830595

DUPONT OF CANADA
BAKER MINE

ORE RESERVE REMAINING

AUGUST 31st

1983

J. PAXTON, GEOLOGIST

In the following discussion the ore is divided into three calagories

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 categoriee and thier 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 forseen	① Sampling indicates ore grade, but is inadequate to predict tons and grade with confidence ② No major mining problems forseen	POSSIBLE ORE
	PROBABLE ORE	POSSIBLE ORE	

BAKER MINE

ESTIMATED ORE REMAINING AUGUST 31st 1983

		Tons	Au	Ag	Au oz	Ag oz
PROBABLE ORE						
BLOCK	I	2600	1.30	15.4	3380	40040
"	V	345	.41	3.4	141	1186
"	VI	260	.47	5.5	122	1430
		3205	1.14	13.3	3643	42656
POSSIBLE ORE						
BLOCK	III	650	.96	26.0	624	16900
"	IV	1461	.50	9.5	727	13823
"	VII	554	.45	3.6	249	1994
#8 STOCKPILE		793	.40	12.1	317	9595
		3458	.55	12.2	1917	42312
INDICATED ORE						
BLOCK	II	333	1.35	17.4	449	5794
"	VIII	167	.20	1.3	33	217
	IX	4500	.38	6.6	1710	29700
		5000	.44	7.1	2192	35711
SUB ORE						
#9 STOCKPILE		2501	.16	3.6	411	8993
TOTAL		14164	.58	9.1	8163	129672

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

	W	Au	Ag	W x Au	W x Ag
Back Sampling	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
	59				
Diamond drill hole	28	3.20	33.8	89.60	946.4
.U-81-8	5.5	.45	8.5	2.47	46.7
	92.5			120.64	1427.8

1.30 Au 15.4 Ag

VOLUME

Estimated mean width = 13'

" area = 30 x 30 = 900

20 x 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 hangwall. The above calculation refers to the main portion of the vein

II - 55-52 Stope Underground Salvage - Indicated
Hangwall Split Vein

Grade

Test Hole	W	Au	Ag	W x Au	W x Ag
	4	2.40	29.9		
	4	.31	5.0		
Mean =		1.35	17.4		

Volume

5' wide x 40' long x 20' high = 4000

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

333 Tons @ 1.35 Au 17.4 Ag

III - 55-54 Stope Crown Pillar - Possible

Grade	W	Au	Ag	W x Au	W x Ag
DDH C-79-15					
	12	1.62	1.54		

Back Samples

W	Au	Ag	W x Au	W x Ag
5	.10	2.7	.5	13
5.5	.24	6.7	1.3	38
8.0	.22	6.4	1.8	51
9.0	.06	1.6	.5	14
15.0	2.40	68.0	36.0	1020
11.5	2.34	66.0	26.9	759
19.5	1.15	32.0	22.5	632
9.5	.02	1.0	.2	9

W	Au	Ag	W x Au	W x Ag
6.5	.24	5	1.56	33
4	.79	16	3.16	64
7	1.82	37	12.74	259
6.5	.43	9	2.79	58
6.0	.06	1	.36	6
113	.98	26	110.3	2956

Volume

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

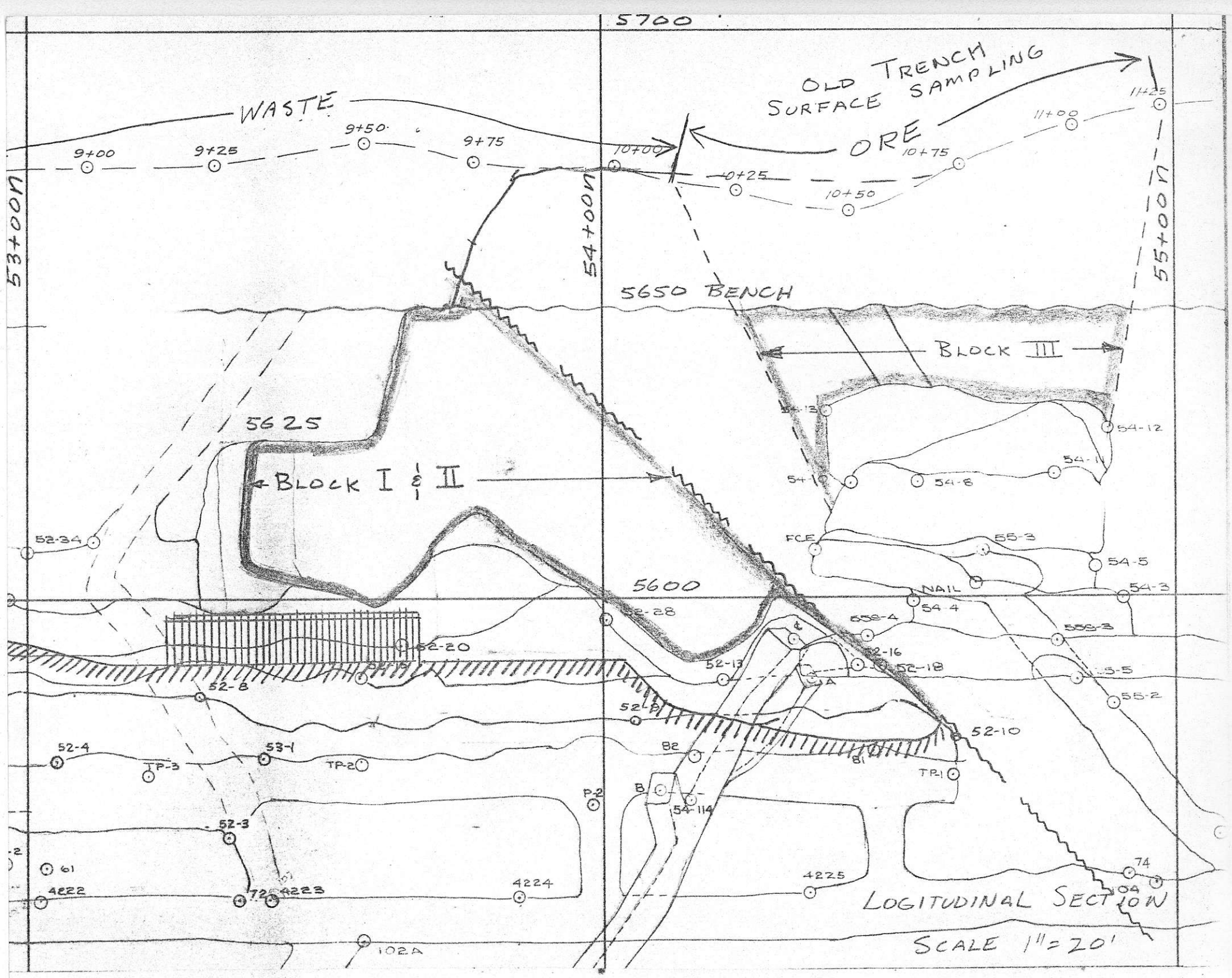
L = 60

H = 15

V = 8.7 x 60 x 15

= $\frac{7830}{12}$ = 650 Ts

650 Tons @ 0.96 Au 26.0 Ag


5700
WASTE
9+00
9+25
9+50
9+75
10+00
OLD TRENCH
SURFACE SAMPLING
ORE
10+25
10+50
10+75
11+00
11+25
53+00N
54+00N
55+00N
5650 BENCH
BLOCK III
BLOCK I & II
5625
5600
52-34
52-28
52-20
52-8
52-13
52-16
52-18
52-10
55-2
55-5
55-3
54-5
54-3
54-4
54-6
54-12
54-13
FCE
NAIL
52-4
TP-3
53-1
TP-2
52-3
61
4222
4223
4224
4225
102A
TP-1
74
54-114
LOGITUDINAL SECTION
SCALE 1"=20'

IV 54-51 STOPE CROWN PILLAR - POSSIBLE

GRADE

Back Sampling

	W	Au	Ag	W x Au	W x Ag
IV a	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
	8.0	.16	2.2	1.28	17.6
	70.0	.23	2.4	15.90	170.6
IV b	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
	11.5	.27	3	3.10	34
	78.5	.59	11.9	46.04	934

VOLUME

IV a

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

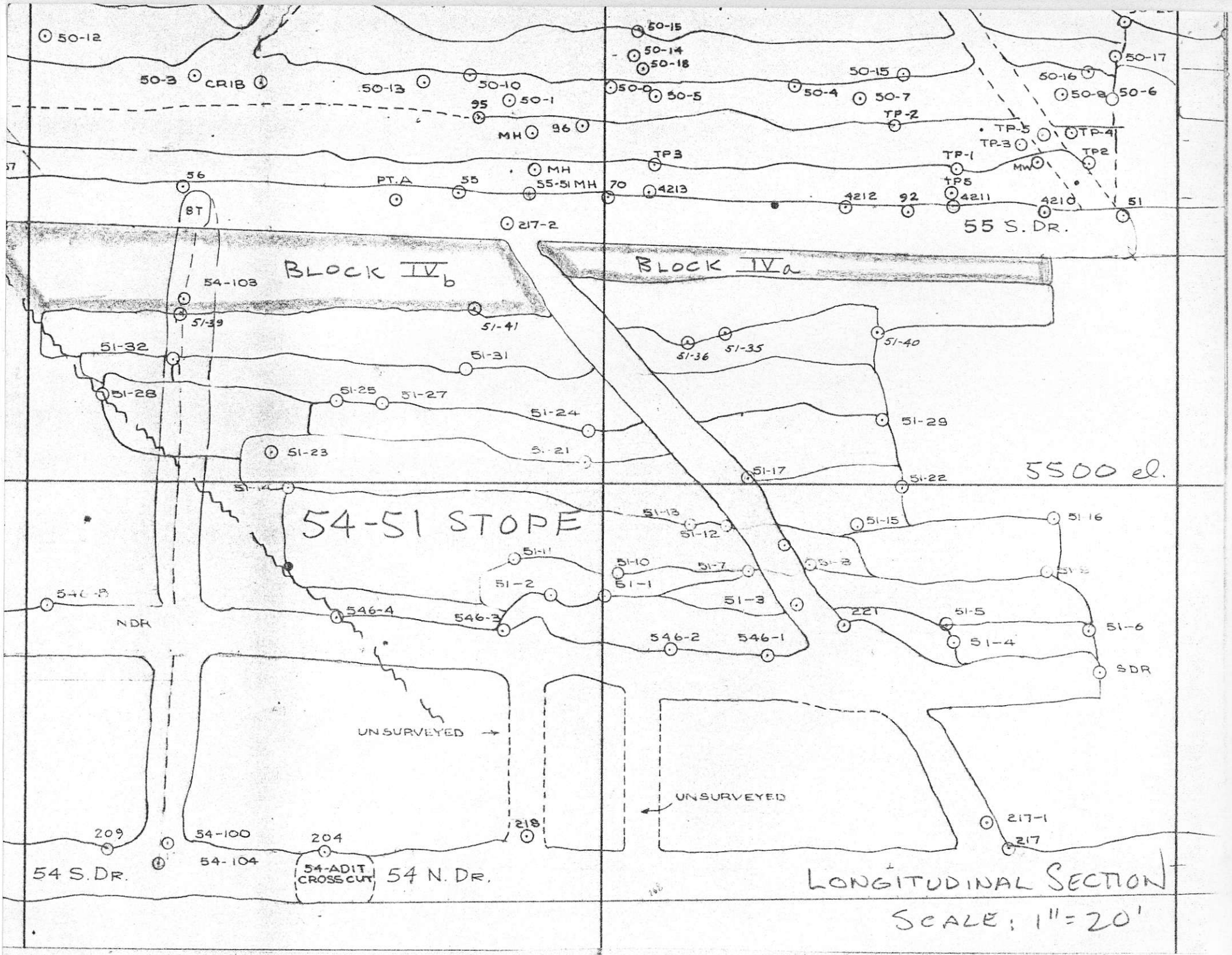
$Tons = \frac{4500}{12} = 375$

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
IV a	375	.23	2.4	86.2	900
IV b	1086	.59	11.9	640.7	12923
IV	1461	.50	9.5	726.9	13823



LONGITUDINAL SECTION

SCALE: 1" = 20'

V - 55-50B STOPE - PROBABLE

V a 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

V b GRADE

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		
	60	14.82	116.2	24.89	217.7

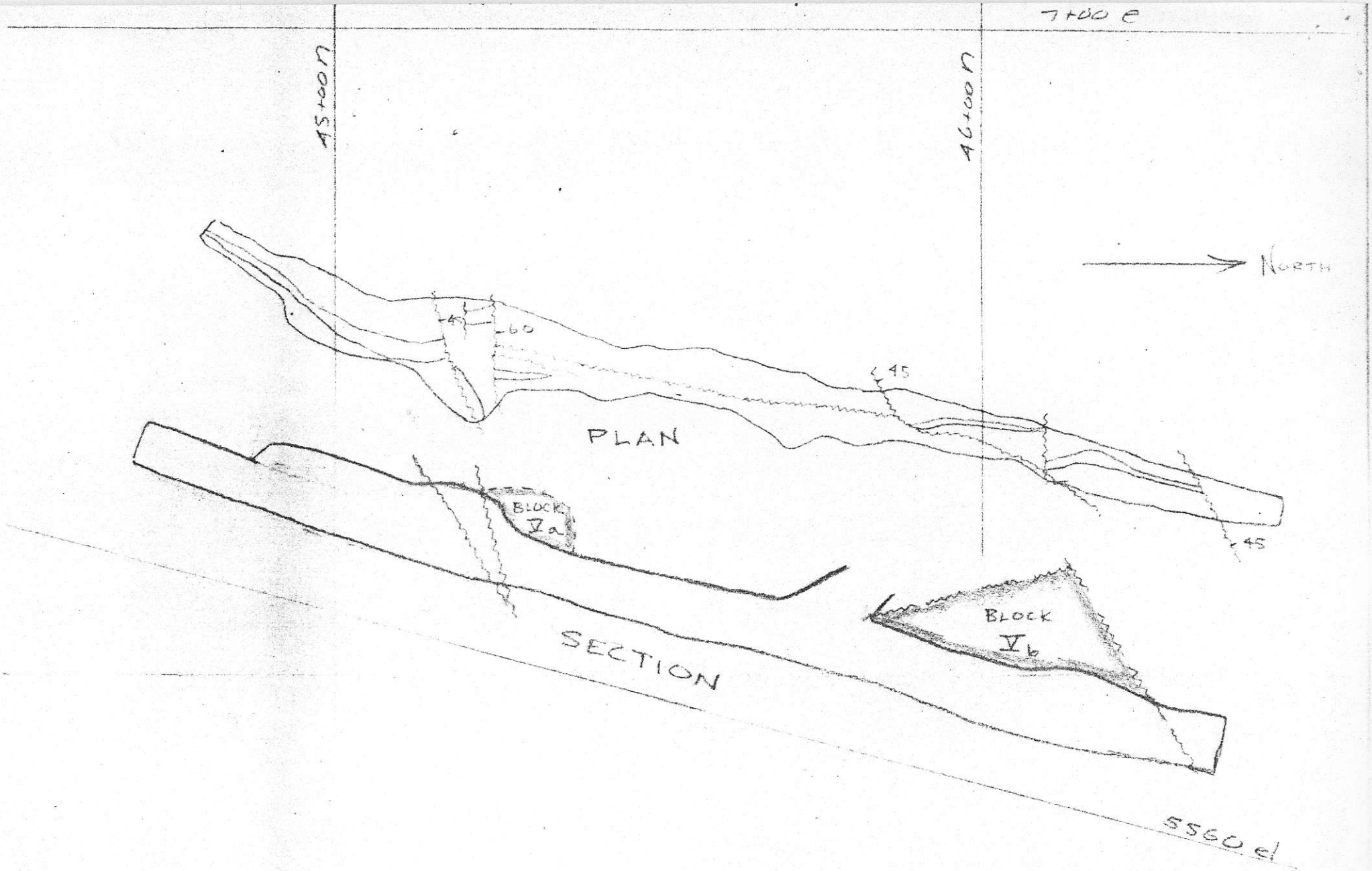
Au = .42 Ag = 3.6

VOLUME
$= 50 \times 7.5 \times 10$
$= 3750$

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

@ 0.42 Au 3.6 Ag.

	Tons	Au	Ag	Au oz	Ag oz
	33	.31	1.9	10.20	63
	312	.42	3.6	131.0	1123
BLOCK V	345	.41	3.4	141.2	1186



55-50 R STOPE

AUG 31/53

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 55-50B DRIFT between 51+35n and 51+60n.

Grade

Back Sample	W	Au	Ag	W x Au	W x Ag
	0.6	.47	15	.28	.9
Diluted	4.4	0	0	0	0
to 5' min	0.9	8.14	110.5	7.33	99.9
mining width	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
	2.8	0	0	0	0
	20.0	.47	5.5	9.5	111.1

Volume

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

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

260 tons @ 0.47 Au 5.5 Ag

BLOCK VII 54 DRIFT SOUTH BACK – POSSIBLE

49+40 N to 49+80 N

GRADE

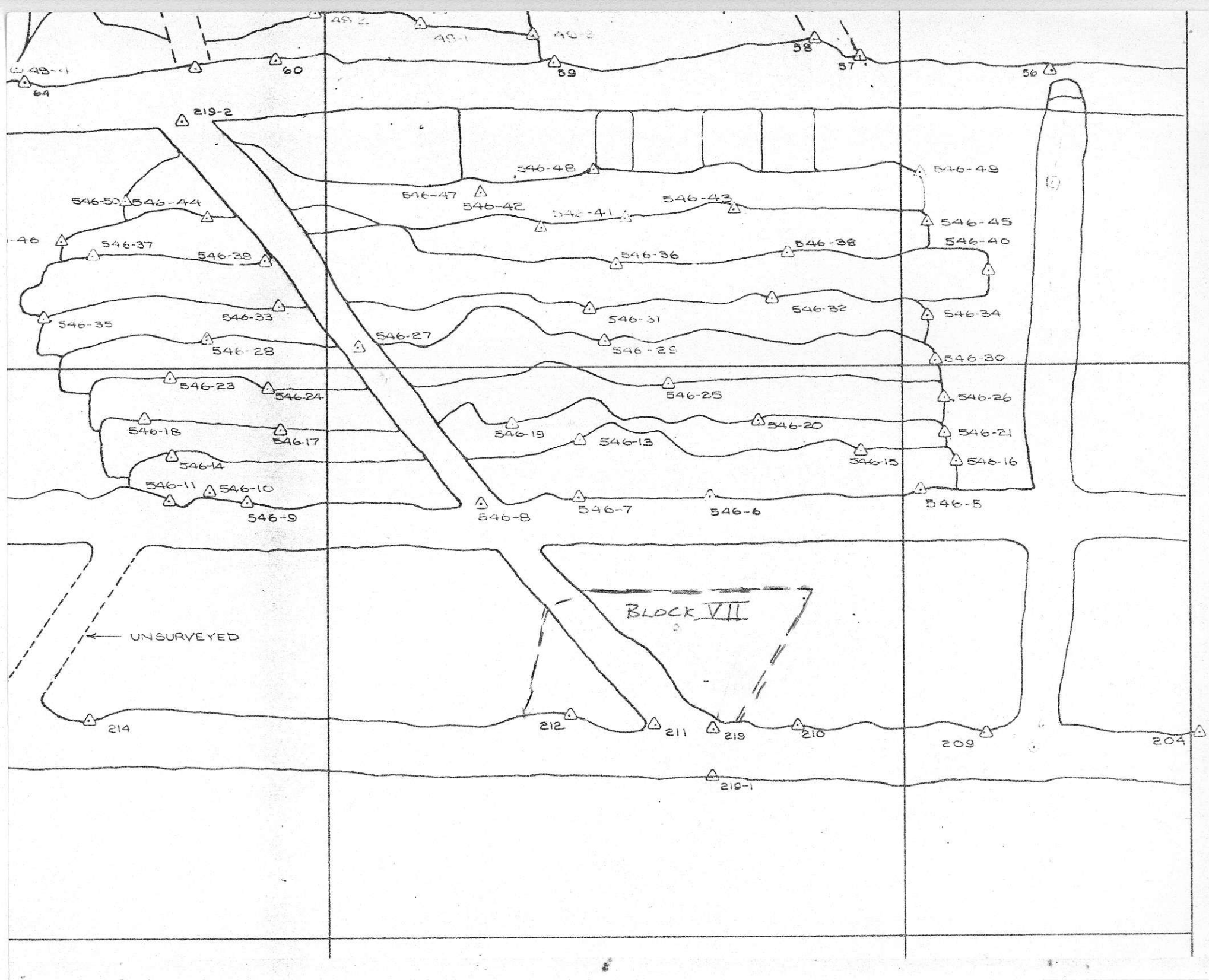
Face samples	W	Au	Ag	W x Au	W x Ag
	10	.13	.6	1.3	6
	4	1.90	3.0	7.6	12
	6	0	0	0	0
	7	.16	.8	1.1	6
	5.5	2.50	6.2	13.7	34
	4.5	0	0	0	0
	7.5	.31	4.9	2.3	37
	5.5	.63	10.6	3.5	58
	4.5	0	0	0	0
	3.0	.14	1.4	.4	4
	5.0	.04	1.0	.2	5
	3.0	.40	8.4	1.2	25
	2.0	0	0	0	0
	3.5	.17	2.8	.6	10
	5.0	.14	2.2	.7	11
	5.0	.32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

VOLUME

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

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

554 Tons @ 0.45 Au 3.6 Ag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BLOCK VII
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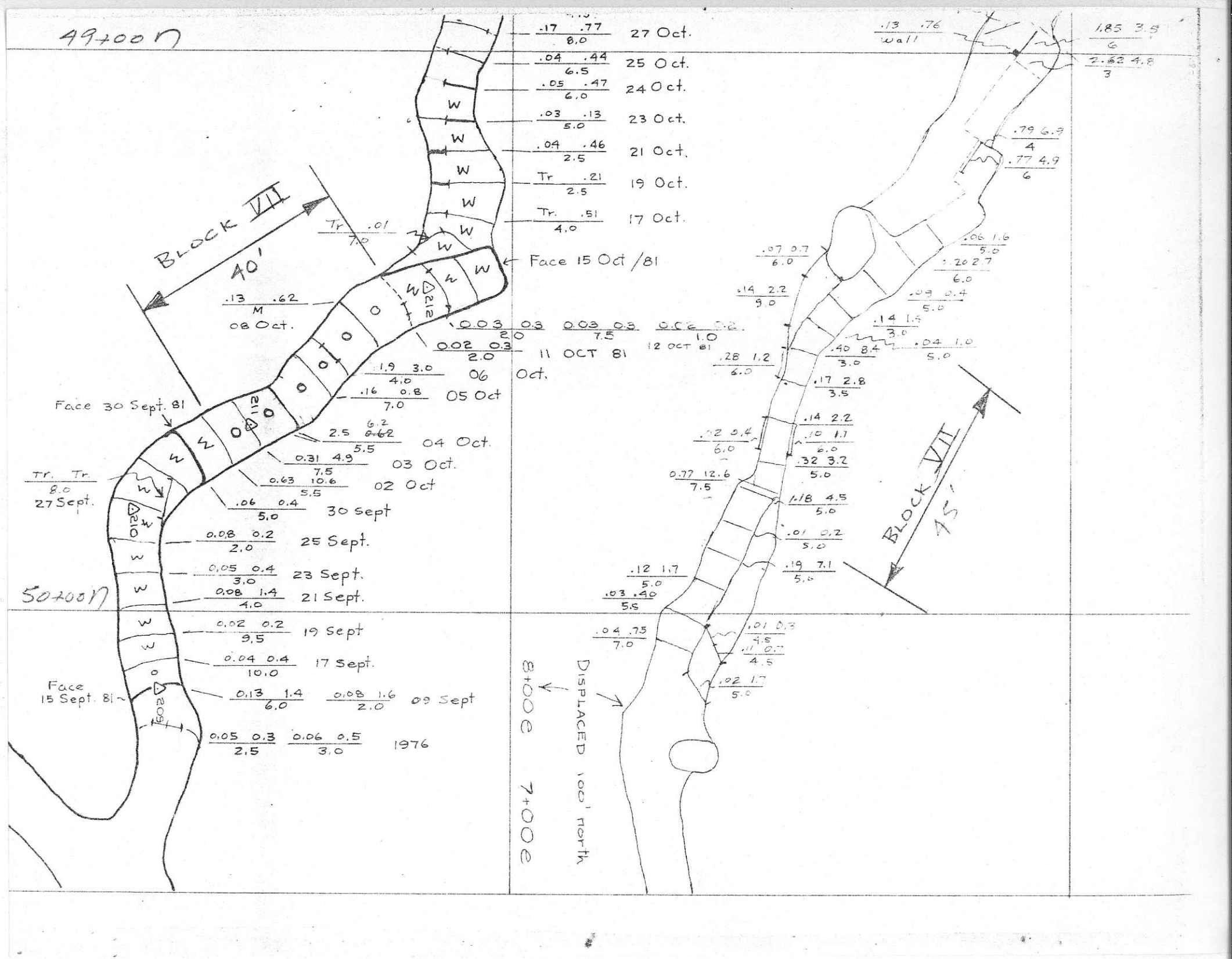
219-1


49+00 N
.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
BLOCK VII
40'
Tr .01 / 7.0
.13 .62 / M — 08 Oct.
0.02 0.3 / 2.0 — 11 OCT 81
.19 3.0 / 4.0 — 06 Oct.
.16 0.8 / 7.0 — 05 Oct
Face 30 Sept. 81
2.5 6.2 / 5.5 — 04 Oct.
0.31 4.9 / 7.5 — 03 Oct.
0.63 10.6 / 5.5 — 02 Oct
Tr. Tr. / 8.0 — 27 Sept.
.06 0.4 / 5.0 — 30 sept
0.08 0.2 / 2.0 — 25 Sept.
0.05 0.4 / 3.0 — 23 Sept.
0.08 1.4 / 4.0 — 21 Sept.
50+00 N
0.02 0.2 / 9.5 — 19 Sept
0.04 0.4 / 10.0 — 17 Sept.
Face 15 Sept. 81
0.13 1.4 / 6.0 — 0.08 1.6 / 2.0 — 09 Sept
0.05 0.3 / 2.5 — 0.06 0.5 / 3.0 — 1976
.13 .76 / Wall
1.85 3.5 / 6
2.62 4.8 / 3
.79 6.9 / 4
.77 4.9 / 6
.07 0.7 / 6.0
.06 1.6 / 5.0
.20 2.7 / 6.0
.14 2.2 / 9.0
.09 0.4 / 5.0
.14 1.4 / 3.0
.40 8.4 / 3.0
.04 1.0 / 5.0
.28 1.2 / 6.0
.17 2.8 / 3.5
.14 2.2
.02 0.4 / 6.0
.10 1.1 / 6.0
.32 3.2 / 5.0
0.77 12.6 / 7.5
1.18 4.5 / 5.0
.01 0.2 / 5.0
.19 7.1 / 5.0
.12 1.7 / 5.0
.03 .40 / 5.5
BLOCK VII
45'
.04 .75 / 7.0
.01 0.3 / 4.5
.11 0.7 / 4.5
.02 1.7 / 5.0
8+00 E
7+00 E
DISPLACED 100' north

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

GRADE
FACE SAMPLES

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

VOLUME

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

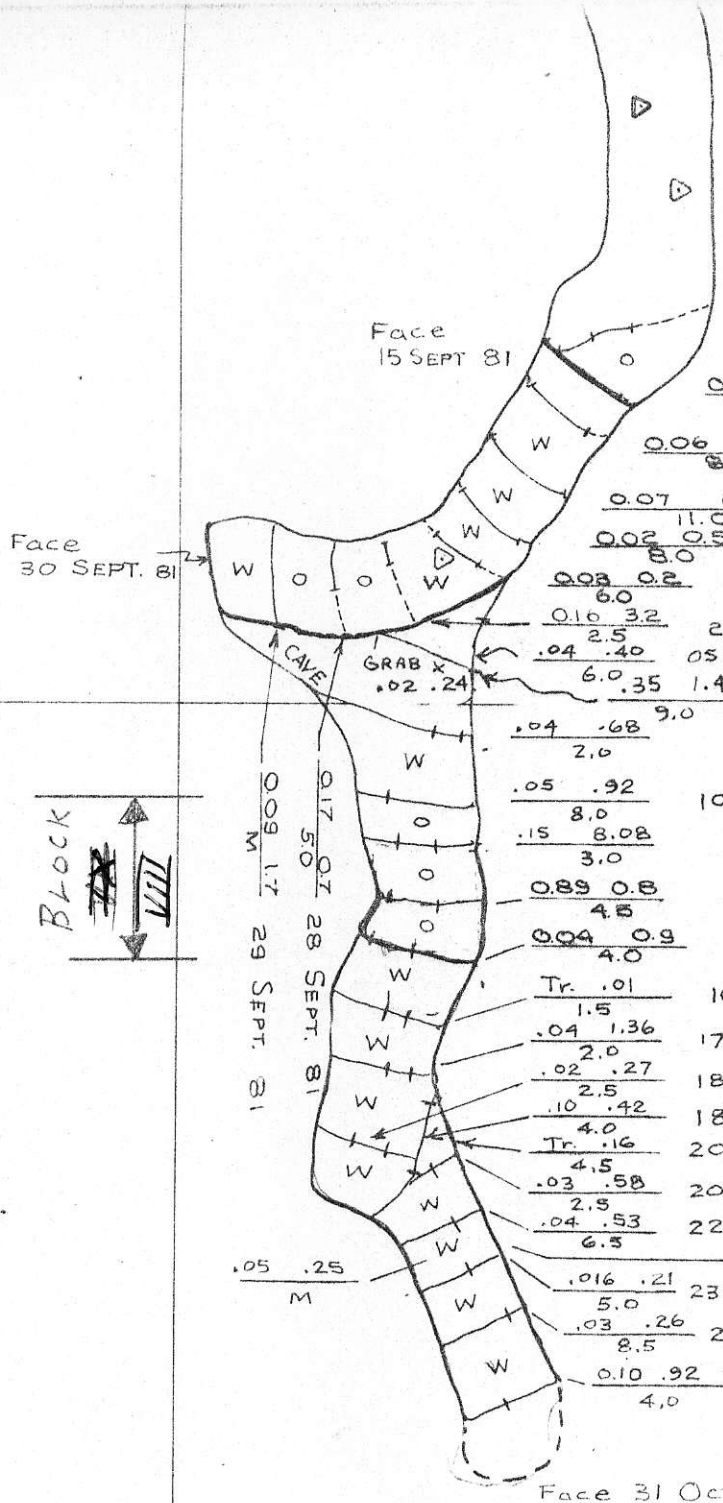
$\text{Tons} = \frac{2000}{12} = 167 \text{ tons}$

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.



0.37 0.5 / 4.0 — 0.07 0.2 / 4.5 — 1976

0.40 2.8 / 10.0 — 08 SEPT 81

0.06 0.4 / 8.0 — 19 SEPT 81

0.07 1.2 / 11.0 — 20 SEPT 81

0.02 0.5 / 8.0 — 22 SEPT 81

0.08 0.2 / 6.0 — 24 SEPT 81

0.10 3.2 / 2.5 — 26 SEPT 81

.04 .40 — 05 OCT 81

6.0 .35 1.4 / 9.0 — 30 SEPT 81

54+00N

.04 .68 / 2.0 — .02 .30 / 3.0 — 2.26 .74 / 7.0

.05 .92 / 8.0 — 10 OCT 81

.15 8.08 / 3.0 — 11 OCT 81

0.89 0.8 / 4.5 — 13 OCT 81

0.04 0.9 / 4.0 — 14 OCT 81 FACE OCT. 15 '81

Tr. .01 / 1.5 — 16 OCT 81

.04 1.36 / 2.0 — 17 OCT 81

.02 .27 / 2.5 — 18 OCT 81

.10 .42 / 4.0 — 18 OCT 81

Tr. .16 / 4.5 — 20 OCT 81

.03 .58 / 2.5 — 20 OCT 81

.04 .53 / 6.5 — 22 OCT 81

.02 .19 GRAB

.016 .21 / 5.0 — 23 OCT.

.03 .26 / 8.5 — 25 OCT.

0.10 .92 / 4.0 — 26 OCT.

55+00N

54 DR NORTH
PLAN
SCALE 1" = 20'

8+00E

J+00E

BLOCK IX SOUTH BLOCK ABOVE 54 SE x C-INDICATED

GRADE DDH intersections	W	Au	Ag	W x Au	W x Ag
	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
	1.0	0	0	0	0
	25.25	0.38	6.6	9.6	168

Volume

$$\text{Area} = (110 \times 40) + \left(100 \times \frac{60}{2}\right) + \left(105 \times \frac{65}{2}\right)$$

$$= 4400 + 3000 + 3412$$

$$= 10812$$

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

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

4500 tons @ 0.38 Au 6.6 Ag