

DIP PLANE  
VERTICAL ANGLE AND DIRECTION

1. G1-G16 DIP PLANE NW-SE

$D = 136.85$

Dif. Elevation = 14.21

MEMBER II

$DIP = 5^{\circ} 55' 41''$

2. G19-G16 DIP PLANE NW-SE

$D = 38.55$

Dif. Elev. 3.72

$DIP = 5^{\circ} 30' 42''$

3. G18-G16 DIP PLANE NW-SE

MEMBER II

$D = 43.55$

Dif. elev.  $5^{\circ} 14' 52''$  - SLOPE  
4.0

4. G7-G16 DIP PLANE NW-SE

MEMBER II

$D = 74.70$

Dif. elev. 5.43

Slope:  $4^{\circ} 09' 27''$

AVERAGE OF THESE

1. 5.928137957

2. 5.111864932  $5^{\circ} 06' 08''$

3. 5.247804528

4. 4.157561444

G1-G16 Perhaps truest to Dip

Dip - Horizontal Direction Angle; from best perpendiculars to  
Dip-center lines: 14.50 -  $56^{\circ} 30''$

14.00 -  $55^{\circ} 30'$

AVERAGE  $55^{\circ} 15'$

10.50  $63^{\circ} 30'$

Point G1-G16  $45^{\circ} 30'$   $\rightarrow$  Perhaps truest angle? <sup>horiz.</sup>

DIP OF CONTACT PLANE MEMBERS I-II  
VERTICAL ANGLE AND DIRECTION

1. G2-G17

$$D = 108.55$$

Dif elevation 10.33

$$5^{\circ} 26' 10''$$

2. G20-G17

$$D = 19.95$$

Dif elev. 1.45

$$4^{\circ} 09' 25''$$

3. G4-G17

$$D = 79.80$$

Dif elev. 4.61

$$3^{\circ} 18' 25.6988''$$

4. G8-G17

$$D = 64.75$$

Dif elev. 5.3

$$4^{\circ} 40' 46''$$

1. 5.436097512

2. 4.157045141

3. 3.306269411

4. 4.679415564

4.394706907 Average

$$4^{\circ} 23' 41''$$

G2-G17 Perhaps truest to dip

Horizontal Direction; from best perpendicular to contour intervals:

$$17.00 : 68^{\circ}$$

$$13.00 : 71^{\circ} 30'$$

$$9.00 : 82^{\circ}$$

G2-G17:  $46^{\circ}$  Probably truest

MEMBER II

45 30  
1 14  
46 44  
43 16  
89 60

58 36  
1 14  
59 50

44 30  
1 14  
43 16

31 24  
1 14  
30 10

Average Dip 5° 06' 8"

Greatest Dip 5° 55' 41"  
G1-G16

Direction Average 55° 15' W of N Grid  
G1-G16 45° 30' W of N Grid

30 10  
59 50  
89 60

STRIKE 145° 15  
STRIKE 135° 30  
W of N

MEMBER I

Average Dip 4° 23' 41"

Greatest Dip 5° 26' 10"  
G2-G17

Direction Average

CONTOUR LINE: 16.0 : 26° 30' W of N

19.0 : 15° W of N

13.0 : 10° 30' W of N

21.0 : 13° E of N

10.0 : 16° 30' W of N

TOTAL 55.30'

N 13° E

AVERAGE 11° 06'  
97 14  
101 06

G2-G17 44° W of N

70  
134

12 60  
1 14  
14

16 30  
1 14  
15 16

10 30  
1 14  
9 16

20 30  
1 14  
25 16

80 08  
9 52  
60

13 14  
1 14  
14 14

78 54  
1 14  
79 68

80 08

14 60  
1 14  
16

10 66  
1 14  
9 52

47.19

179 20  
101 06  
78 54

42 46  
47 14  
69 60

MEMBER II

Average Dip  $5^{\circ} 06' 08''$   
 Greatest Dip  $5^{\circ} 55' 46''$   
 G1 - G16

DIRECTION AVERAGE

CONTOUR LINE 13.5:	$38^{\circ} 30'$	W OF N	$N 38^{\circ} 30' W$
15.0:	$33^{\circ} 30'$	W OF N	
17.0:	$29^{\circ}$	W OF N	
19.0	$28^{\circ}$	W OF N	
22.0	$28^{\circ}$	W OF N	

AVERAGE  ~~$37^{\circ} 40'$~~   
 $\downarrow$   
 $31^{\circ} 24'$   
 $+ 90 00$   


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 $121^{\circ} 24'$

G1 - G16  $44^{\circ} 30'$  W OF N  


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 $90$   


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 $134. 30$

~~STRIKE =  $31^{\circ} 24'$~~

BEARING OF GRID

$1^{\circ} 14'$

ADD TO ABOVE BEARINGS FOR TRUE N ORIENTATION

N  
 $27^{\circ} 56'$   
 $1 14$   


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 $26 46$

180  
 $37.26$   
 $32.26$   
 $27.76$   
 $26.76$   
 $26.76$   
 $179 60$   
 $134 30$   


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 $45 30$

$179 56$   
 $121 24$   


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 $58 36$

$29.94$   
 $36$   
 $24$   


---

 $60$

180  
 $121 24$   


---

 $59$

$11 06$   
 $1 14$   


---

 $10 52$

$10 66$   
 $1 14$   


---

 $9 52$

$28 56$   
 $1 14$   


---

 $27 46$

$38 30$   
 $1 14$   


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 $37 16$

$33 30$   
 $1 14$   


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 $32 16$

1. G32 - G24 NE-SW

D = 251

Dif. elevation .495

Dip.  $0^{\circ} 06' 46''$

2. G31 - G25 ~~SE~~ SE-NW

D = 77

Dif. Height: 12.31

Dip.  $9^{\circ} 04' 58''$

Horizontal Angle  $\approx 40^{\circ} 45'$  w of N GRID

$$\begin{array}{r} 40^{\circ} 45' \\ 1 \quad 14 \\ \hline 31 \end{array}$$

3. G30 - G25 SE-NW

D = 101

H = 17.095

Slope =  $9^{\circ} 36' 24''$

Hor.  $\angle = 32^{\circ}$  w of N Grid

$$\begin{array}{r} 31 \quad 5 \\ 1 \quad 14 \\ \hline 32 \quad 46 \end{array}$$

4. G25 - G27 SE-NW

D = 439.75

H = 22.27

Slope =  $2^{\circ} 53' 56''$

Hor  $\angle = 24^{\circ}$  w of N Grid

5. G25 - G26 SE-NW

D = 387

H = 21.4998

Slope =  $3^{\circ} 10' 47''$

Hor  $\angle = 36^{\circ}$

$$\begin{array}{r} 18 \quad 30 \\ 1 \quad 14 \\ \hline 36 \quad 44 \end{array}$$

$$\begin{array}{r} 24 \quad 15 \\ 1 \quad 14 \\ \hline 25 \quad 29 \end{array}$$

$$\begin{array}{r} 26 \quad 45 \\ 1 \quad 14 \\ \hline 59 \end{array}$$

$$\begin{array}{r} 45^{\circ} 30' \\ 90^{\circ} 30' \\ \hline 135^{\circ} \end{array}$$

$$\begin{array}{r} 55^{\circ} 15' \\ 90^{\circ} \\ \hline 145^{\circ} 15' \end{array}$$

1. Q30-Q31 2E-1M

D = 221

H = 17.032  
Slope = 2.33.25

2. Q31-Q32 2E-1M

D = 217

H = 17.032  
Slope = 2.33.25

3. Q32-Q33 2E-1M

D = 213

H = 17.032

Slope = 2.33.25

4. Q33-Q34 2E-1M

D = 209

H = 17.032

Slope = 2.33.25

5. Q34-Q35 2E-1M

6. Q35-Q36 2E-1M

D = 205

H = 17.032

Slope = 2.33.25

H = 17.032

6. G30 - G27 SE-NW

D = 540

H = 39.365

Slope =  $4^{\circ} 10' 09''$

Hor  $\angle$  =  $25^{\circ} 30'$

$$\begin{array}{r} 8.30 \\ 1.14 \\ \hline 9.44 \end{array}$$

7. G30 - G26 SE-NW

D = 488

H = 39.5948

Slope =  $4^{\circ} 38' 19''$

Hor  $\angle$  =  $35^{\circ}$

19.55

8. G33 - G22 NE-SW BED 6<sub>1</sub> TOP

3.97

D = 152.5

H = 4.175

Slope =  $1^{\circ} 34' 05''$

Hor  $\angle$  =  $26^{\circ} 45'$  E of N

$$\begin{array}{r} 26.30 \\ 1.14 \\ \hline 27.44 \end{array}$$

9. G24 - G20 S-N

D = 578.80

H = 11.6698

Slope =  $1^{\circ} 09' 18''$

Hor  $\angle$  =  $10^{\circ} 45'$  E of N Grid

10. G23 - G32 SW-NE

D = 194.5

H = 1.115

Slope =  $0^{\circ} 19' 42''$

Hor  $\angle$  =  $35^{\circ}$  E of N Grid

35

11. G24 - G32 SW-NE

D = 251

H = .495 (Down NE to SW)

Slope =  $0^{\circ} 06' 46''$

Hor  $\angle$  =  $44^{\circ}$  E of N Grid

$$\begin{array}{r} 30.4 \\ 2.9 \\ \hline 33.3 \end{array}$$

$$\begin{array}{r} 25.30 \\ 1.14 \\ \hline 26.44 \end{array}$$

G2 - G26 SE-NU  
DISTANCE - 361.5  
D.f. hei : 25.2848  
Slope : 4°  
Hor < N 22° 30' W

G32 - G26  
D = 440.5  
D.f. hei = 22.8748  
Slope = 2° 58' 21"  
< Hz = N 24° 46' W  
half dip  
half bearing

G2 - G27  
D : 431  
D.f. hei : 26.055  
Slope 3° 27' 34"  
Hor < N 12° 30' W

G8 - 26  
D = 400  
D.f. hei : 30.3148  
Slope 4° 20' 02"  
Hor < N 28° 30' W

G8 - G27  
D = 461.75  
D.f. hei : 31.085  
Slope : N 3° 51' 04" W  
< Hz 18° 30'

SPHINX HEAD elevation

12

1/2

25-20  
1 14  
24 546