

675754  
(1991) 92I/9

# AJAX WEST OPEN PIT : STRUCTURAL DATA

PLANES: 1 Mineralized Faults/Shears

295 40  
298 51  
170 60  
255 56  
237 36  
295 55  
255 72  
340 67  
330 70  
250 72  
246 47  
343 67  
140 80  
090 53  
225 51  
060 56  
113 46  
045 42  
015 90  
200 38  
110 90  
105 90  
250 65  
075 82  
230 85  
240 67  
248 78  
241 74  
240 61  
340 70  
142 66  
100 35  
140 90  
072 64  
330 79  
242 69  
335 85  
155 52  
110 80  
195 25  
175 75  
165 66  
145 70  
100 79  
195 46  
300 67  
190 62

210 45  
170 63  
145 55  
245 65  
190 48  
035 55  
145 40  
245 53  
135 65  
000 57  
230 81  
180 60  
200 35  
260 85  
090 90  
205 56  
205 40  
035 90  
170 76  
310 86  
230 78  
130 83  
190 41  
180 36  
315 66  
120 25  
250 65  
080 38

END-DATA:

PLANES: 2 Unmineralized Faults/Shears

325 00  
350 72  
005 70  
150 65  
150 87  
219 75  
223 73  
060 56  
150 85  
170 44  
145 45  
150 37  
120 51  
240 75  
300 75  
290 51  
135 90  
130 52  
300 58  
292 72  
090 50

180 30  
090 85  
267 70  
180 45  
155 90  
212 71  
075 90  
320 43  
315 20  
205 82  
255 63  
315 56  
320 50  
290 50  
032 66  
310 60  
240 62  
240 75  
295 82  
150 90  
130 25  
060 90  
085 55  
240 40  
085 90  
225 45  
275 50  
070 70  
175 79  
250 44  
170 72  
155 76  
150 75  
145 88

END-DATA:

PLANES: 3 Mineralized Veins/Fractures

325 85  
240 77  
035 90  
079 55  
245 68  
020 90  
200 71  
025 90  
313 66  
320 62  
153 74  
140 63  
240 25  
270 80  
185 90

275 85  
195 75  
070 77  
093 90  
060 90  
065 80  
070 42  
325 75  
290 73  
160 55  
270 70  
145 32  
110 50  
345 87  
300 57  
326 85  
125 70  
300 45  
168 62  
250 70  
042 45  
040 70  
207 65  
072 46  
195 45  
050 50  
300 60  
240 50  
260 55  
195 55  
130 80  
210 74  
320 85  
150 70  
160 78  
070 71

END-DATA:

PLANES: 4 Unmineralized Joints/Fractures

137 58  
137 58  
150 85  
205 85  
095 90  
160 38  
357 71  
167 68  
070 83  
062 62  
275 75  
035 55  
145 40

032 55  
180 72  
115 40  
020 66  
305 83  
340 65  
070 45  
130 25  
180 60  
232 69  
230 72

END-DATA:

PLANES: 5 Mineralized Dyke Contacts

180 50  
200 79  
270 66  
223 73  
274 84  
260 90  
070 28  
230 50  
260 78  
110 90  
310 60  
195 72  
251 82  
090 85  
185 65

END-DATA:

PLANES: 6 Unmineralized Dyke Contacts

340 81  
270 82  
285 86  
328 72  
275 80  
230 60  
080 42  
200 76  
195 75  
168 78

END-DATA

PLANES: 7 Mineralized Breccia Bodies

040 90  
290 73  
350 62

END-DATA

# Structural study of Ajax West pit

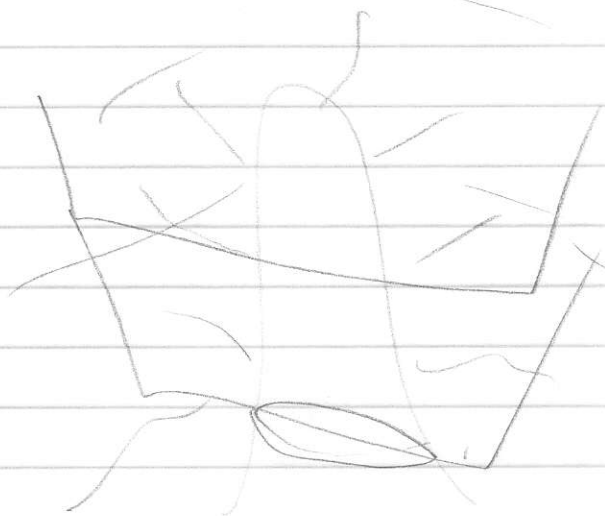
Complete file of structural data from 880 bench, 800 bench plans + field notes.  
Break down data into following categories.

## A. Unmineralized structures:

- faults, shears
- joints, fractures
- dyke contacts

## B. Mineralized structures including albite, calcite, pyrite, Kspar, epidote, chlorite, quartz, chalcopyrite, barite, molybdenite, hematite, Cu carbonates, biotite

- veins, fractures
- shears, faults
- mineralized breccia bodies
- mineralized dyke contacts



\* Faults plotted on Fig 2: BCM-EMPR Bull 77 (Y.T.J. Kwong)

- all are ~~strikes~~ <sup>trends</sup> w/ down thrown dir where noted on Fig 2

Faults within Iron Mask & crossing to Nicola or Kamloops GP

IM & Nicola

IM & KG or Mida & KG

344 ✓		284 ✓	001 ✓✓
334 ✓	301 → 0	020 ✓	326 ✓✓
083 ✓		242 ✓	<del>347 ✓</del>
312 ✓		324 ✓	257 ✓✓
305 ✓		234 ✓	330 ✓✓
317 ✓		320 ✓	229 ✓✓
306 ✓		304 ✓	027 ✓✓
319 ✓		048 ✓	350 ✓✓
348 ✓		006 ✓	012 ✓✓
<del>299</del>		300 ✓	342 ✓✓
<del>342</del>		255 ✓✓	330 ✓✓
248 ✓		262 ✓✓	318 ✓✓
328 ✓		224 ✓✓	324 ✓✓
312 ✓		301 ✓✓	039 ✓✓
347 ✓		319 ✓✓	327 ✓✓
332 ✓		333 ✓✓	327 ✓✓
318 ✓		358 ✓✓	356 ✓✓
332 ✓		012 ✓✓	030 ✓✓
330 ✓		294 ✓✓	329 ✓✓
352 ✓		310 ✓✓	356 ✓✓
		336 ✓✓	307 ✓✓
		035 ✓✓	300 ✓✓
		324 ✓✓	236 ✓✓
		075 ✓✓	291 ✓✓
		356 ✓✓	020 ✓✓
		296 ✓✓	264 ✓✓
		062 ✓✓	249 ✓✓
		306 ✓✓	306 ✓✓
		032 ✓✓	318 ✓✓
		321 ✓✓	340 ✓✓
		314 ✓✓	047 ✓✓
		315 ✓✓	
		025 ✓✓	
		320 ✓✓	

# Structural Measurements from OF 980

## 1:125,000 scale Blueline

Eastern Limit of measurement contact between  
Niola Seds (uT<sub>N6</sub>) and older Volc & Seds  
assigned to either Niola (TPM<sub>150</sub>) or Harper  
Ranch DP<sub>HR1</sub> or DP<sub>HR2</sub>

Meas in Niola

004/40E B ✓	336/47E B ✓	169/60 W B ✓
325/15E B ✓	345/65E B ✓	206/73W B ✓
188/40W B ✓	* 325/90 C ✓	192/35W B ✓
* 144/80W C ✓	303/43N B ✓	360/95E B ✓
144/40W B ✓	327/30N B ✓	* 008/90 C ✓ <small>with B</small>
345/55E B ✓	333/40N B ✓	021/86E B ✓
* 253/20N C ✓	231/70N B ✓	160/65W B ✓
* 074/70S C ✓	016/15E B ✓	007/80E B ✓
355/52E B ✓	299/31N B ✓	164/40W B ✓
272/55N B ✓	* 275/59N C ✓	129/85S B ✓
156/55E B ✓	306/30N B ✓	346/80E B ✓
246/40N B ✓	* 343/42E C ✓	153/56W B ✓
275/20N B ✓	* 327/25N C ✓	136/78S B ✓
088/65S B ✓	* 351/20E C ✓	327/80N B ✓
325/65N B ✓	* 213/75W C ✓	197/47W B ✓
319/55N B ✓	* 223/66N C ✓	218/29N B ✓
169/25W B ✓	* 041/70S C ✓	238/43N B ✓
314/90 B ✓	<del>* 113/90 C</del>	190/40W B ✓
316/90 B ✓	* 011/74E C ✓	142/75W B ✓
326/50N B ✓	* 177/52W C ✓	358/75E B ✓
298/50N B ✓	* 123/85S C ✓	323/80N B ✓
322/54N B ✓	* 162/65E C ✓	441/40S B ✓
292/85N B ✓	327/55N B ✓	111/42S B ✓
340/45N B ✓	348/80E B ✓	* 067/50S C ✓
337/50N B ✓	218/77N B ✓	306/60N B ✓
172/85W B ✓	201/60W B ✓	200/80W B ✓
337/60N B ✓	243/55W B ✓	019/70E B ✓
326/61N B ✓	191/90 B ✓	183/80W B ✓
282/45N B ✓	010/72E B ✓	005/65E B ✓
343/40N B ✓	204/75W B ✓	169/21W B ✓
167/40W B ✓	180/35W B ✓	178/63W B ✓
357/5E B ✓	173/65W B ✓	319/81N B ✓
	* 154/50W C ✓ <small>wild AOLG Bent</small>	146/79S B ✓

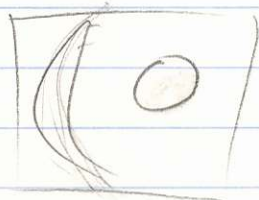


OF 980 cont'd  
Nicola Parks & older

line 128

NCHVG

147/80S B ✓	332/70N B ✓
352/83E B ✓	332/70N B ✓
335/50E B ✓	333/47N B ✓
319/50N B ✓	332/22N B ✓
335/83E B ✓	322/67N B ✓
273/85N B ✓	329/55N B ✓
272/10N B ✓	324/71N B O/T ✓
340/80E B ✓	607/20E B ✓
339/90 B ✓	136/70S B ✓ 316/80N B ✓
185/80W B ✓	KBDG <u>Kamloops GRA + Nicolaj Bath</u>
151/65S B ✓	359/55E B ✓
185/45W B ✓	179/20W B ✓
163/80W B ✓	178/30W B ✓
* 360/55E C ✓	173/25W B ✓
082/40S B ✓	200/20W B ✓
350/90 B ✓	351/15E B ✓
* 169/66S C ✓	353/10E B ✓
* 049/25E C ✓	264/20N B ✓
232/56N B ✓	262/30N B ✓
237/66N B ✓	666/12S B ✓
329/70E B ✓	338/30E B ✓
120/55S B ✓	298/15N B ✓
334/72E B ✓	301/30N B ✓
307/75N B ✓	112/15S B ✓
304/70N B ✓	* 108/30S C NB
320/80N B ✓	* 106/90 C NB
326/80NB ✓	302/10N B ✓
320/80NB ✓	089/38S B Tseeds ✓
296/70N B ✓	089/55S B Tseeds ✓
321/81N B ✓	
143/87S B ✓	
133/70S B ✓	
138/90 B ✓	
141/85S B ✓	
139/81S B ✓	
138/50S B ✓	
304/56N B ✓	
320/55N B ✓	



OF 180 cont'd (S of 50° 20')

Nicola R. + Quichen egg Int

- \* 212/78S C (TJd)
- \* 126/90 C (" )
- \* 221/85E C (" )
- \* 169/48E C (" )
- \* 185/49E C (" )



127, 331 137, 400 (10)  
127, 331 137, 400 (10)  
127, 331 137, 400 (10)

16SP	157,331	13 files (10)
16SP/CP	80,007	34 files
16SP/GS	79,959	26 files



\* 182/440 C (=)  
 \* 148/480 C (=)  
 \* 551/820 C (=)  
 \* 52/90 C (=)  
 \* 515/780 C (125)

OF 180 C (20) (20)

# Mineralized shears/faults

- 105/40 N ✓
- 118/51 NE ✓
- 170/60 SE ✓
- 075/56 NW ✓
- 057/36 NW ✓
- 115/55 NE ✓
- 075/72 NW ✓
- 160/67 NE ✓
- 150/70 NE ✓
- 070/72 NW ✓
- 066/47 NW ✓
- 163/67 NE ✓
- 140/80 SW ✓
- 090/53 S ✓
- 045/51 NW ✓
- 060/56 SE ✓
- 113/46 S ✓
- 045/42 S ✓
- 015/90 ✓
- 020/38 NW ✓
- 110/90 ✓
- 105/90 ✓
- 070/65 N ✓
- 075/82 S ✓
- 050/85 N ✓
- 060/67 NW ✓
- 068/78 NW ✓
- 061/74 NW ✓
- 060/61 N ✓
- 160/70 NE ✓
- 142/66 SW ✓
- 100/35 SW ✓
- 140/90 ✓
- 072/64 SE ✓
- 150/79 NE ✓
- 062/69 NW ✓
- 155/85 W ✓
- 155/52 SW ✓
- 110/80 S ✓

- (010 → 020) 25 NW ✓
- 355/75 W ✓
- 165/66 W ✓
- 145/70 SW ✓
- 100/79 S ✓
- 195/46 NW ✓
- 120/67 NE ✓
- 010/62 W ✓
- 210/45 W ✓
- 170/63 W ✓
- 145/55 SW ✓
- 065/65 N ✓
- 010/48 W ✓
- 035/55 SE ✓
- 145/40 SW ✓
- 065/53 NW ✓
- 135/65 SW ✓
- 180/57 E ✓
- 050/81 NW ✓
- 000/60 W ✓
- 020/35 E ✓
- 080/85 N ✓
- 090/90 ✓
- 025/56 NW ✓
- 025/40 NW ✓
- 035/90 ✓
- 170/76 W ✓
- 130/86 N ✓
- 050/78 NW ✓
- 130/83 SW ✓
- 010/41 E ✓
- 000/36 W ✓
- 135/66 NE ✓
- 120/25 SW ✓
- 070/65 N ✓
- 080/38 S ✓

ATX out  
ATX

km -13° @ 050

km 35° @ 240

km -10 @ 290

un mineralized shear/fault

Flat (NW) shear? ✓✓

070/72NW ✓✓

005/70E ✓✓

150/65SW ✓✓

150/87W ✓✓

039/75W ✓✓

043/73NW ✓✓

060/56SE ✓✓

~~070~~ 150/85SW ✓✓

assoc lin 275@35

350/44W ✓✓

145/45SW ✓✓

assoc lin 060@37

150/37SW ✓✓

120/51SW ✓✓

060/75NW ✓✓

120/75N ✓✓

110/51N ✓✓

135/90 ✓✓

130/52SW ✓✓

120/58NE ✓✓

112/72NE ✓✓

090/50S ✓✓

360/30W ✓✓

090/85S ✓✓

-70 @ 087lin

087/70N ✓✓

000/45W ✓✓

155/90 ✓✓

212/71W ✓✓

075/90 ✓✓

140/43N ✓✓

135/20NE ✓✓

025/82NW ✓✓

075/63N ✓✓

135/56NE ✓✓

140/50NE ✓✓

110/50NE ✓✓

032/66SE ✓✓

130/60NE ✓✓

060/62NW ✓✓

060/75NW ✓✓

115/82N ✓✓

150/90 ✓✓

130/25SW ✓✓

060/90 ✓✓

085/55S ✓✓

060/40NW ✓✓

085/90 ✓✓

65/45NW ✓✓

lin -53° to 70 095/50N ✓✓

lin 71° to 70 070/70S ✓✓

175/79W ✓✓

070/44NW ✓✓

120/72SW ✓✓

155/76SW ✓✓

150/75SW ✓✓

145/88SW ✓✓

# Mineralized veins/fractures

145/85 NE ✓ partly cleared(?)

060/77 NW ✓

035/90 ✓ (min joints)

079/55 SE ✓

065/68 NW ✓

020/90 ✓

020/71 N ✓

025/90 ✓

133/66 NE ✓

140/62 NE ✓

153/74 SW ✓

140/63 SW ✓

060/25 NW ✓

090/80 N ✓

005/90 ✓

-23° @ 095

095/85 N ✓

015/75 W ✓

070/77 SE ✓

093/90 ✓

060/90 ✓

065/80 SE ✓

070/42 SE ✓

145/75 NE ✓

110/73 N ✓

160/55 W ✓

090/70 N ✓

145/32 SW ✓

110/50 S ✓

~~135/65 S~~

165/87 E ✓

120/57 NE ✓

146/85 NE ✓

~~125/77~~ 125/70 SW ✓

120/45 NE ✓

168/62 SW ✓

070/70 N ✓

042/45 SE ✓

040/70 ✓

027/65 N ✓

072/46 SE ✓

015/45 NW ✓

050/50 SE ✓

120/60 NE ✓

060/50 NW ✓

080/55 NW ✓

015/55 W ✓

130/80 SW ✓

030/74 NW ✓

150/95 NE ✓

150/70 SW ✓

160/78 W ✓

070/71 SE ✓

# Unmineralized joints/fractures

- 137/58 SW ✓
- 137/58 SW ✓
- 150/85 SW ✓
- 025/85 NW ✓ *unmineralized*
- 095/90 ✓
- 160/38 SW ✓
- 177/71 E ✓
- 167/68 SW ✓
- 070/83 SE ✓
- 060/62 SE ✓
- 095/75 N ✓
- 035/55 SE ✓
- 145/40 SW ✓
- 212/55 SE ✓
- 000/72 E ✓
- 115/40 SW ✓
- 020/66 W ✓
- 125/83 NE ✓
- 160/65 E ✓
- 070/45 SE ✓
- 130/25 SW ✓
- 000/60 E ✓
- 052/69 NW ✓
- 050/72 NW ✓

Mineralized breccia bodies

040/90 ✓

110/73N ✓

170/62E

Mineralized dyke contacts

00/50W ✓

020/79NW ✓

090/66N ✓

043/73N ✓

074/84N ✓

080/90 ✓

070/28SE ✓

050/50NW ✓

080/78N ✓

110/90 ✓

130/60NE ✓

015/72NW ✓

077/82N ✓

090/85S ✓

005/65W



Unmineralized dyke contacts

140/81 NE ✓

090/82 N ✓

105/86 N ✓

148/72 NE ✓

095/80 N ✓

050/60 NW ✓

080/42 W ✓

020/76 NW ✓

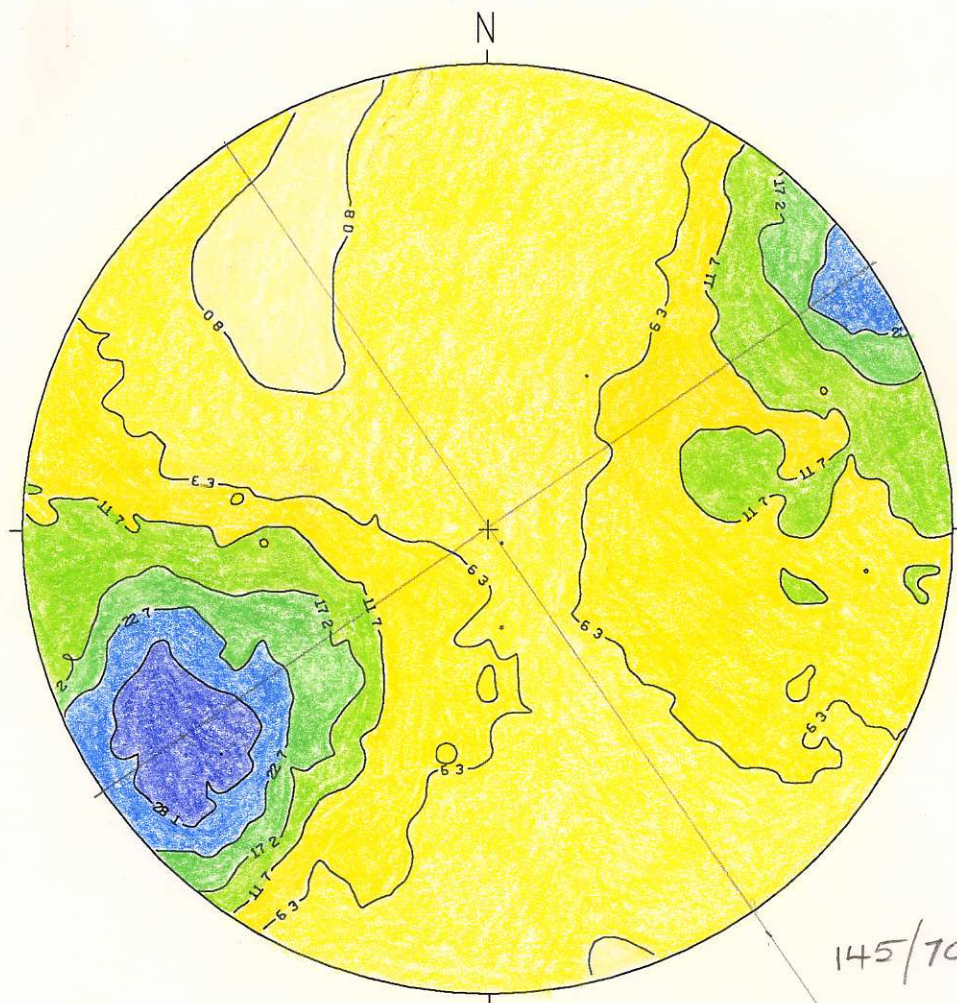
015/75 W ✓

168/78 W .

Ashcroft Sheet Data (92I)








Contoured Bedding Data (Nicola)

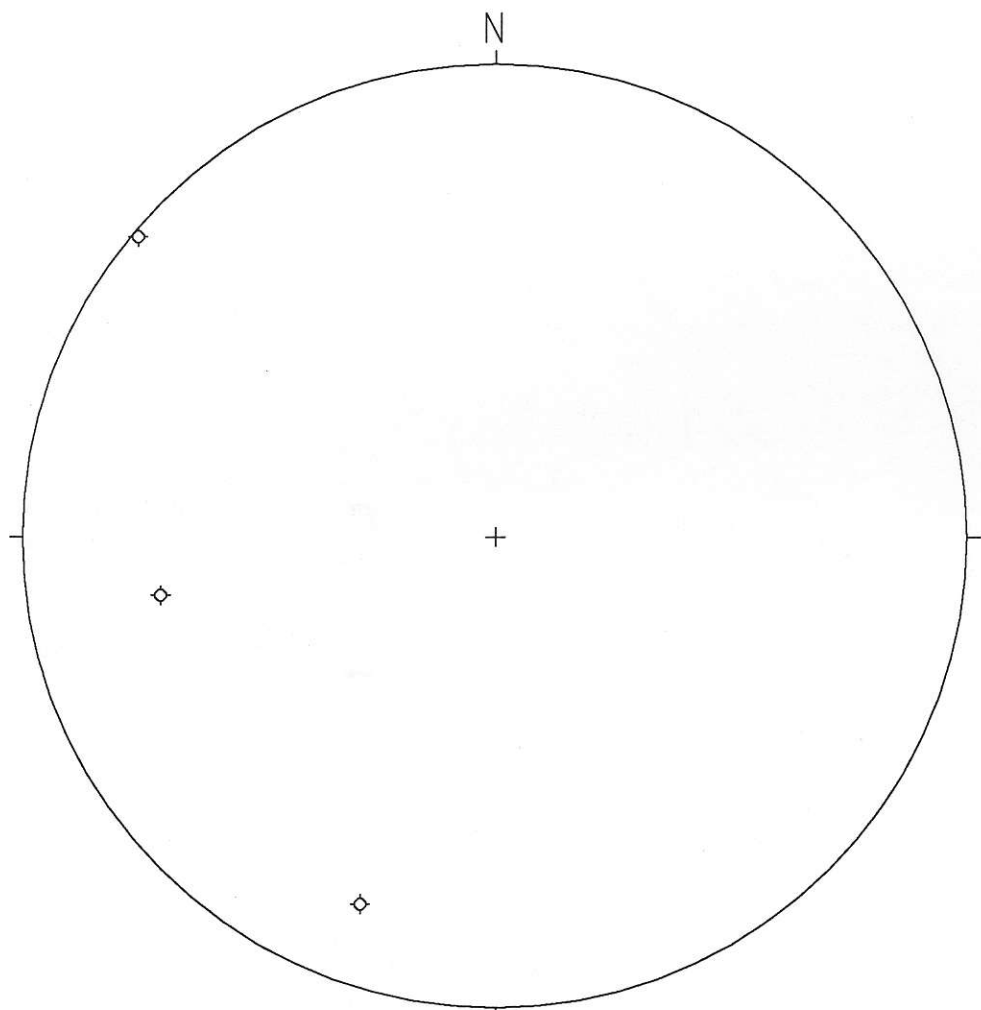
Number of Sample Points 125



145/70 NE

## LEGEND

	:	0.0 to 0.8%
	:	0.8 to 6.3%
	:	6.3 to 11.7%
	:	11.7 to 17.2%
	:	17.2 to 22.7%
	:	22.7 to 28.1%
	:	28.1 to 33.6%



Ajax West Pit (Afton Mine)

Projection

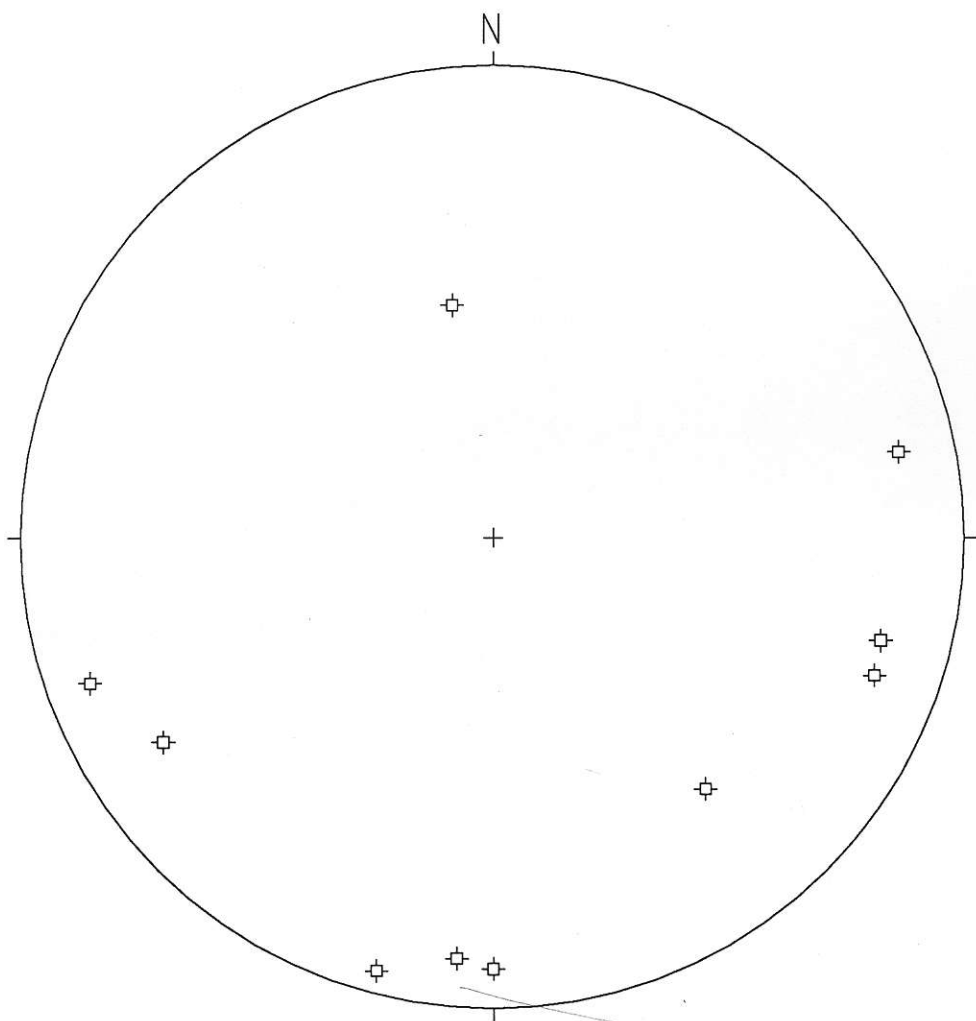
Schmidt

Number of Sample Points

3

◊ Mineralized Breccia Bodies

Mineralized Breccia Contacts



Ajax West Pit (Afton Mine)

Projection

Schmidt

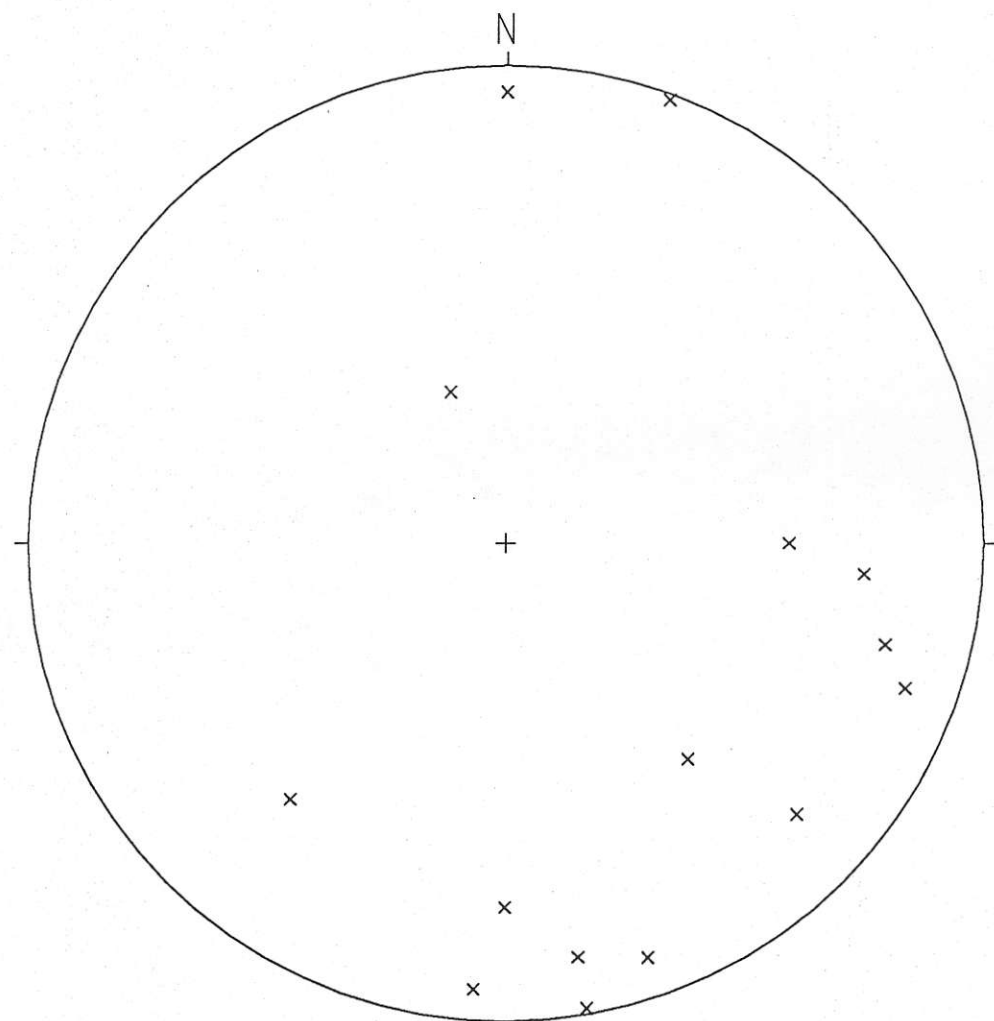
Number of Sample Points

10

⊕ Unmineralized Dyke Contacts

Unmineralized Dyke Contacts

*EW/90 like mineralized dyke contacts.*



Ajax West Pit (Afton Mine)

Projection Schmidt  
Number of Sample Points 15

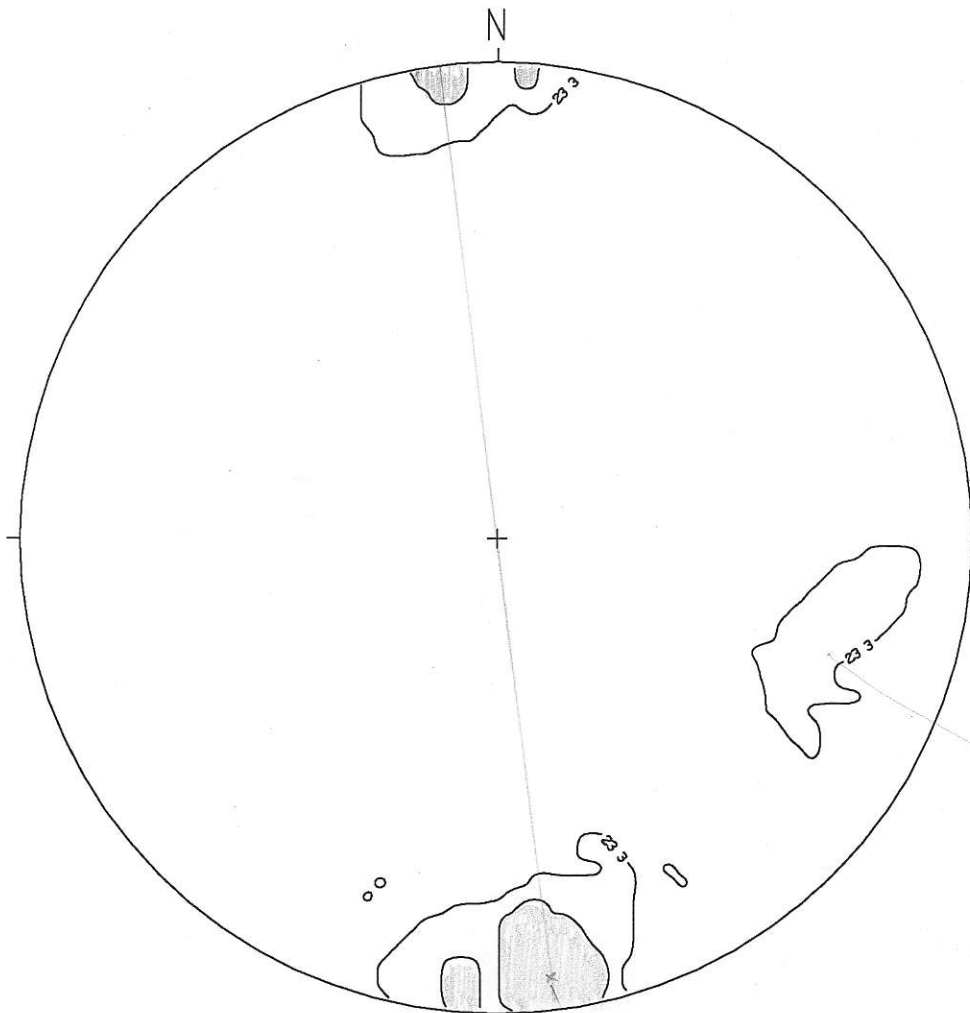
x Mineralized Dyke Contacts

Mineralized Dyke Contacts

Ajax West Pit (Afton Mine)

Step Function Grid

Number of Sample Points 15



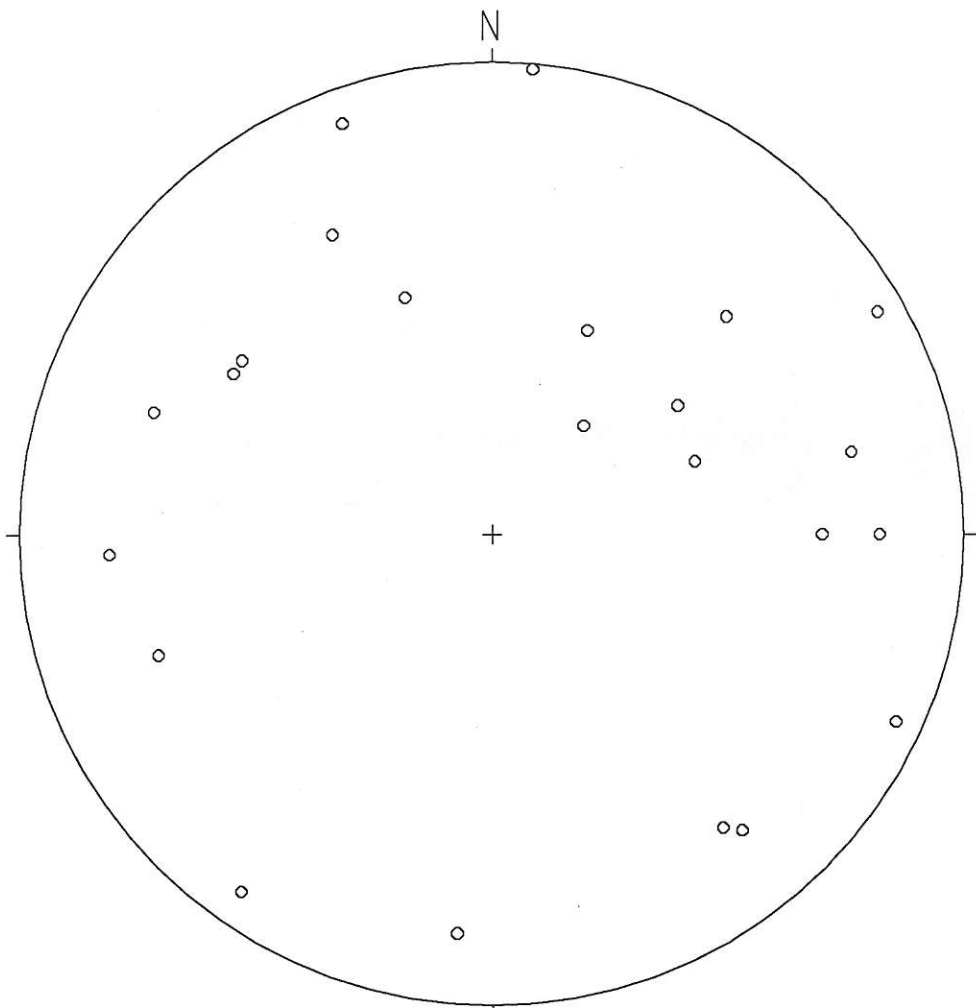
083/85N

SW, ENE

NNE/75N

083/85N

Mineralized Dyke Contacts



Ajax West Pit (Afton Mine)

Projection

Schmidt

Number of Sample Points

24

◦ Unmineralized Joints/Fractures

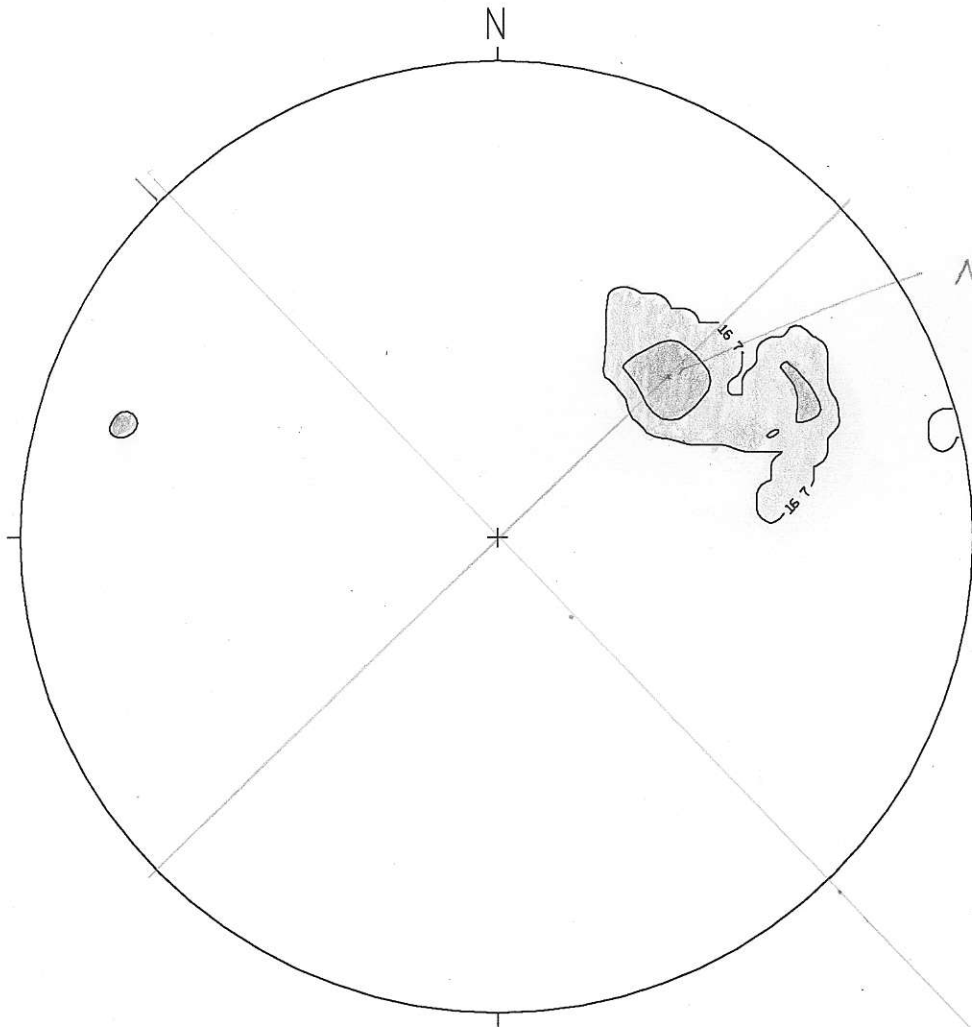
Unmineralized Joints/Fractures



Ajax West Pit (Afton Mine)

Step Function Grid

Number of Sample Points 24

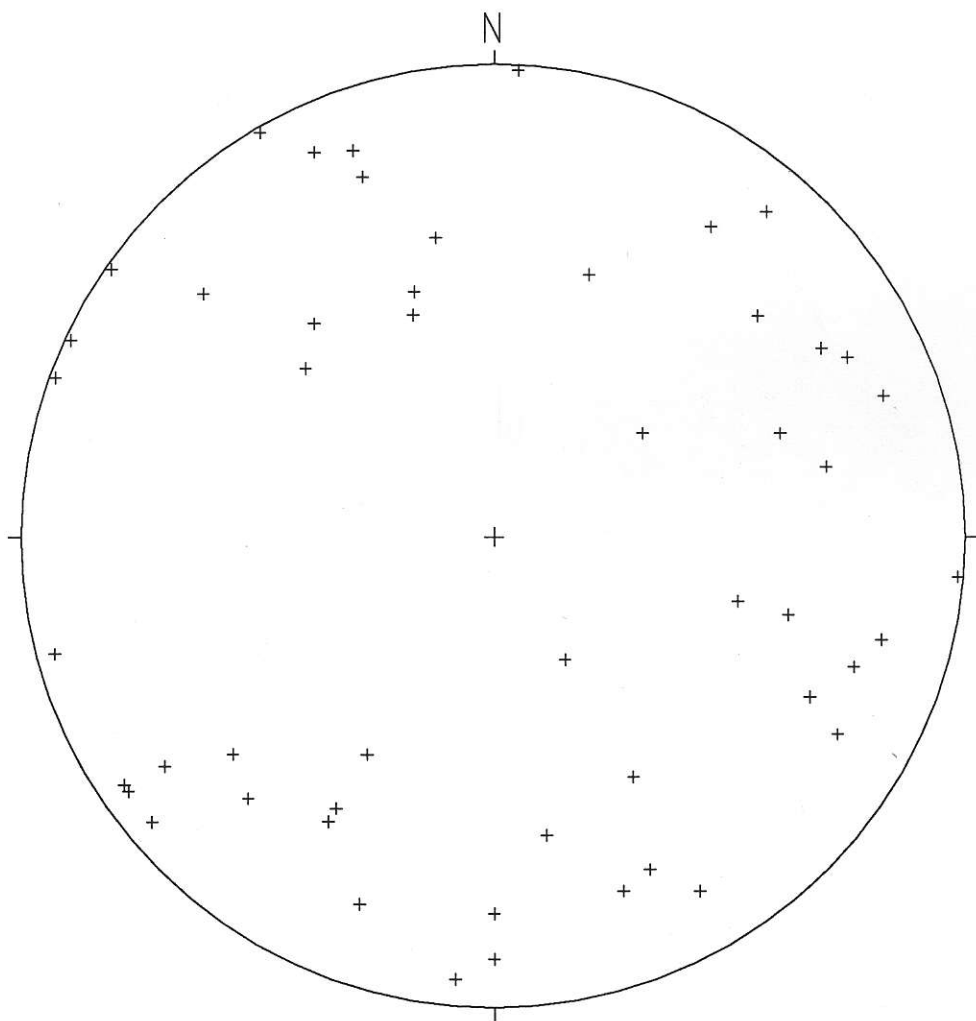


NW/50-60 SW

Shallow dipping  
post-ore joints.

135/45 SW

Unmineralized Joints/Fractures



Ajax West Pit (Afton Mine)

Projection

Schmidt

Number of Sample Points

51

+ Mineralized Veins/Fractures

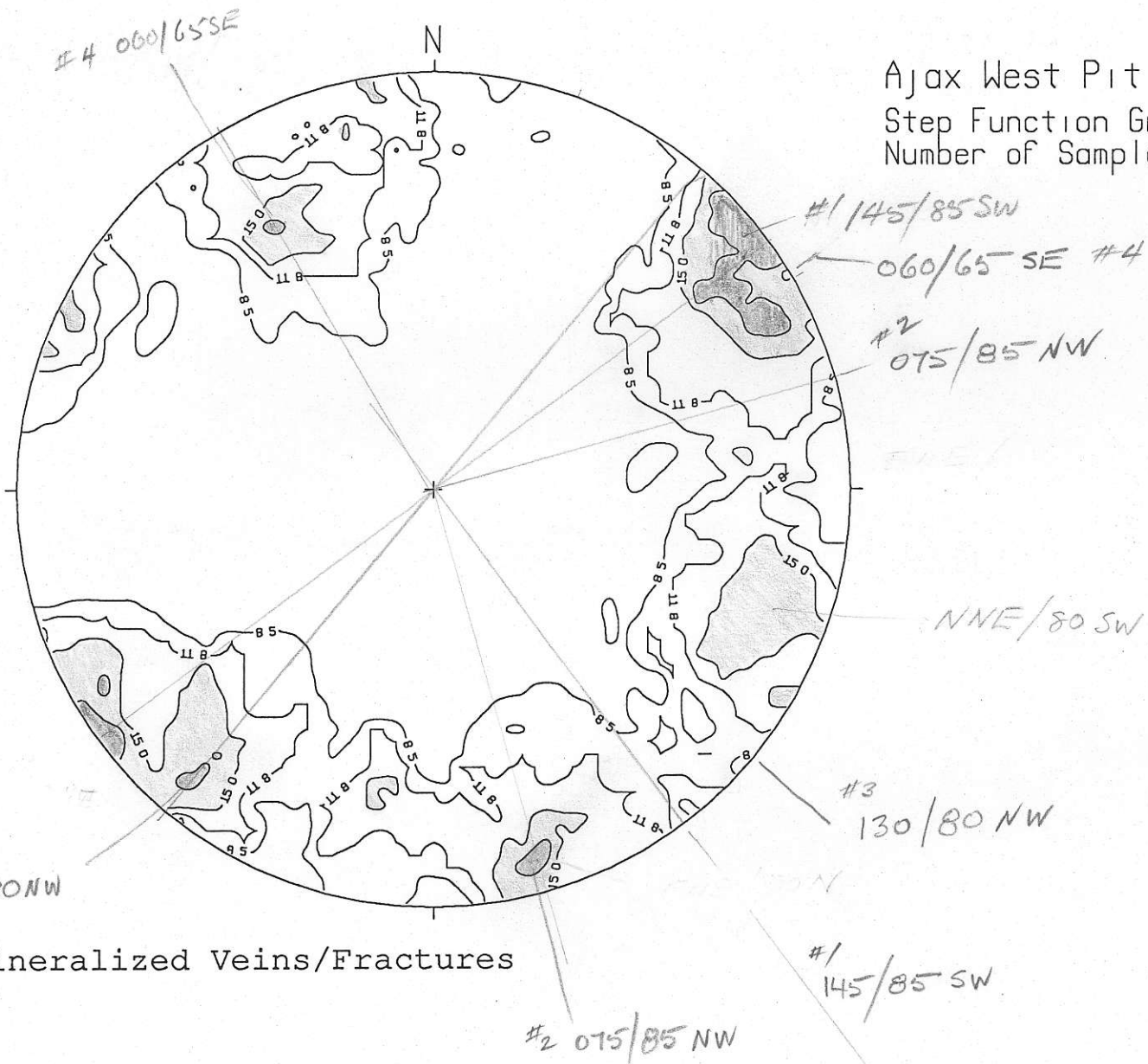
Mineralized Veins/Fractures

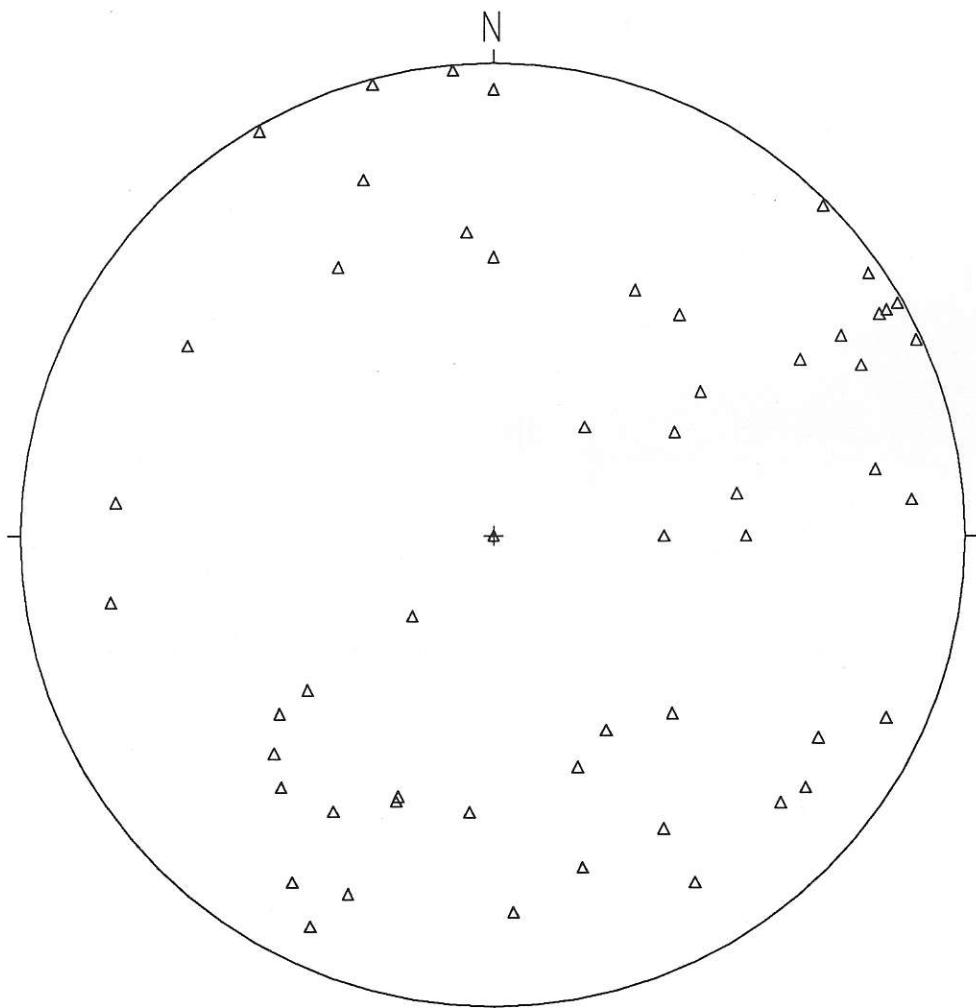
Ajax West Pit (Afton Mine)

Step Function Grid

Number of Sample Points

51





Ajax West Pit (Afton Mine)

Projection

Schmidt

Number of Sample Points

55

△ Unmineralized Faults/Shears

*Shallow structures common.*

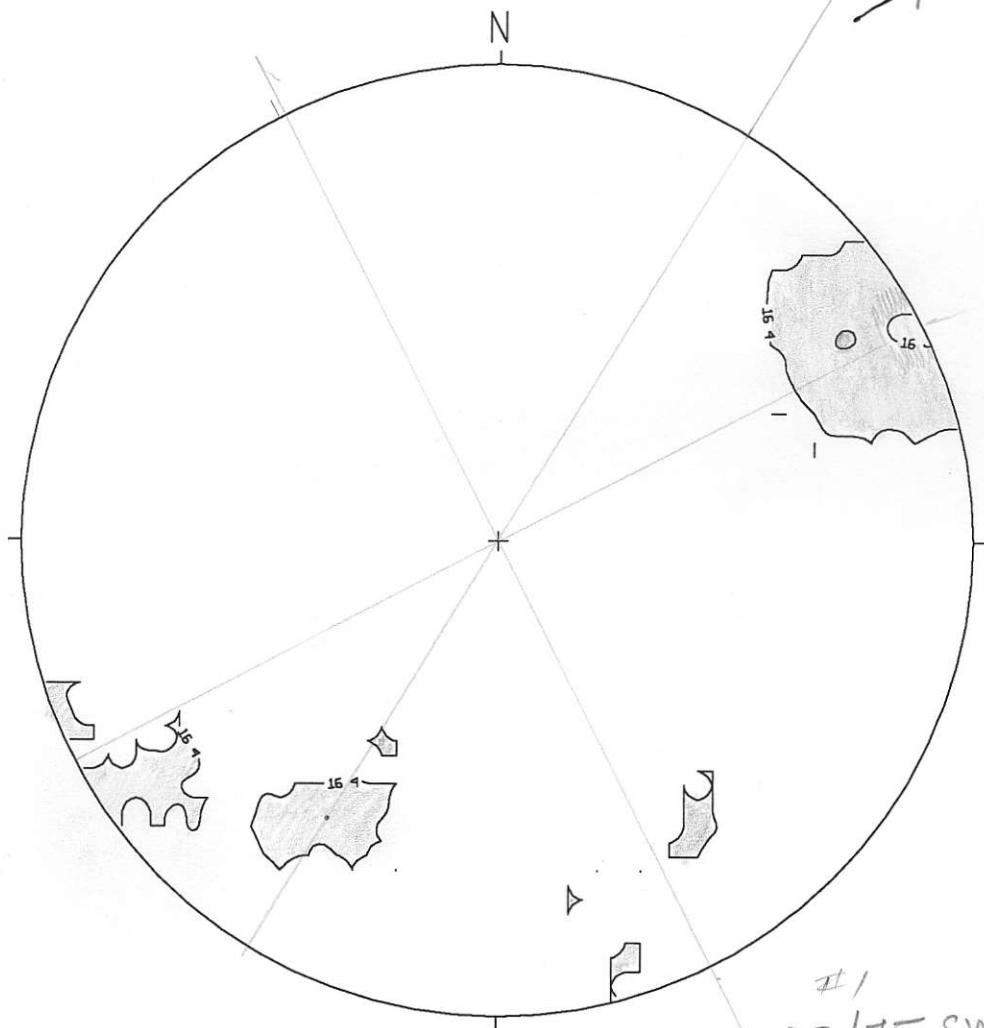
Unmineralized Faults/Shears

#2  
~~030/60NW~~ 120/60NE

Ajax West Pit (Afton Mine)  
Step Function Grid  
Number of Sample Points 55

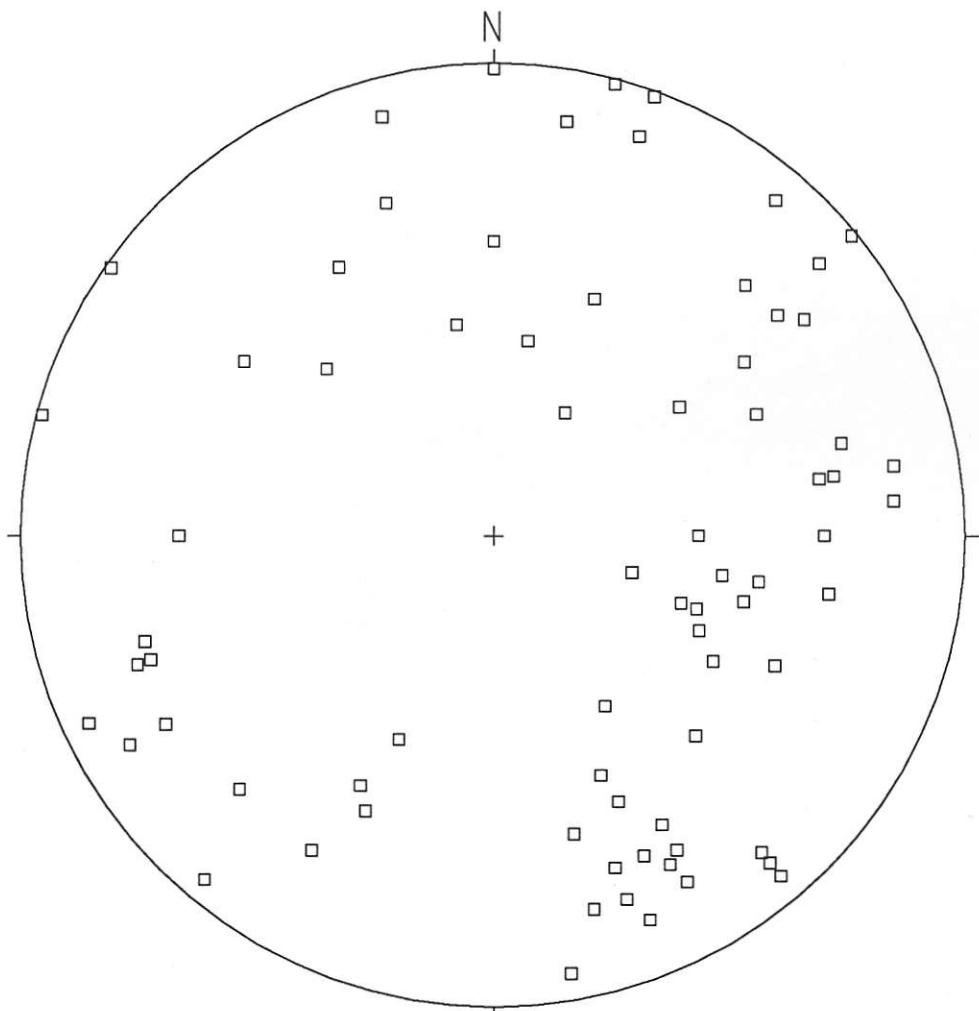
NNW/70-80SW

Similar to unmineralized  
joints, fractures



#1  
153/75 SW

Unmineralized Faults/Shears



Ajax West Pit (Afton Mine)

Projection

Schmidt

Number of Sample Points

75

□ Mineralized Shears/Faults

Mineralized Faults/Shears



Ajax West Pit (Afton Mine)

Step Function Grid

Number of Sample Points

75

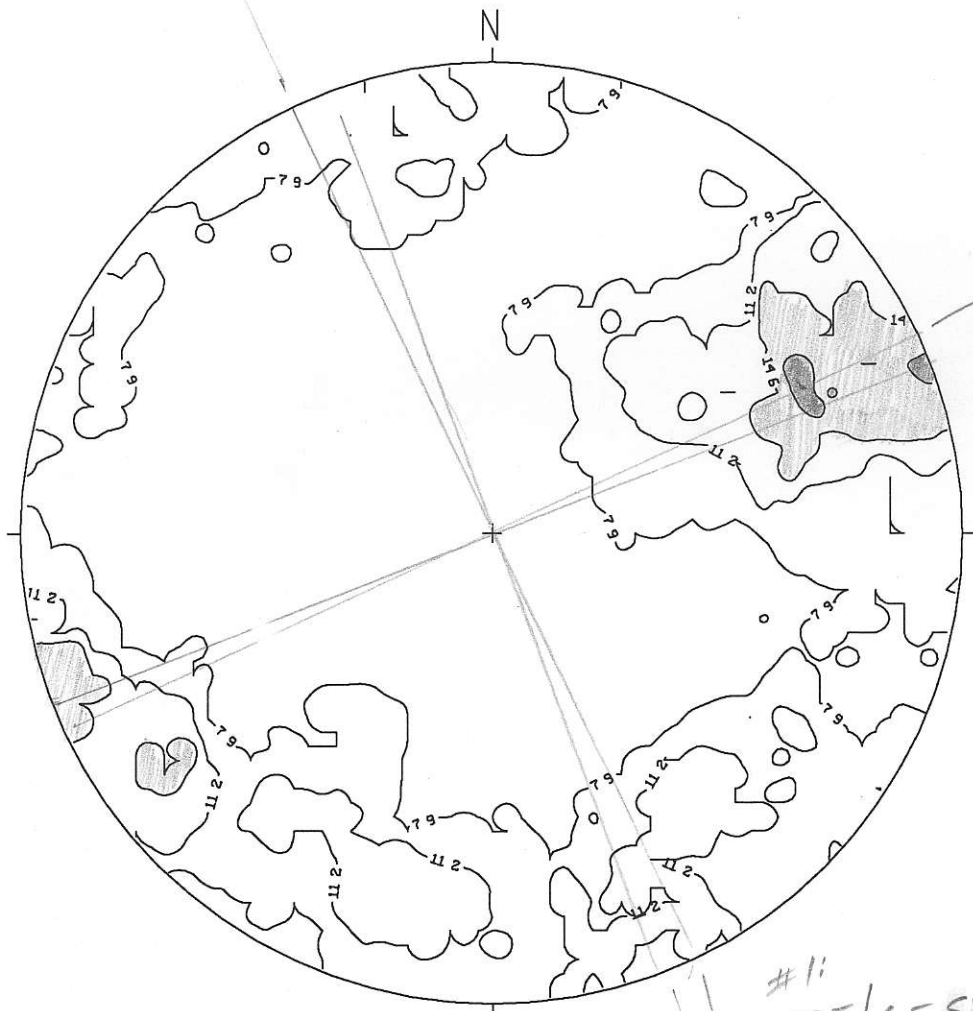
#2

NS/55W shallow dipping fault.

#1

OG2/70NW (65-80NW)

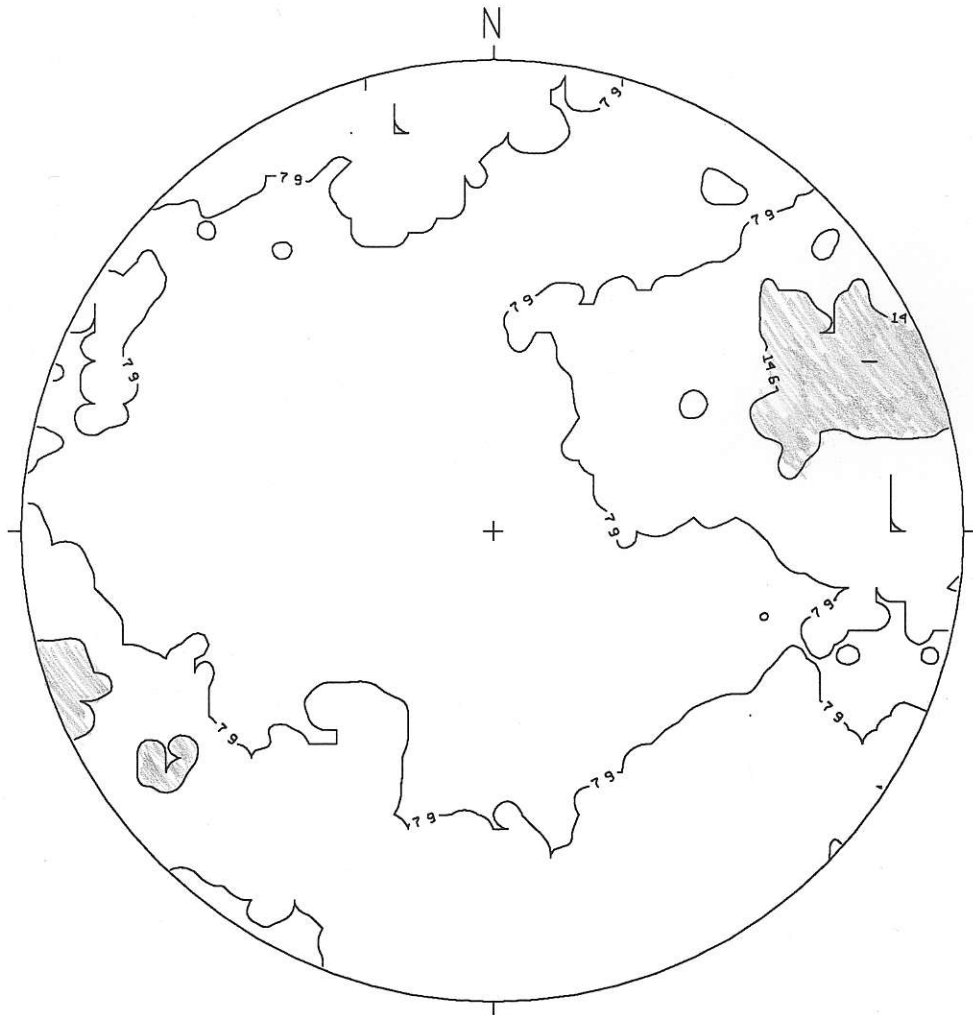
Mineralized Faults/Shears



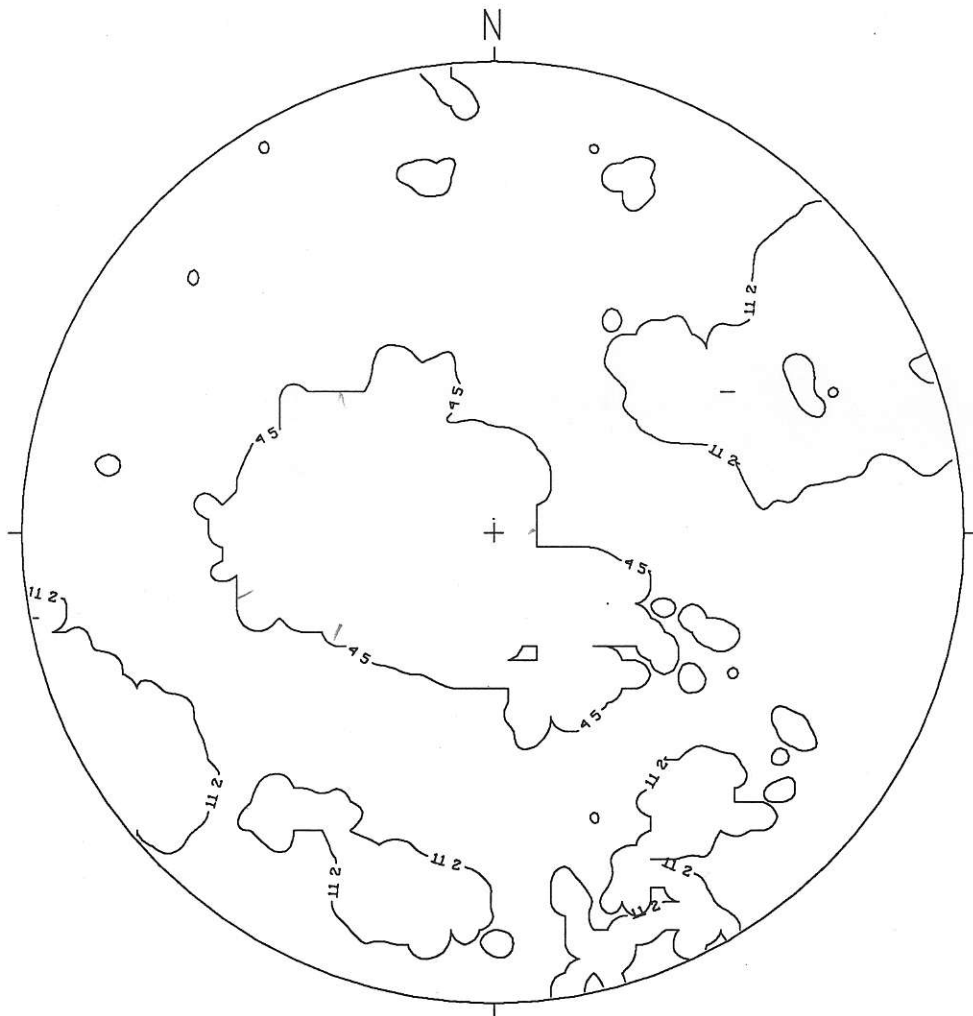
Ajax West Pit (Afton Mine)  
Contoured Unmineralized Data  
Number of Sample Points 89

#1: 155/65 SW  
#2: 160/90

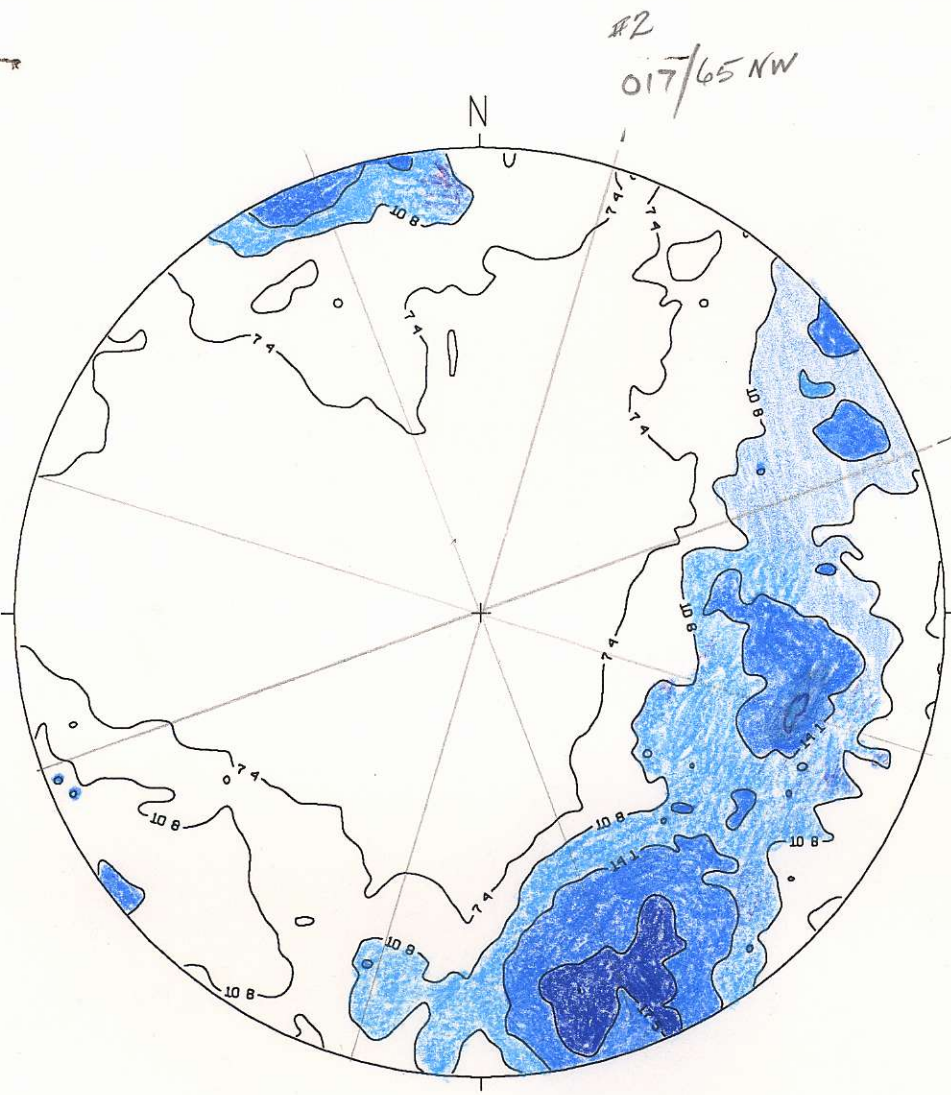




Ajax West Pit (Afton Mine)  
Contoured Unmineralized Data  
Number of Sample Points 89



Ajax West Pit (Afton Mine)  
Contoured Unmineralized Data  
Number of Sample Points 89

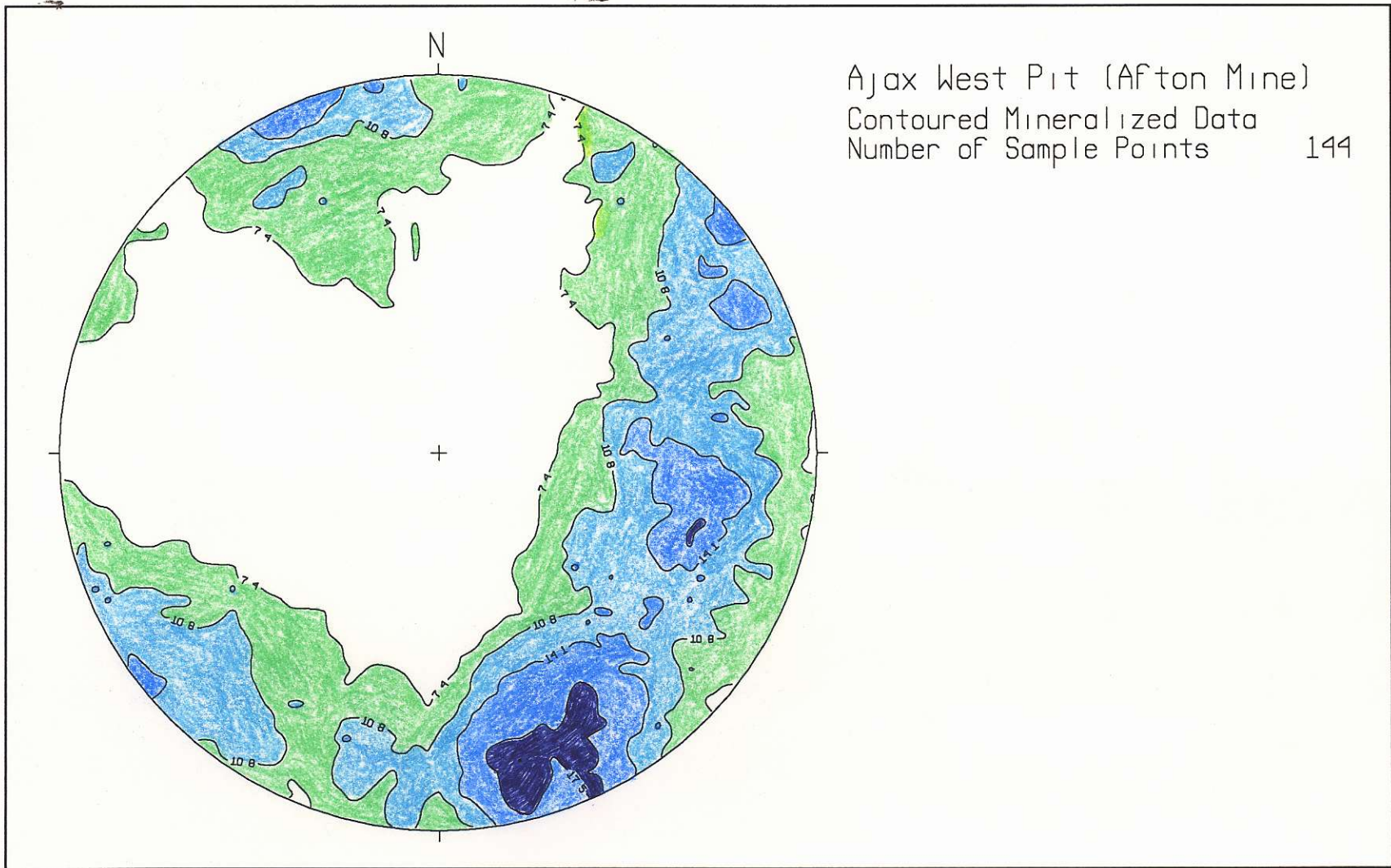


Ajax West Pit (Afton Mine)  
Contoured Mineralized Data  
Number of Sample Points

~~144~~  
141

#1  
070/75 NW

#2  
017/65 NW

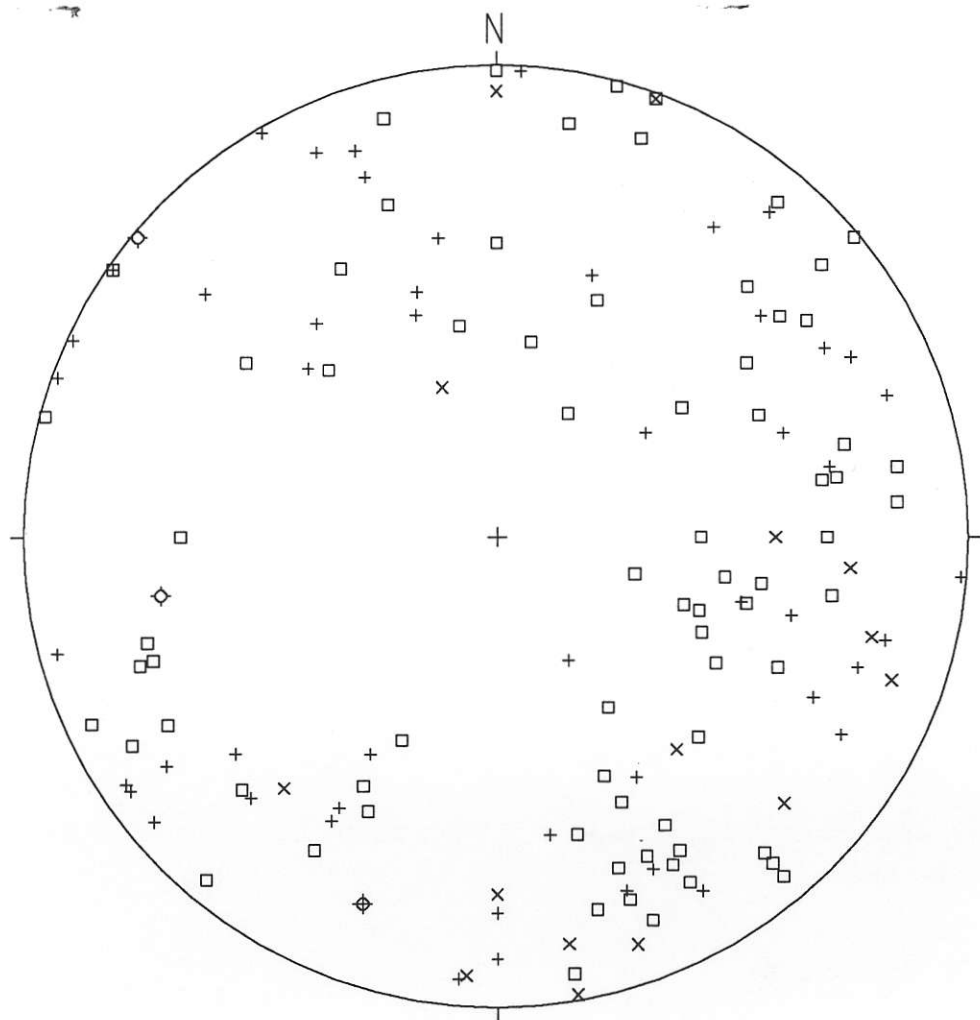


Ajax West Pit (Afton Mine)

Contoured Mineralized Data

Number of Sample Points

144



Ajax West Pit (Afton Mine)

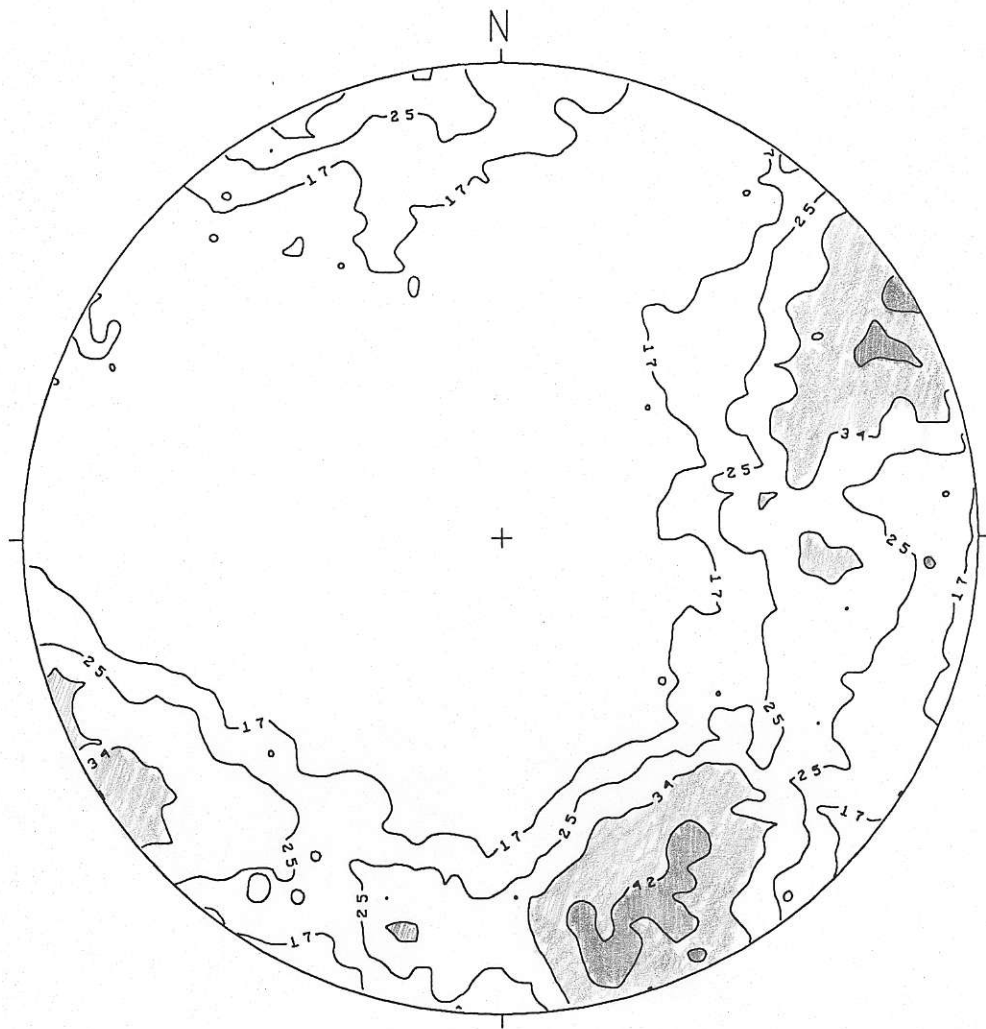
Projection

Schmidt

Number of Sample Points

144

- Mineralized Faults/Shears
- + Mineralized Veins/Fractures
- x Mineralized Dyke Contacts
- ◇ Mineralized Breccia Bodies



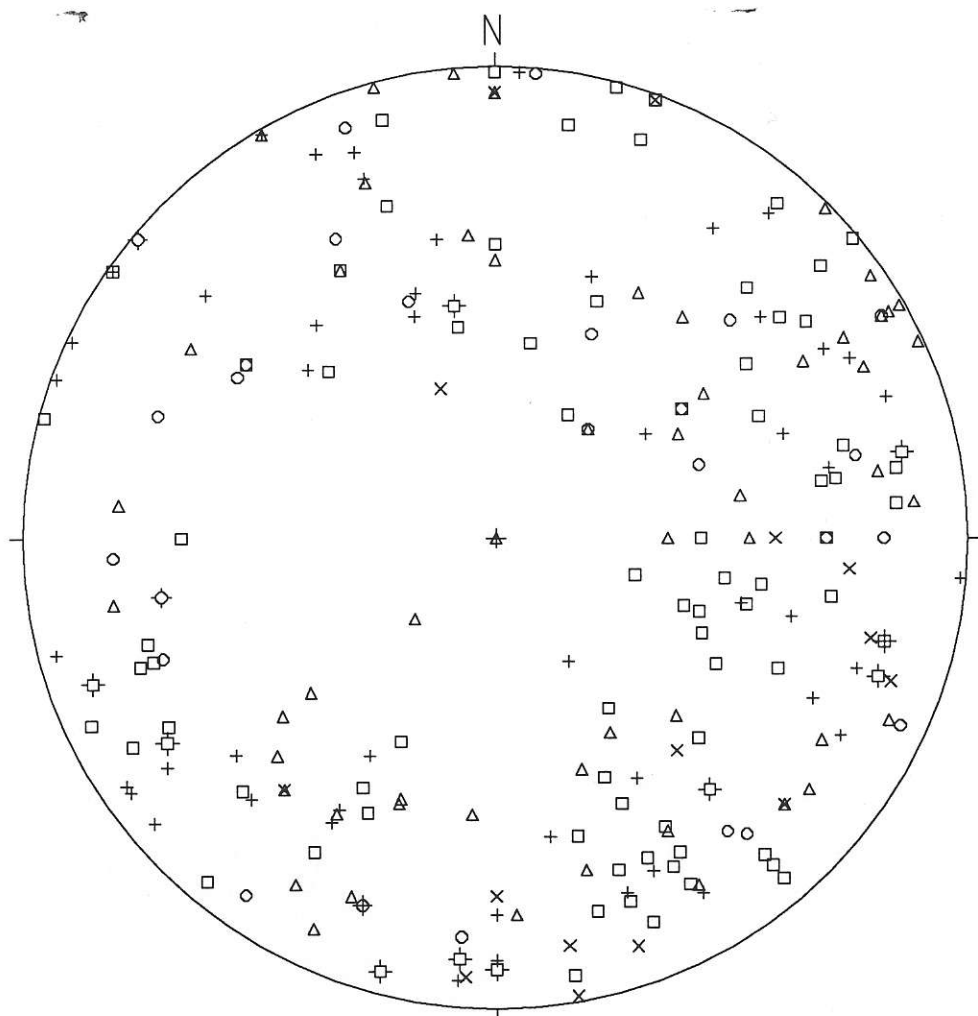
Ajax West Pit (Afton Mine)

Step Function Grid

Number of Sample Points

233

All Structural Data



Ajax West Pit (Afton Mine)

Projection

Schmidt

Number of Sample Points

233

- Mineralized Faults/Shears
- △ Unmineralized Faults/Shears
- + Mineralized Veins/Fractures
- Unmineralized Joints/Fractures
- × Mineralized Dyke Contacts
- ⊕ Unmineralized Dyke Contacts
- ◇ Mineralized Breccia Bodies

All Structural Data