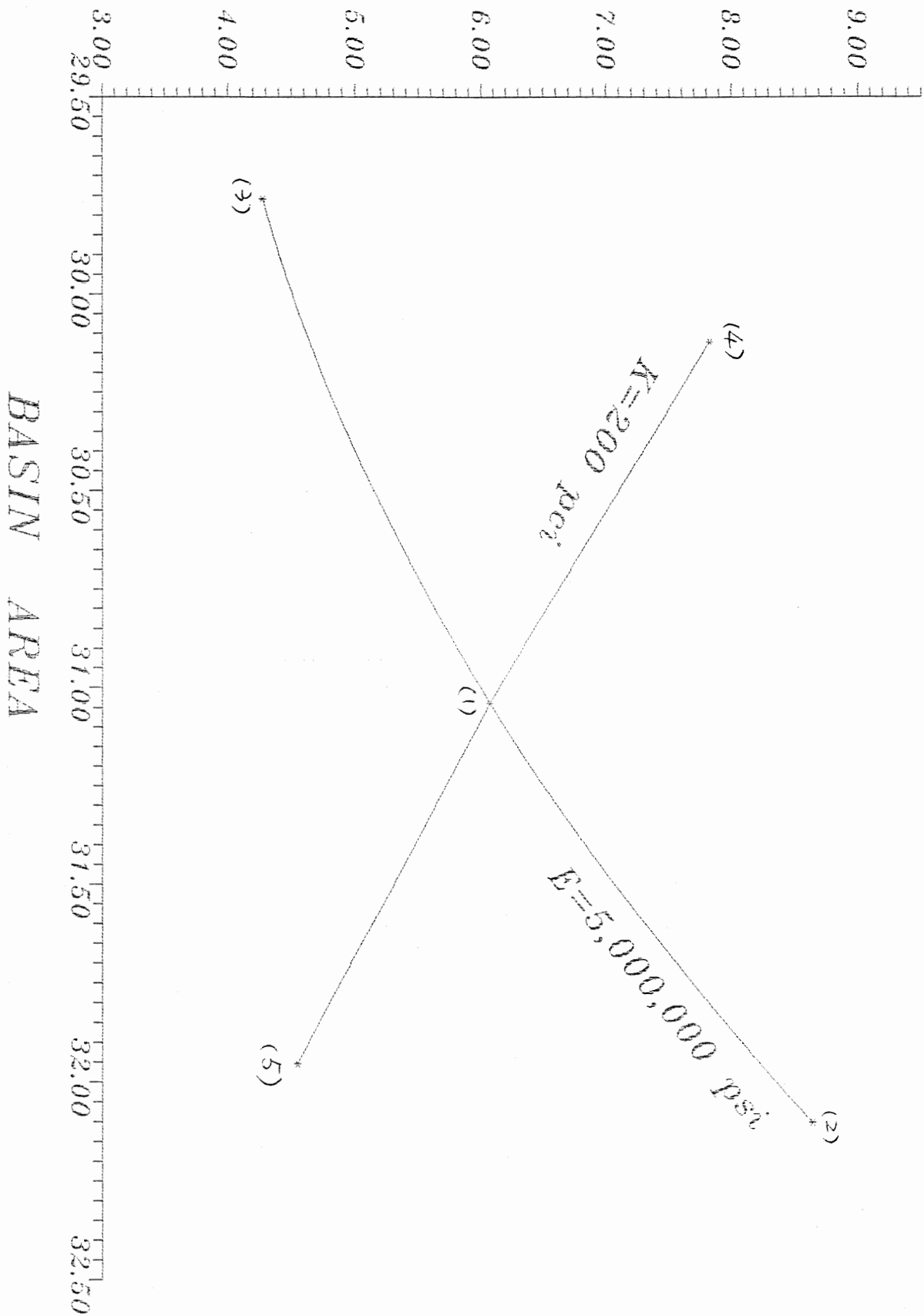
$$DI = 6.068 \text{ mils} = y \text{ 值}$$

$$\begin{aligned} \text{AREA} &= 6 \cdot \left( 1 + 2 \cdot \frac{d_1}{d_0} + 2 \cdot \frac{d_2}{d_0} + \frac{d_3}{d_0} \right) \\ &= 6 \cdot \left( 1 + 2 \cdot \frac{5687}{6068} + 2 \cdot \frac{4932}{6068} + \frac{4085}{6068} \right) \\ &= 31.04 \\ &= x \text{ 值} \end{aligned}$$

$\therefore k=200 \text{ pci} \quad E=5 \times 10^6 \text{ psi}$  对应桌端

$$\Rightarrow (\text{AREA}, DI) = (31.04, 6.068)$$

DI AT 14,000 lbs



BASIN AREA