

830595

DUPONT OF CANADA
BAKER MINE

ORE RESERVE REMAINING

AUGUST 31st

1983

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In the following discussion the ore is divided into three categories

PROBABLE ORE - On which firm plans can be made

POSSIBLE ORE - For which allowance must be made in planning

INDICATED ORE - On which plans can be changed if further test work puts it in a higher category

The relationship between these categories and their definition is shown in the following diagram

	POSSIBLE ORE	INDICATED ORE	
POSSIBLE ORE	① Sampling adequate to predict ore grade and tons with confidence ② Possible major mining problems	① Sampling indicates ore grade, but is inadequate to predict tons and grade with confidence ② Possible major mining problems.	INDICATED ORE
PROBABLE ORE	① Sampling adequate to predict ore grade and tons with confidence ② No major mining problems foreseen	① Sampling indicates ore grade, but is inadequate to predict tons and grade with confidence ② No major mining problems foreseen	POSSIBLE ORE
	PROBABLE ORE	POSSIBLE ORE	

BAKER MINE

ESTIMATED ORE REMAINING AUGUST 31st 1983

		<u>TONS</u>	<u>Au</u>	<u>Ag</u>	<u>Auoz</u>	<u>Ag oz</u>
<u>PROBABLE ORE</u>						
BLOCK	<u>I</u>	2600	1.30	15.4	3380	40040
"	<u>V</u>	345	.41	3.4	141	1186
"	<u>VI</u>	<u>260</u>	<u>.47</u>	<u>5.5</u>	<u>122</u>	<u>1430</u>
		3205	1.14	13.3	3643	42656

<u>POSSIBLE ORE</u>						
BLOCK	<u>III</u>	650	.96	26.0	624	16900
"	<u>IV</u>	1461	.50	9.5	727	13823
"	<u>VII</u>	554	.45	3.6	249	1994
#8 STOCKPILE		<u>793</u>	<u>.40</u>	<u>12.1</u>	<u>317</u>	<u>9595</u>
		3458	.55	12.2	1917	42312

<u>INDICATED ORE</u>						
BLOCK	<u>II</u>	333	1.35	17.4	449	5794
"	<u>VIII</u>	167	.20	1.3	33	217
	<u>IX</u>	<u>4500</u>	<u>.38</u>	<u>6.6</u>	<u>1710</u>	<u>29700</u>
		5000	.44	7.1	2192	35711

<u>SUB ORE</u>						
#9 STOCKPILE		2501	.16	3.6	411	8993
<u>TOTAL</u>		<u>14164</u>	<u>.58</u>	<u>9.1</u>	<u>8163</u>	<u>129672</u>

This compares the estimate of June 30
of 17217 .45 9.1 7898 156868

ORE BLOCKS

I - 55-52 STOPE UNDERGROUND SALVAGE - PROBABLE
MAIN VEIN

GRADE

Back Sampling	<u>W</u>	<u>Au</u>	<u>Ag</u>	<u>WxAu</u>	<u>WxAg</u>
	5	.05	1.7	.25	8.5
	5	.06	2.5	.30	12.5
	5	.30	13.8	1.50	69.0
	5	.07	.4	.35	2.0
	5	.01	.2	.05	1.0
	3	.04	2.4	.12	7.2
	3	.40	6.5	1.20	19.5
	5	.38	9.9	1.90	49.5
	4	.37	15.7	1.48	62.8
	4	1.90	9.4	7.60	37.6
	4	.73	5.8	2.92	23.2
	7	1.14	17.0	7.98	119.0
	4	.73	5.8	2.92	23.2
	<u>59</u>				

Diamond drill hole	28	3.20	33.8	89.60	946.4
.U-81-8	<u>5.5</u>	.45	8.5	<u>2.47</u>	<u>46.7</u>
	92.5			120.64	1427.8
		1.30 Au	15.4 Ag		

VOLUME

Estimated mean width = 13'
 " area = $30 \times 30 = 900$
 $20 \times 75 = 1500$
2400

$$V = 2400 \times 13 = 31,200 \text{ ft}^3$$

$$T = \frac{31,200}{12} = 2,600$$

NOTE: Mapping of the back shows the vein to be split, with a minor 5' vein in the hang wall. The above calculation refers to the main portion of the vein

II - 55-52 STOPE UNDERGROUND SALVAGE - INDICATED
HANG WALL SPLIT VEIN

GRADE

TEST HOLE	<u>W</u>	<u>Au</u>	<u>Ag</u>	<u>WxAu</u>	<u>WxAg</u>
	4	2.40	29.9		
	4	.31	5.0		
Mean =	1.35		17.4		

VOLUME

5' wide x 46' long x 20' high = 4000

$\frac{4000}{12} = 333 \text{ Tons}$

333 Tons @ 1.35 Au 17.4 Ag

III - 55-54 STOPE CROWN PILLAR - POSSIBLE

GRADE	<u>W</u>	<u>Au</u>	<u>Ag</u>	<u>WxAu</u>	<u>WxAg</u>
DDH C-79-15	12	1.62	1.54		

BACK Samples

<u>W</u>	<u>Au</u>	<u>Ag</u>	<u>WxAu</u>	<u>WxAg</u>	<u>W</u>	<u>Au</u>	<u>Ag</u>	<u>WxAu</u>	<u>WxAg</u>
5	.10	2.7	.5	13	6.5	.24	5	1.56	33
5.5	.24	6.7	1.3	38	4	.79	16	3.16	64
8.0	.22	6.4	1.8	51	7	1.82	37	12.74	259
9.0	.06	1.6	.5	14	6.5	.43	9	2.79	58
15.0	2.40	68.0	36.0	1020	6.0	.06	1	.36	6
11.5	2.34	6.0	26.9	759	113	.98	26	110.3	2956
19.5	1.15	32.0	22.5	632					
9.5	.02	1.0	.2	9					

VOLUME

MEAN W = $\frac{113}{13} = 8.7$

650 Tons @ 0.96 Au 26.0 Ag

L = 60

V = 8.7 x 60 x 15

H = 15

= $\frac{7830}{12} = 650 \text{ Tons}$

IV 54-51 STOPE CROWN PILLAR - POSSIBLE

GRADE

Back Sampling	W	Au	Ag	WxAu	WxAg
<u>IV a</u>	8.0	.04	.8	.32	6.4
	9.5	.36	3.8	3.42	36.1
	10.5	.31	5.6	3.25	58.8
	12.0	.15	1.1	1.80	13.2
	11.0	.05	1.4	.55	15.4
	11.0	.48	2.1	5.28	23.1
	<u>8.0</u>	<u>.16</u>	<u>2.2</u>	<u>1.28</u>	<u>17.6</u>
	70.0	.23	2.4	15.90	170.6

<u>IV b</u>	6.0	1.21	28	7.26	168
	7.0	.29	13	2.03	91
	8.5	.39	12	3.31	102
	10.0	.17	3	1.70	30
	12.0	.31	13	3.72	156
	11.5	.56	13	6.44	149
	12.0	1.54	17	18.48	204
	<u>11.5</u>	<u>.27</u>	<u>3</u>	<u>3.10</u>	<u>34</u>
	78.5	.59	11.9	46.04	934

VOLUME

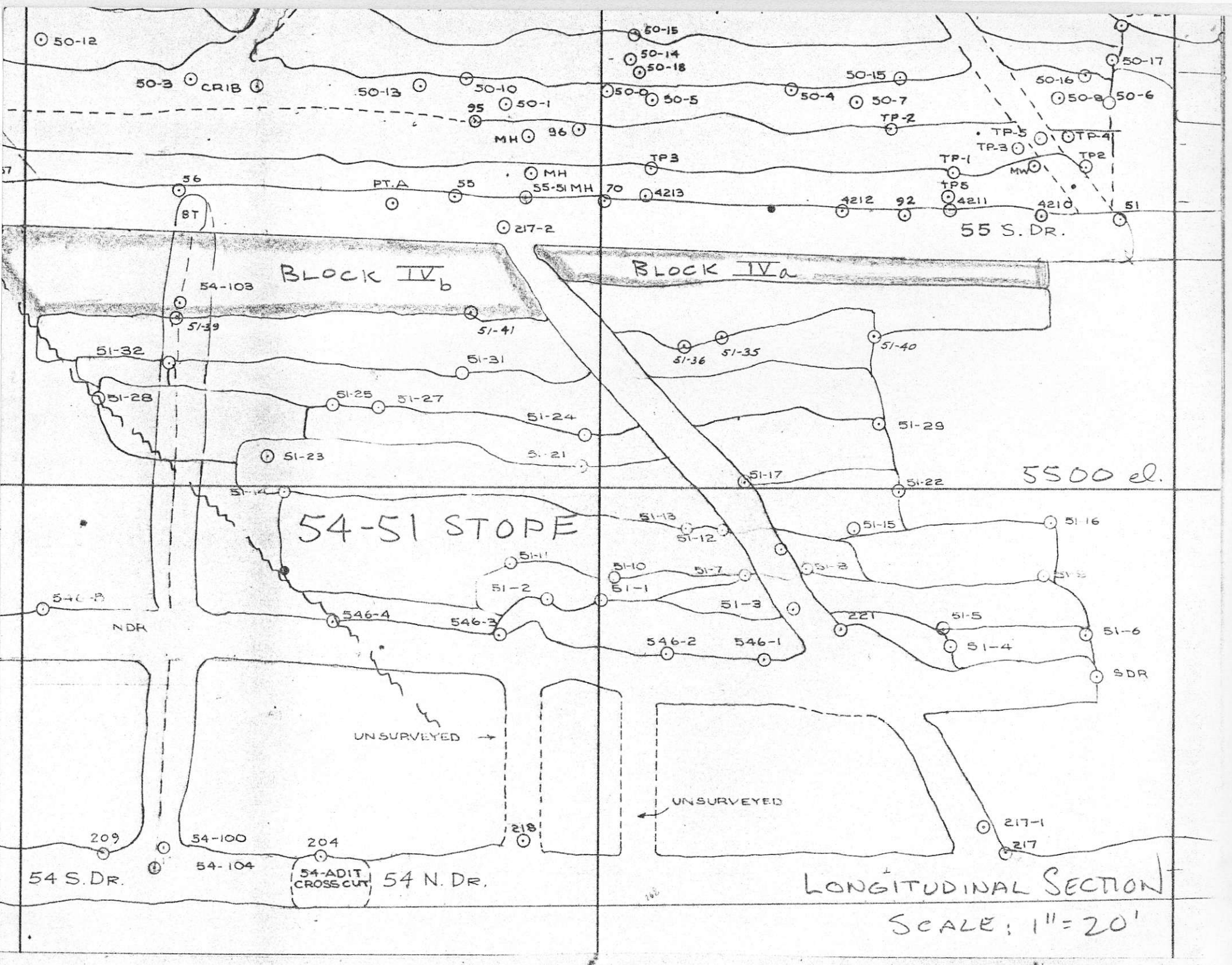
IV a
 $V = (W=10.0) \times (L=90) \times (H=5) = 4500$

Tons = $\frac{4500}{12} = 375$

IV b
 $V = (W=9.8) \times (L=95) \times (H=14) = 13034$

Tons = $\frac{13034}{12} = 1086$

	Tons	Au	Ag	Au oz	Ag oz
<u>IV a</u>	375	.23	2.4	86.2	900
<u>IV b</u>	1086	.59	11.9	640.7	12923
<u>IV</u>	1461	.50	9.5	726.9	13823



V - SS-SO B STOPE - PROBABLE

Grade	w	Au	Ag	w x Au	w x Ag
Back sample	7	.31	1.89		

Volume $5 \times 8 \times 10 = 400$

Tons = $\frac{400}{12} = 33$

33 tons @ .31 Au 1.9 Ag

Vb GRADE

Grade	w	Au	Ag	w x Au	w x Ag
Back sample	1.0	4.79	18.0	4.79	18.0
	7.0	0	0	0	0
	.6	.05	.6	.03	.36
	7.4	0	0	0	0
	1.0	.02	.3	.02	.3
	6.0	0	0	0	0
	1.0	.02	.2	.02	.2
	6.0	0	0	0	0
	2.0	6.49	64.9	12.98	129.8
	6.0	0	0	0	0
	2.3	1.12	13.4	2.58	30.8
	5.7	0	0	0	0
	3.0	1.07	9.7	3.21	29.1
	4.0	0	0	0	0
	1.0	1.26	9.1	1.26	9.1
	6.0	0	0		
	<u>60</u>	<u>14.82</u>	<u>116.2</u>	<u>24.89</u>	<u>217.7</u>

VOLUME

= $50 \times 7.5 \times 10$

= 3750

Tons = $\frac{3750}{12} = 312$

@ 0.42 Au 3.6 Ag

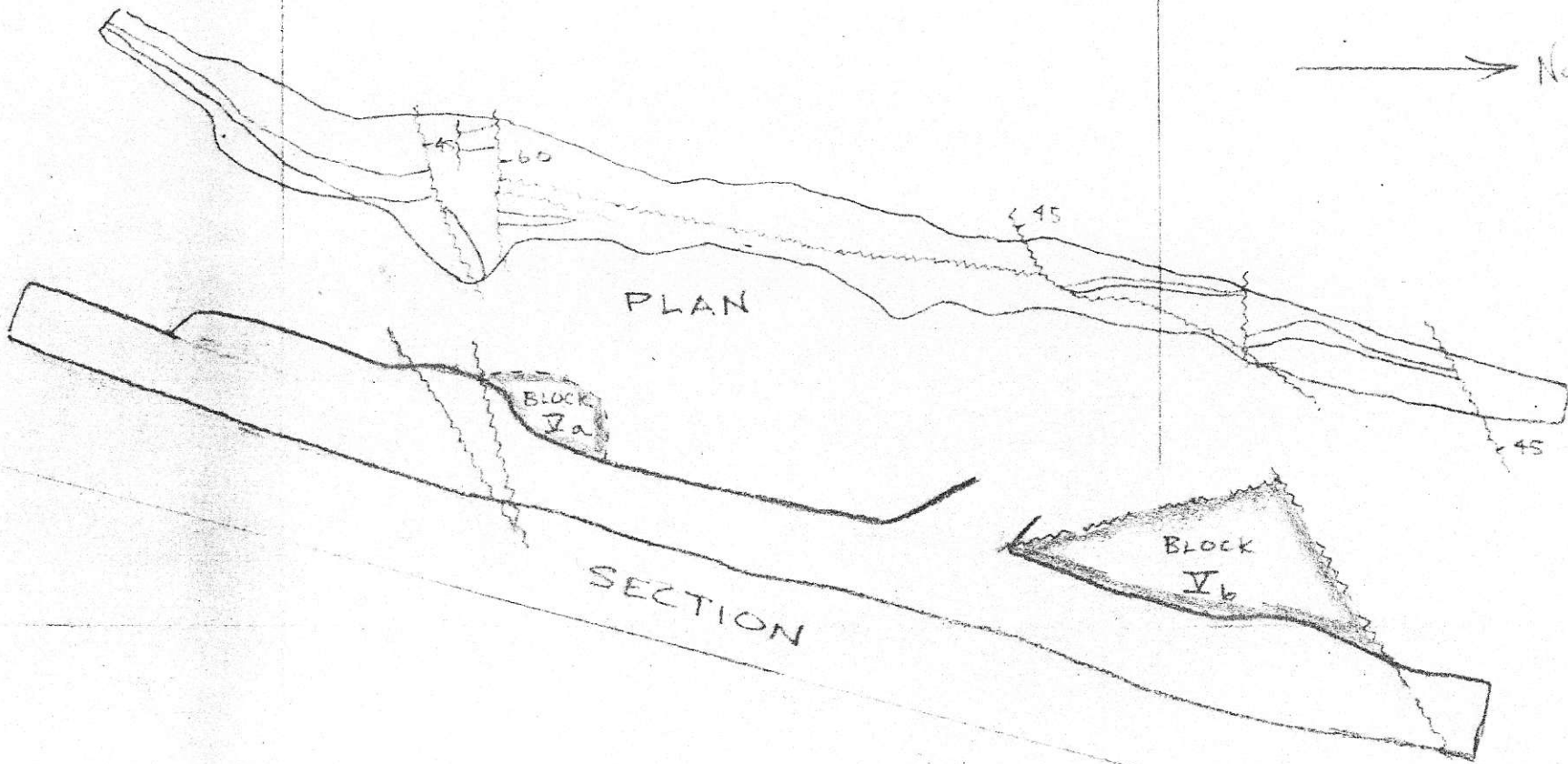
Au = .42 Ag = 3.6

	Tons	Au	Ag	Au oz	Ag oz
	33	.31	1.9	10.2	63
	<u>312</u>	<u>.42</u>	<u>3.6</u>	<u>131.0</u>	<u>1123</u>
BLOCK <u>V</u>	<u>345</u>	<u>.41</u>	<u>3.4</u>	<u>141.2</u>	<u>1186</u>

7+00 E

45+00 N

46+00 N



PLAN

SECTION

BLOCK Ia

BLOCK Ib

5560 d

55-50 R SLOPE

AUG 31/83

SCALE 1"=20'

VI 55-50 B DRIFT BACK - PROBABLE

An isolated section of the B vein of ore grade exists in the back of 55-50 B DRIFT between 51+35 n and 51+60 n.

Grade

Back Sample	<u>W</u>	<u>Au</u>	<u>Ag</u>	<u>W x Au</u>	<u>W x Ag</u>
	0.6	.47	15	.28	.9
Diluted to 5' min mining width	4.4	0	0	0	0
	0.9	8.14	110.5	7.33	99.9
	4.1	0	0	0	0
	1.5	.87	5.4	1.30	8.1
	3.5	0	0	0	0
	2.2	.27	1.0	.59	2.2
	<u>2.8</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Volume	20.0	.47	5.5	9.5	111.1

$$V = (W=5.0) \times (L=25) \times (H=25) = 3125$$

$$\text{Tons} = \frac{3125}{12} = 260$$

260 tons @ 0.47 Au 5.5 Ag

BLOCK VII 54 DRIFT SOUTH BACK - POSSIBLE
49+40m to 49+80m

GRADE

Face samples	W	Au	Ag	Wx Au	Wx Ag
10	.13	.6	1.3	6	
4	1.90	3.0	7.6	12	
6	0	0	0	0	
7	.16	.8	1.1	6	
5.5	2.50	6.2	13.7	34	
4.5	0	0	0	0	
7.5	.31	4.9	2.3	37	
5.5	.63	10.6	3.5	58	
4.5	0	0	0	0	
3.0	.14	1.4	.4	4	
5.0	.04	1.0	.2	5	
3.0	.40	8.4	1.2	25	
2.0	0	0	0	0	
3.5	.17	2.8	.6	10	
5.0	.14	2.2	.7	11	
5.0	.32	3.2	1.6	16	
7.5	.77	12.6	5.8	94	
<u>88.5</u>	<u>.45</u>	<u>3.6</u>	<u>40</u>	<u>318</u>	

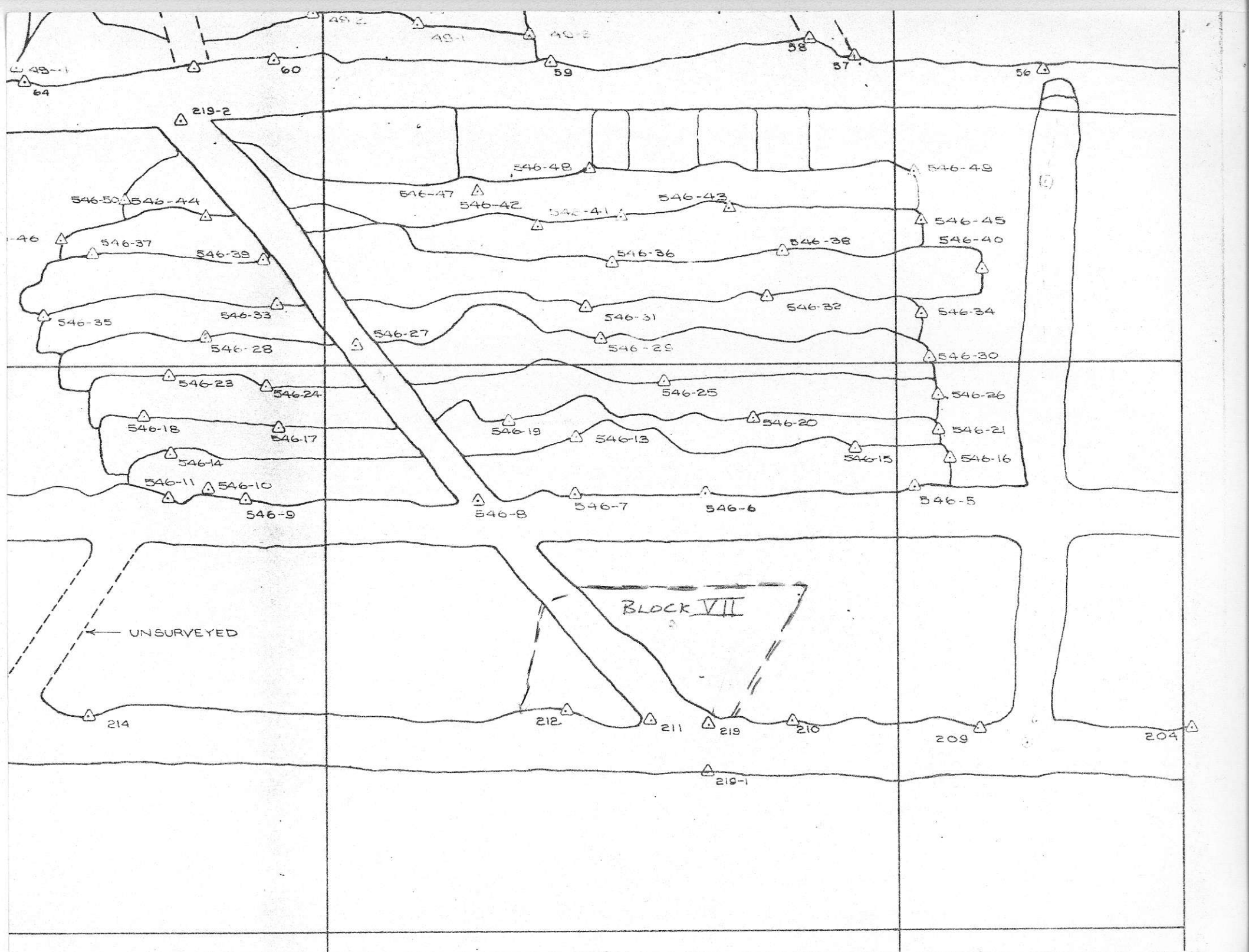
VOLUME

$$V = \left[\frac{(L_1 = 40) + (L_2 = 45)}{2} \right] \times (H = 23) \times (W = 6.8)$$

$$V = 6647$$

$$Tons = \frac{6647}{12} = 554$$

554 Tons @ 0.45 Au 3.6 Ag



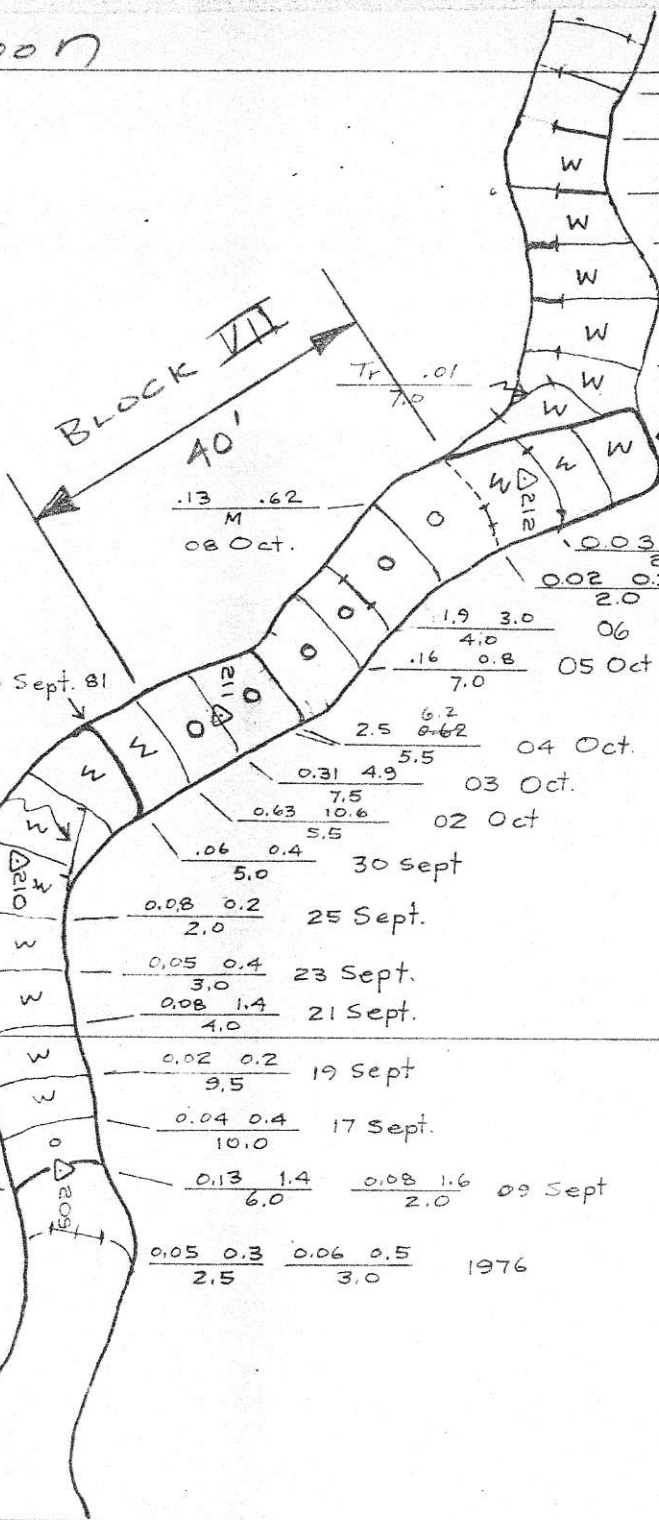
49700N

BLOCK VII
40'

Tr. Tr.
8.0
27 Sept.

50700N

Face
15 Sept. 81



.13 .62
M
08 Oct.

.003 .03

.002 .03

.19 3.0

.16 0.8

7.0

2.5 6.2

0.31 4.9

0.63 7.5

.06 0.4

5.0

0.08 0.2

2.0

0.05 0.4

3.0

0.08 1.4

4.0

0.02 0.2

9.5

0.04 0.4

10.0

0.13 1.4

6.0

0.05 0.3

2.5

Tr. .01
7.0

Face 15 Oct / 81

0.03 .03

0.02 .03

2.0

.19 3.0

.16 0.8

7.0

2.5 6.2

0.31 4.9

0.63 7.5

.06 0.4

5.0

0.08 0.2

2.0

0.05 0.4

3.0

0.08 1.4

4.0

0.02 0.2

9.5

0.04 0.4

10.0

0.13 1.4

6.0

0.05 0.3

2.5

0.06 0.5

3.0

1976

.17 .77
8.0 27 Oct.

.04 .44
6.5 25 Oct.

.05 .47
6.0 24 Oct.

.03 .13
5.0 23 Oct.

.04 .46
2.5 21 Oct.

Tr. .21
2.5 19 Oct.

Tr. .51
4.0 17 Oct.

Face 15 Oct / 81

0.03 .03

0.02 .03

2.0 11 OCT 81

.19 3.0

.16 0.8

7.0 06 Oct.

2.5 6.2

0.31 4.9

0.63 7.5

.06 0.4

5.0 03 Oct.

0.08 0.2

2.0 02 Oct

0.05 0.4

3.0 30 sept

0.08 1.4

4.0 25 Sept.

0.02 0.2

9.5 23 Sept.

0.04 0.4

10.0 21 Sept.

0.08 1.4

4.0 19 Sept

0.04 0.4

10.0 17 Sept.

0.13 1.4

6.0 09 Sept

8+00E
7+00E
DISPLACED 100' north

.13 .76
wall

185 3.5
6
2.62 4.8
3

.79 6.9
4
.77 4.9
6

.06 1.6
5.0
2.20 2.7
6.0

.09 0.4
5.0

.14 1.4
3.0

.40 8.4
3.0

.17 2.8
3.5

.14 2.2
6.0

.02 0.4
6.0

.32 3.2
5.0

1.18 4.5
5.0

.01 0.2
5.0

.19 7.1
5.0

.12 1.7
5.0

.03 1.4
5.5

.04 7.5
7.0

.01 0.3
4.5

.11 0.7
4.5

.02 1.7
5.0

.07 0.7
6.0

.14 2.2
9.0

.07 0.7
6.0

BLOCK VII
45'

BLOCK VIII 54 DRIFT NORTH BACK - INDICATED
54+10 N TO 54+25 N

GRADE

FACE SAMPLES

<u>W</u>	<u>Au</u>	<u>Ag</u>	<u>Au x W</u>	<u>Ag x W</u>
3.0	.15	8.1	.45	24
9	0	0	0	0
4.5	.89	0.8	4.00	4
<u>5.5</u>	0	0	<u>0</u>	<u>0</u>
22	.20	1.3	4.45	28

VOLUME

$$V = (W = 10) \times (L = 20) \times (H = 10) = 2000$$

$$\text{Tons} = \frac{2000}{12} = 167 \text{ tons}$$

167 Tons @ 0.20 Au 1.3 Ag

Note: (1) Could possibly be a high grade pocket here which would give substantially better results than indicated

(2) Very weak caving ground conditions !!
This will require mucking out & timbering.

BLOCK IX SOUTH BLOCK ABOVE SASE XC-INDICATED

GRADE	<u>W</u>	<u>Au</u>	<u>Ag</u>	<u>Wx Au</u>	<u>Wx Ag</u>
DDH intersections	5.25	1.30	3.2	6.82	17
	5.0	.07	9.1	.35	45
	5.0	.08	16.6	.40	83
Minimum mining width = 5.0'	3.0	.26	5.0	.78	15
	2.0	0	0	0	0
	4.0	.31	1.9	1.24	8
	<u>1.0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	25.25	0.38	6.6	9.6	168

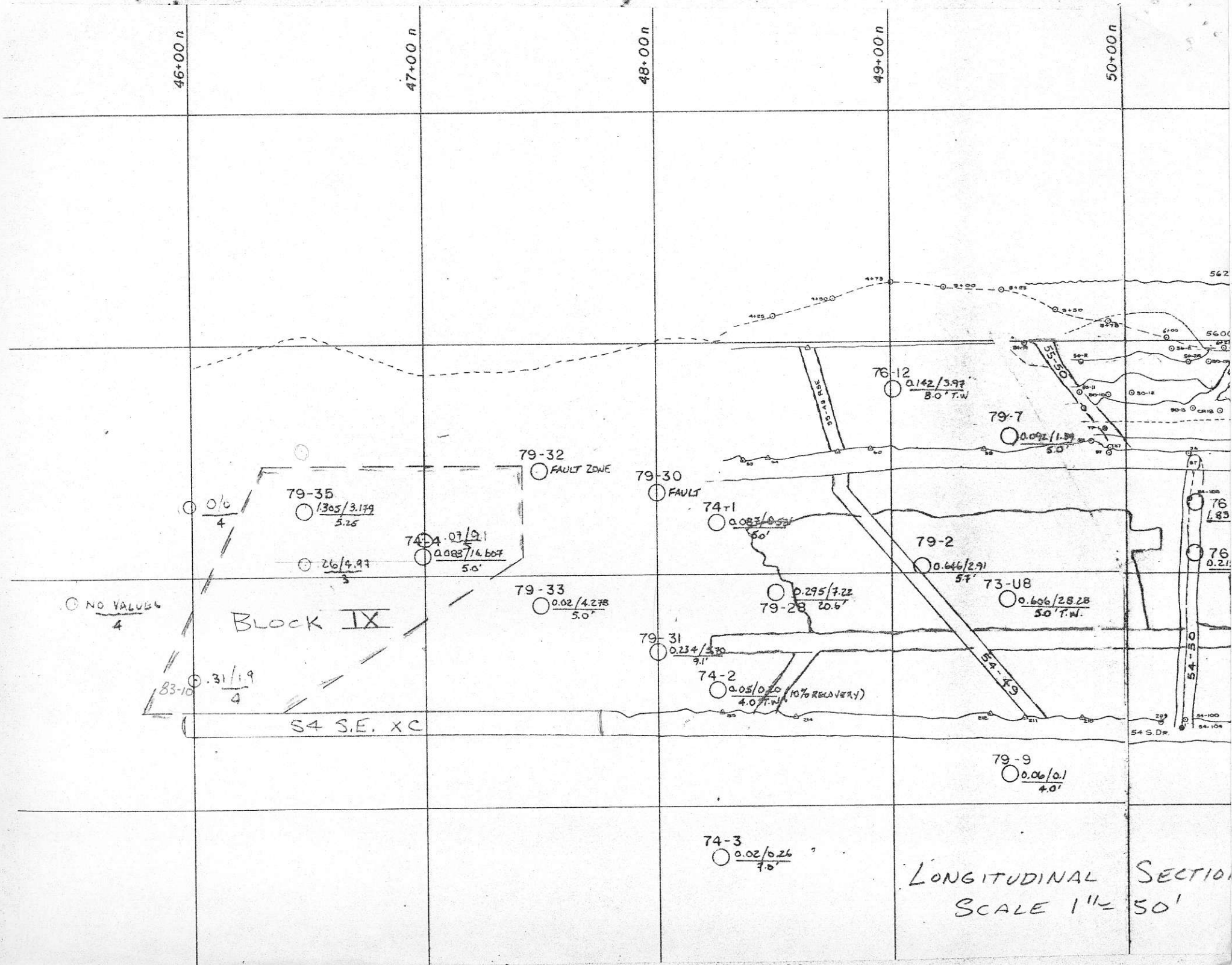
Volume

$$\begin{aligned}
 \text{Area} &= (110 \times 40) + \left(100 \times \frac{60}{2}\right) + \left(105 \times \frac{65}{2}\right) \\
 &= 4400 + 3000 + 3412 \\
 &= 10812
 \end{aligned}$$

$$V = 10812 \times 5 = 54060$$

$$\text{Tons} = \frac{54060}{12} = 4505$$

4500 tons @ 0.38 Au 6.6 Ag



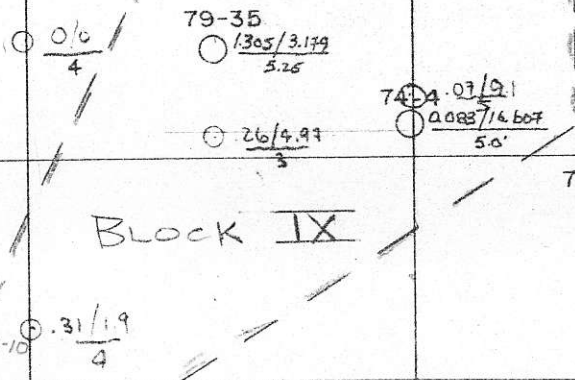
46+00 n

47+00 n

48+00 n

49+00 n

50+00 n



79-32 FAULT ZONE

79-30 FAULT

79-33 $\frac{0.02}{5.0}$ / $\frac{4.278}{5.0}$

79-31 $\frac{0.234}{9.1}$ / $\frac{3.78}{9.1}$

74-2 $\frac{0.05}{4.0}$ / $\frac{0.20}{4.0}$ (10% RECOVERY)

79-28 $\frac{0.295}{20.6}$ / $\frac{7.22}{20.6}$

79-2 $\frac{0.646}{5.7}$ / $\frac{2.91}{5.7}$

73-U8 $\frac{0.606}{50}$ / $\frac{28.28}{50}$ T.W.

79-9 $\frac{0.06}{4.0}$ / $\frac{0.1}{4.0}$

74-3 $\frac{0.02}{7.0}$ / $\frac{0.26}{7.0}$

LONGITUDINAL SECTION
SCALE 1" = 50'

76-12 $\frac{0.142}{8.0}$ / $\frac{3.97}{8.0}$ T.W.

79-7 $\frac{0.092}{5.0}$ / $\frac{1.34}{5.0}$

76-83

76-0.21

54 S.D.R.