2E

017902

```
]RUN

          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 12

COORDINATES OF VERTEX 1  (A,B)  :20,66
               VERTEX 2  (A,B)  :100,71
               VERTEX 3  (A,B)  :152,81
               VERTEX 4  (A,B)  :211,91
               VERTEX 5  (A,B)  :294,98
               VERTEX 6  (A,B)  :280,88
               VERTEX 7  (A,B)  :211,80
               VERTEX 8  (A,B)  :152,77
               VERTEX 9  (A,B)  :110,63
               VERTEX 10 (A,B)  :80,48
               VERTEX 11 (A,B)  :51,48
               VERTEX 12 (A,B)  :20,66

AREA = 2856
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 12

COORDINATES OF VERTEX 1  (A,B)  :51,48
               VERTEX 2  (A,B)  :80,48
               VERTEX 3  (A,B)  :110,63
               VERTEX 4  (A,B)  :152,77
               VERTEX 5  (A,B)  :211,80
               VERTEX 6  (A,B)  :280,88
               VERTEX 7  (A,B)  :166,19
               VERTEX 8  (A,B)  :158,39
               VERTEX 9  (A,B)  :134,34
               VERTEX 10 (A,B)  :96,12
               VERTEX 11 (A,B)  :96,4
               VERTEX 12 (A,B)  :51,48

AREA = 7173.5
PRESS (RETURN) KEY TO RESTART PROGRAM 4
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 96,12
?EXTRA IGNORED

COORDINATES OF VERTEX 1  (A,B)  :134,34
               VERTEX 2  (A,B)  :134,11
               VERTEX 3  (A,B)  :96,4
               VERTEX 4  (A,B)  :
?REENTER
 (A,B)  :999,9999
               VERTEX 5  (A,B)  :8999,987
               VERTEX 6  (A,B)  :
]RUN

          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 4

COORDINATES OF VERTEX 1  (A,B)  :96,12
               VERTEX 2  (A,B)  :134,34
```

overburden 2856

"waste" 7173.5

2E1 628

2E2 389

11246.5

overburden 2856 * 3.05 = 17288 m³ = 22599 yd³

"Waste" 11735 * 3.5 = 43399 m³ = 56743 yd³

3.5 = 1,193,492 tonnes

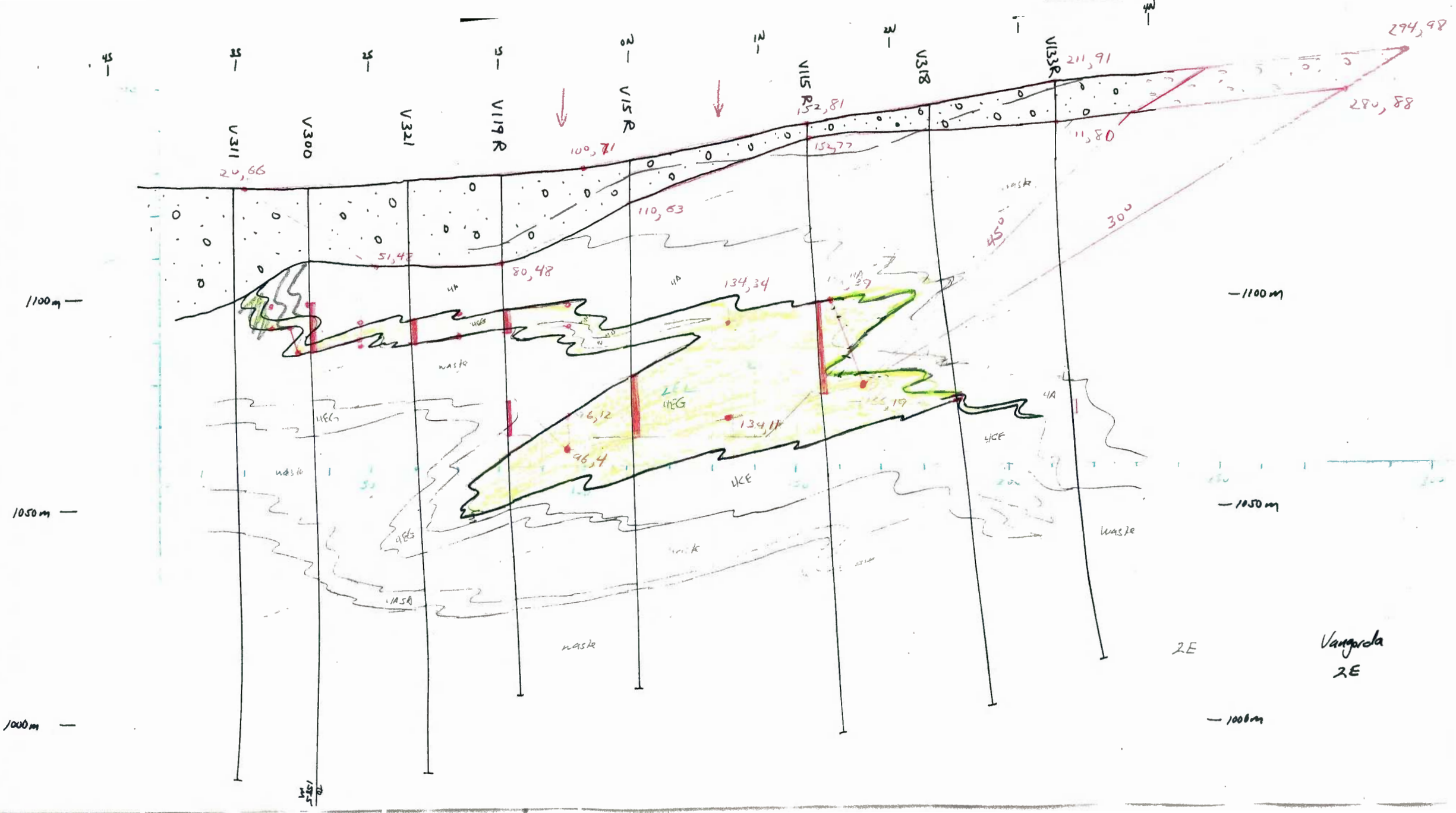
OR 1217 * 6.05 = 73628 m³ = 96301 yd³

6.389 = 286415 tonnes

```
                VERTEX 3  (A,B)  :134,11
                VERTEX 4  (A,B)  :96,4

AREA = 589
PRESS <RETURN> KEY TO RESTART PROGRAM 5
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 134,34
?EXTRA IGNORED

COORDINATES OF VERTEX 1  (A,B)  :
]
]
]
]
]RUN

          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 5

COORDINATES OF VERTEX 1  (A,B)  :134,34
                VERTEX 2  (A,B)  :158,39
                VERTEX 3  (A,B)  :166,19
                VERTEX 4  (A,B)  :134,11
                VERTEX 5  (A,B)  :134,34

AREA = 628
PRESS <RETURN> KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 5

COORDINATES OF VERTEX 1  (A,B)  :96,12
                VERTEX 2  (A,B)  :134,34
                VERTEX 3  (A,B)  :134,11
                VERTEX 4  (A,B)  :96,4
                VERTEX 5  (A,B)  :96,12

AREA = 589
PRESS <RETURN> KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 10

COORDINATES OF VERTEX 1  (A,B)  :20,66
                VERTEX 2  (A,B)  :100,71
                VERTEX 3  (A,B)  :152,81
                VERTEX 4  (A,B)  :211,91
                VERTEX 5  (A,B)  :294,98
                VERTEX 6  (A,B)  :166,19
                VERTEX 7  (A,B)  :134,11
                VERTEX 8  (A,B)  :96,4
                VERTEX 9  (A,B)  :51,48
                VERTEX 10 (A,B)  :20,66

AREA = 11159.5
PRESS <RETURN> KEY TO RESTART PROGRAM
```

2E

overburden	"waste rock"	ore block 2E2	ore block 2E1	total pit
20,66	51,48	96,12	134,34	20,66
100,71	80,48	134,34	158,39	100,71
152,81	110,63	134,11	166,19	152,81
211,91	152,77	96,4	134,11	211,91
294,98	211,80	96,12	134,34	294,98
280,88	280,88			166,19
211,80	166,19	Sum	Sum	134,11
152,77	158,39			96,4
110,63	134,34			51,48
80,48	96,12			20,66
51,48	96,4			
20,66	51,48			10
2 vertices	12 vertices			


V311
V300
V321
V119R
V115R
V133R
V318
20,66
51,47
100,71
80,48
110,63
152,81
153,77
211,91
294,98
280,88
11,80
45°
30°
1100m
1050m
1000m
waste
LIA
LIEG
LKE
LIASA
134,34
134,14
96,4
16,12
2E
Vangarda
2E

VANGORDA DEPOSIT =main layer high grade Nov 1984

SECTION 2 EAST

DDH	from	to	length	(M) S.G.	(N) Pb	(O) Zn	(P) Cu	(Q) Ag	(R) Au	(S) BaO	(T) Pb + Zn
V-115-R	42.4	43.9	1.5	4.24	4.96	7.05	.05	87.0	0	27.33	12.01
	43.9	45.4	1.5	4.25	6.85	7.62	.08	102.0	0	20.02	14.47
	45.4	46.9	1.5	4.24	8.19	6.73	.07	102.0	.01	19.02	14.92
	46.9	48.5	1.6	4.37	6.79	7.65	.04	95.0	.01	19.97	14.44
	48.5	50	1.5	4.2	9.65	7.36	.2	112.0	.01	4.71	17.01
	50	51.2	1.2	4.41	8.82	6.51	.1	98.5	0	11.51	15.33
	51.2	52.7	1.5	4.47	6.05	4.72	.04	89.0	.01	14.14	10.77
	52.7	54.3	1.6	4.37	5.26	5.7	.17	72.0	.01	13.04	10.96
	54.3	55.8	1.5	4.74	1.98	6.07	.03	33.5	0	6.54	8.05
	55.8	57.3	1.5	4.35	5.57	9.06	.05	101.5	.01	21.09	14.63
	57.3	58.8	1.5	4.33	8.49	10.6	.1	106.5	.02	11.98	19.09
	58.8	60.4	1.6	4.57	3.64	7.41	.08	59.0	0	27.03	11.05
	60.4	61.9	1.5	4.46	3.28	7.63	.09	62.0	0	30.51	10.91
	61.9	63.4	1.5	4.46	7.99	6.77	.16	100.5	.02	10.82	14.76
	63.4	64.9	1.5	4.48	3.45	3.79	.3	49.0	.01	4.37	7.24
	64.9	66.4	1.5	4.48	5.05	4.13	.3	67.0	.03	3.78	9.18
	66.4	67.7	1.3	4.39	4.59	4.89	.25	60.0	.01	5.24	9.48
2-E-1 =	42.4	67.7	25.3	4.40	5.89	6.71	.12	82.0	.01	14.95	12.59
V-15-R	38.5	39.9	1.4	3.08	4.65	9.03	.04	74.5	.45	.33	13.68
	41.8	42.9	1.1	4.13	8.02	5.35	.08	103.5	.65	1.83	13.37
	45	45.4	.4	3.49	4.19	9.79	.04	63.5	.24	12.24	13.98
	50.6	51.8	1.2	4.13	5.89	7.8	.09	96.0	.89	22.93	13.69
	51.8	52.6	.8	2.96	.5	.6	.03	4.0	.21	6.73	1.10
	52.6	54.7	2.1	4.53	3.75	5.73	.14	59.5	.89	23.31	9.48
	54.7	56.3	1.6	4.48	7.1	7.9	.13	92.5	1.03	4.66	15.00
	56.3	57.9	1.6	4.25	5.45	7.23	.18	82.0	2.26	23.89	12.68
	57.9	59.4	1.5	4.22	.95	1.04	.3	20.5	1.47	1.75	1.99
	59.4	60.4	1.0	4.23	1.34	2.1	.17	21.0	1.03	1.98	3.44
	60.4	61.4	1.0	4.45	4.97	7.23	.07	83.0	.82	26.74	12.20
	61.4	61.8	.4	4.39	7.78	8.73	.05	111.0	.69	21.58	16.51
	61.8	63.6	1.8	4.21	3.93	6.07	.09	64.0	.55	19.82	10.00
	63.6	65.4	1.8	4.18	5.97	5.06	.15	74.5	.62	13.59	11.03
2-E-2 =	50.6	65.4	14.8	4.23	4.33	5.44	.14	64.3	1.00	15.38	9.77
	67.2	69.3	2.1	4.42	5.1	7.65	.05	91.0	.48	27.9	12.75
	70.6	72.1	1.5	4.45	5.62	6.45	.05	82.0	.45	26.46	12.07
V-119-R	32.6	34.1	1.5	4.69	6.06	8.64	.22	174.5	.01	.32	14.70
	34.1	36	1.9	4.13	10.22	4.87	.04	128.0	.01	5.03	15.09

36	36.6	.6	2.75	0	0	0	0.0	0	0	0.00
36.6	37.6	1.0	4.68	5.99	8.04	.22	190.0	.02	.11	14.03
32.6	37.6	5	4.24	6.90	6.05	.13	139.0	.01	2.03	12.95
53.8	55.4	1.6	3.96	6.85	6.27	.07	87.5	0	11.64	13.12
55.4	56.7	1.3	4.59	7.48	8.86	.06	108.5	.01	31.14	16.34
56.7	58.2	1.5	4.57	6.55	8.53	.04	94.0	.01	36.44	15.08
58.2	59.8	1.6	4.53	6.87	7.96	.04	5.0	.01	36.19	14.83
59.8	61	1.2	4.58	3.17	4.49	.2	41.0	.01	8.16	7.66
61	62.3	1.3	4.46	5.41	5.87	.21	68.0	.02	4.43	11.28
53.8	62.3	8.5	4.44	6.16	7.07	.10	66.8	.01	22.03	13.23

File: VANG.2E

block	from	to	length	S.G.	Pb	Zn	Cu	Ag	Au	BaO	Pb + Zn	DDH	AREA	VOLUME	TONNAGE
SECTION 2 EAST															
2-E-1	42.4	67.7	25.3	4.40	5.89	6.71	.12	82.0	.01	14.95	12.59	V-115-R	570	34485	136591
2-E-2	50.6	65.4	14.8	4.23	4.33	5.44	.14	64.3	1.00	15.38	9.77	V-15-R	494	29911	113997
averages/totals				4.32	5.18	6.13	.13	74.0	.46	15.14	11.31		1064	64396	250589

4E

```
]RUN POLYGONAREA
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 11

COORDINATES OF VERTEX 1  (A,B)34:-66,75
               VERTEX 2  (A,B)88:-12,68
               VERTEX 3  (A,B)150:50,64
               VERTEX 4  (A,B)217:117,65
               VERTEX 5  (A,B)272:172,77
               VERTEX 6  (A,B)320:220,78
               VERTEX 7  (A,B)294:194,63
               VERTEX 8  (A,B)234:134,51
               VERTEX 9  (A,B)172:72,46
               VERTEX 10 (A,B)80:-20,48
               VERTEX 11 (A,B)34:-66,75

A AREA = 4486.5   overburden
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 4

COORDINATES OF VERTEX 1  (A,B)  :1,26
               VERTEX 2  (A,B)  :-20,48
               VERTEX 3  (A,B)  :72,46
               VERTEX 4  (A,B)  :1,26

B AREA = 991      waste rock
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 11

COORDINATES OF VERTEX 1  (A,B)  :1,26
               VERTEX 2  (A,B)  :38,28
               VERTEX 3  (A,B)  :73,33
               VERTEX 4  (A,B)  :97,48
               VERTEX 5  (A,B)  :134,51
               VERTEX 6  (A,B)  :194,63
               VERTEX 7  (A,B)  :91,1
               VERTEX 8  (A,B)  :91,23
               VERTEX 9  (A,B)  :24,23
               VERTEX 10 (A,B)  :24,1
               VERTEX 11 (A,B)  :1,26

C AREA = 3142.5   waste rock
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 10

COORDINATES OF VERTEX 1  (A,B)  :-66,75
               VERTEX 2  (A,B)  :-12,68
               VERTEX 3  (A,B)  :50,64
               VERTEX 4  (A,B)  :117,65
               VERTEX 5  (A,B)  :172,77
               VERTEX 6  (A,B)  :220,78
               VERTEX 7  (A,B)  :91,1
               VERTEX 8  (A,B)  :24,1
               VERTEX 9  (A,B)  :-20,48
```

A' ↑ A'=A+100 gives same area using (A',B) ie. no negative coords

overburden 4486.5 * 60.5 = 271,433 m^3 = 355 019 yd^3

waste rock 4133.5 * 60.5 = 250 077 m^3 = 327 086 yd^3
@ 2.75 = 687,712 tonnes

ore 1993 * 60.5 = 120 576 m^3 = 157 707 yd^3
@ 3.68 = 443,720 tonnes

VERTEX TO (A,B) ?-86,75

AREA = 10830 total pit
PRESS (RETURN) KEY TO RESTART PROGRAM

A+B+C = 8620 × 60.5 = 499730

ore = 1993 × 60.5 = 120,577 @ 3.68 = 443,724 tonnes ore
(From calculated grade)

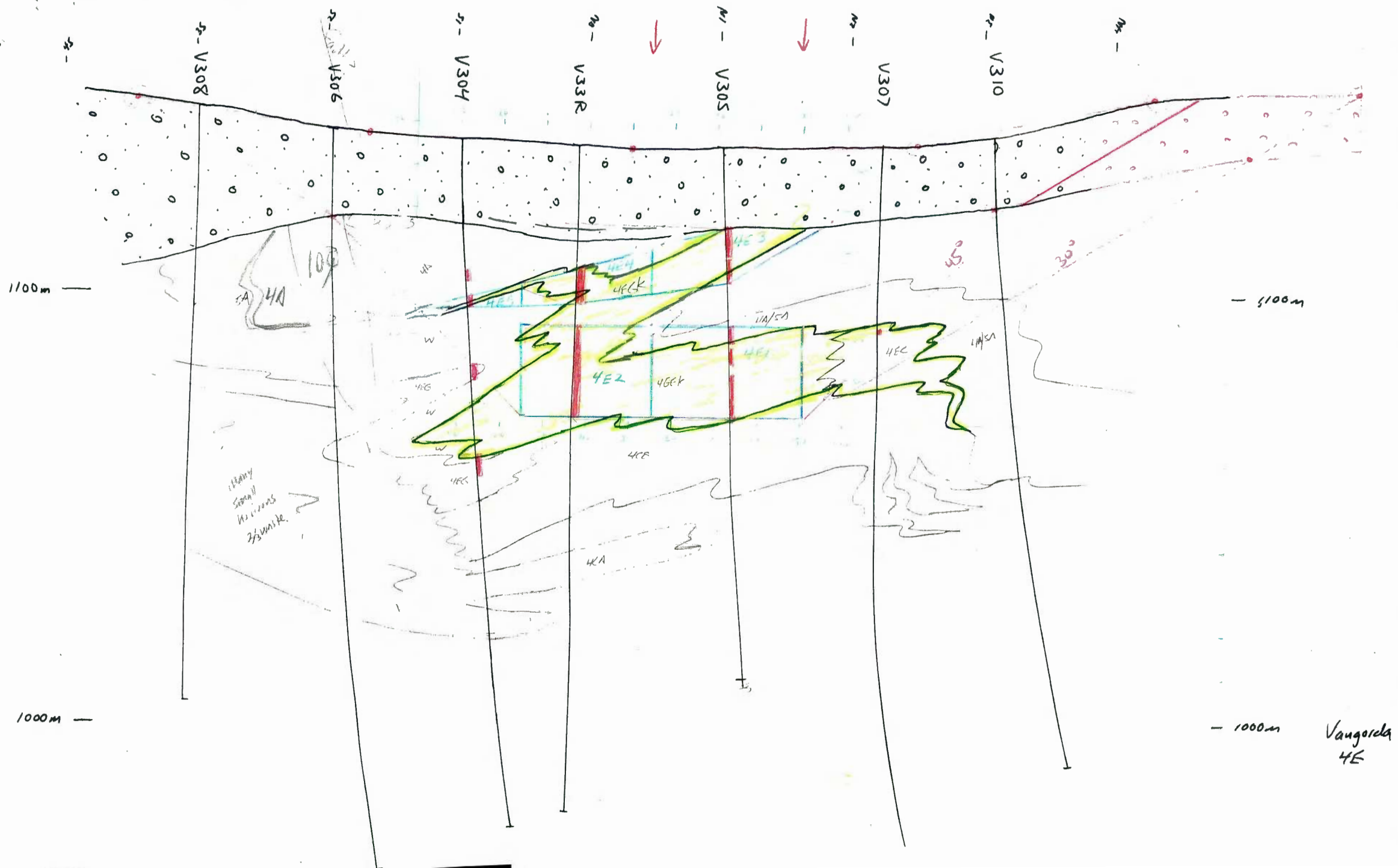
A+B+C ore = 10613 compared to 10830 ⇒ 2% diff.

rock 4133.5 × 60.5 = 250,077 @ 2.75 = 687712 tonnes waste rock

OB 4486.5 × 60.5 = 271,433

4E

Overburden	waste rock	waste rock	total vol.
-66, 75	1, 26	1, 26	-66, 75
-12, 68	-20, 48	28, 28	-12, 68
50, 64	22, 46	73, 33	50, 64
117, 65	1, 26	97, 48	117, 65
172, 77		134, 51	172, 77
220, 78		194, 63	220, 78
194, 63		91, 1	~~91, 1~~
134, 51		91, 23	91, 1
22, 46		24, 23	24, 1
-20, 48		24, 1	-20, 48
-66, 75		1, 26	-66, 75


V308
V306
V304
V33R
V305
V307
V310
1100m
1000m
5100m
1000m
4E3
4E4
4FCk
4E2
4GCk
4E1
4EC
4CE
4KA
4A
4E
Vaugorda
4E

VANGORDA DEPOSIT- main layer high grade Nov. 1984

SECTION 4 EAST

DDH	from	to	length	(M) S.G.	(N) Pb	(O) Zn	(P) Cu	(Q) Ag	(R) Au	(S) BaO	(T) Pb + Zn
V-305	18.4	20.0	1.6	4.41	4.84	3.15	.17	60.0	.80	7.94	7.99
	20	21.2	1.2	3.92	6.01	4.65	.11	72.0	.51	7.38	10.66
	21.2	23	1.8	3.18	1.74	1.96	.05	26.5	.08	17.9	3.70
	23	24.2	1.2	3.88	4.19	5.03	.15	60.0	.1	11.87	9.22
	24.2	25.1	.9	4.45	3.59	6.42	.05	59.5	.42	22.92	10.01
	25.1	25.6	.5	2.75	0	0	0	0.0	0	0	0.00
	25.6	27.4	1.8	4.22	3.97	4.23	.17	53.5	1.15	3.98	8.20
	27.4	28.7	1.3	4.54	5.89	7.59	.06	85.0	.35	23.08	13.48
	28.7	29.8	1.1	4.05	4.56	6.12	.06	77.0	.31	19.7	10.68
4-E-3 =	18.4	29.8	11.4	3.99	4.05	4.40	.10	56.8	.47	12.94	8.45
	42	43.8	1.8	3.27	4.26	6.61	.05	59.5	.15	3.21	10.87
	43.8	44.7	.9	3.55	4.67	7.37	.12	72.0	.86	5.62	12.04
	44.7	46	1.3	4.74	9.04	11.29	.04	160.0	.77	12.57	20.33
	46	46.9	.9	3.34	2.09	3.69	.01	33.0	.07	15.59	5.78
	46.9	47.9	1.0	4.1	3.18	7.01	.02	52.0	.14	31.86	10.19
	47.9	48.8	.9	4.25	5.79	4.47	.15	81.5	.76	8.24	10.26
	48.8	50.3	1.5	4.41	4.12	6.81	.05	73.5	.52	31.3	10.93
	50.3	51.8	1.5	4.23	2.84	6.26	.02	40.0	.31	36.07	9.10
	51.8	53.3	1.5	4	1.92	5.3	.03	34.5	.39	32.69	7.22
	53.3	54.9	1.6	4.33	3.68	7.13	.03	60.0	.36	33.96	10.81
	54.9	56.4	1.5	4.41	3.77	7.49	.03	70.0	.27	33.47	11.26
	56.4	57.9	1.5	4.32	4.71	8.86	.04	88.5	.31	27.5	13.57
	57.9	59.4	1.5	4.24	4.59	9.61	.03	81.5	.36	25.67	14.20
	59.4	61	1.6	4.42	3.18	8.16	.02	59.0	.39	34.3	11.34
	61	62.5	1.5	4.33	6.94	11.29	.07	89.0	.93	20.04	18.23
	62.5	63.5	1.0	4.16	9.07	11.66	.08	84.5	1.36	14.39	20.73
4-E-1 =	42	63.5	21.5	4.15	4.52	7.77	.05	70.9	.47	23.92	12.30
V-33-R	28.5	29	.5	3.88	10.86	8.87	.03	157.0	.41	7.32	19.73
	29	30.1	1.1	4.46	4.39	8.25	.03	72.0	.27	37.04	12.64
	30.1	31.7	1.6	4.69	6.33	7.63	.19	81.5	1.41	7.45	13.96
	31.7	33.2	1.5	4.57	4.69	6.02	.09	67.0	1.1	23.71	10.71
	33.2	34.4	1.2	4.06	3.17	5.82	.15	47.0	1.23	29.78	8.99
	34.4	35.5	1.1	4.04	4.74	4.6	.48	87.5	3.43	12.96	9.34
	35.5	37.1	1.6	4.5	5.76	6.54	.13	77.5	1.58	11.06	12.30
4-E-4 =	28.5	37.1	8.6	4.39	5.31	6.66	.16	77.4	1.42	18.56	11.97
	42.3	43.5	1.2	4.13	6.21	7.9	.08	87.0	.79	19.01	14.11
	43.5	45	1.5	3.91	3.72	7.29	.01	58.0	.21	30.33	11.01
	45	46.6	1.6	3.98	3.35	8.05	.01	59.5	.17	36.94	11.40
	46.6	48.2	1.6	4.17	6.37	6.94	.02	88.5	.27	27.95	13.31
	48.2	49.7	1.5	3.83	3.59	4.27	.16	49.5	.55	16.02	7.86
	49.7	51.2	1.5	3.87	5.15	4.43	.09	70.0	.58	17.44	9.58
	51.2	52.7	1.5	3.59	3.06	5.18	.06	47.5	.72	20.92	8.24
	52.7	54.3	1.6	3.96	2.65	5.09	.05	38.5	.72	22.8	7.74

	54.3	55.8	1.5	4.28	2.47	5.66	.07	41.0	.68	30.84	8.13
	55.8	57.3	1.5	4.45	3.56	5.39	.15	71.5	1.89	23.85	8.95
	57.3	58.8	1.5	4.34	3.47	6.75	.2	60.0	1.17	17.89	10.22
	58.8	60	1.2	4.22	4.27	6.75	.04	62.5	.62	32.88	11.02
	60	61.3	1.3	3.81	4.92	4.72	.07	64.0	1.17	14.53	9.64
	61.3	63.2	1.9	3.83	3.03	4.83	.13	35.5	1.03	16.67	7.86
4-E-2 =	42.3	63.2	20.9	4.02	3.93	5.91	.08	58.6	.75	23.40	9.83
V-304	30.8	32.3	1.5	3.21	5.05	7.86	.16	73.5	.99	.14	12.91
	36.9	38.4	1.5	2.87	2.6	5.82	.04	40.5	.78	.19	8.42
	38.4	39.2	.8	4.19	8.58	12.12	.23	107.0	1.47	3.58	20.70
4-E-5 =	36.9	39.2	2.3	3.33	4.68	8.01	.11	63.6	1.02	1.37	12.69
	53	54.5	1.5	4.5	8.14	9.86	.05	123.0	1.12	23.34	18.00
	54.5	56	1.5	4.14	4.25	6.86	.17	65.5	1.15	17.24	11.11
	56	57	1.0	4.01	4.77	6.41	.13	66.0	.63	12.83	11.18
	53	57	4	4.24	5.84	7.87	.12	87.2	1.01	18.43	13.71
	74.6	76.2	1.6	4.1	4.07	3.87	.53	48.5	4.18	1.74	7.94
	76.2	77.7	1.5	4.63	4.94	5.95	.21	68.5	1.41	17.61	10.89
	77.7	79.1	1.4	4.51	5.78	8.5	.07	83.5	2.05	22.56	14.28
	74.6	79.1	4.5	4.40	4.89	6.00	.28	66.1	2.59	13.51	10.90

File: VANG.4E

block	from	to	length	S.G.	Pb	Zn	Cu	Ag	Au	BaO	Pb + Zn	DDH	AREA	VOLUME	TONNAGE
SECTION 4 EAST															
4-E-1 =	42	63.5	21.5	4.15	4.52	7.77	.05	70.9	.47	23.92	12.30	V-305	746	45103	168495
4-E-4 =	28.5	37.1	8.6	4.39	5.31	6.66	.16	77.4	1.42	18.56	11.97	V-33-R	240	14520	57318
4-E-3 =	18.4	29.8	11.4	3.99	4.05	4.40	.10	56.8	.47	12.94	8.45	V-305	307	18574	66678
4-E-2 =	42.3	63.2	20.9	4.02	3.93	5.91	.08	58.6	.75	23.40	9.83	V-33-R	640	38750	140220
4-E-5 =	36.9	39.2	2.3	3.33	4.68	8.01	.11	63.6	1.02	1.37	12.69	V-304	60	3630	10876
averages/totals				4.09	4.37	6.54	.08	65.6	.70	20.86	10.91		1993	120576	443588

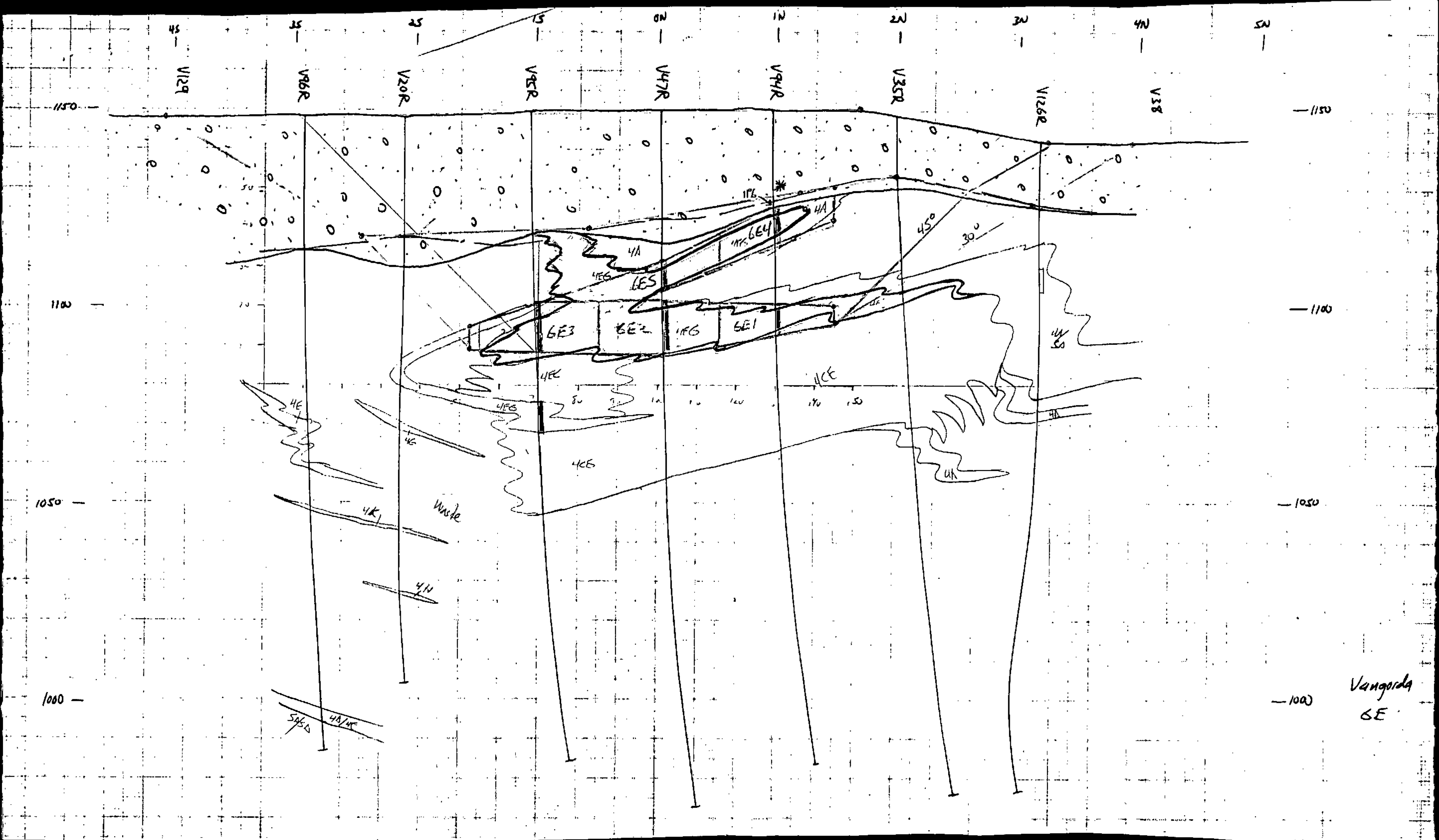
GE

```
 RUN

          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 9

COORDINATES OF VERTEX 1  (A,B)  :-26,68
                VERTEX 2  (A,B)  :151,70
                VERTEX 3  (A,B)  :199,62
                VERTEX 4  (A,B)  :220,62
                VERTEX 5  (A,B)  :195,46
                VERTEX 6  (A,B)  :161,53
                VERTEX 7  (A,B)  :83,40
                VERTEX 8  (A,B)  :25,38
                VERTEX 9  (A,B)  :-26,68

AREA = 5058      overburden
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 7

COORDINATES OF VERTEX 1  (A,B)  :25,38
                VERTEX 2  (A,B)  :83,40
                VERTEX 3  (A,B)  :136,49
                VERTEX 4  (A,B)  :101,32
                VERTEX 5  (A,B)  :52,15
                VERTEX 6  (A,B)  :52,9
                VERTEX 7  (A,B)  :25,38

AREA = 1417      waste rock
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 8

COORDINATES OF VERTEX 1  (A,B)  :97,22
                VERTEX 2  (A,B)  :145,42
                VERTEX 3  (A,B)  :145,50
                VERTEX 4  (A,B)  :161,53
                VERTEX 5  (A,B)  :195,46
                VERTEX 6  (A,B)  :145,16
                VERTEX 7  (A,B)  :145,20
                VERTEX 8  (A,B)  :97,22

AREA = 1485      waste rock
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 9

COORDINATES OF VERTEX 1  (A,B)  :-26,68
                VERTEX 2  (A,B)  :151,70
                VERTEX 3  (A,B)  :199,62
                VERTEX 4  (A,B)  :220,62
                VERTEX 5  (A,B)  :145,16
                VERTEX 6  (A,B)  :102,7
                VERTEX 7  (A,B)  :52,9
                VERTEX 8  (A,B)  :25,38
                VERTEX 9  (A,B)  :-26,68

AREA = 9526      total pit
```

OB 5058
waste rock 1417
waste rock 1485
ore 1447
9407

Δ% -1.3 % between sum & total pit

OB - 5058 * 60.5 = 306,009 m³ = 400,242 yd³
waste rock = 2902 * 60.5 = 175,571 m³ = 229,637 yd³
@ 2.75 482820 tonnes
O/C = 1447 * 60.5 = 87545 m³ = 114,504 yd³
@ 3.76 = 329 344 tonnes



4S
3S
2S
1S
0N
1N
2N
3N
4N
5N
V129
V98R
V20R
V95R
V47R
V94R
V35R
V126R
V38
1150
1100
1050
1000
6E1
6E2
6E3
6E4
6ES
4A
4FG
4EG
4CE
4CG
4G
4K
4N
Waste
45°
30°
Vangorda
6E

6E

overburden	waste rock	waste rock	total Pit
-26, 68	25, 38	97, 22	-26, 68
151, 70	83, 40	145, 42	154, 70
199, 62	136, 49	145, 50	199, 62
220, 62	101, 32	161, 53	220, 62
195, 46	52, 15	195, 46	145, 16
161, 53	52, 9	145, 16	102, 7
83, 40	25, 38	145, 20	52, 9
25, 38		97, 22	25, 38
-26, 68			-25, 68

VANGORDA DEPOSIT main layer high grade calculation Nov. 1984

SECTION 6 EAST

DDH	from	to	length	(M) S.G.	(N) Pb	(O) Zn	(P) Cu	(Q) Ag	(R) Au	(S) BaO	(T) Pb + Zn
V-94-R	25.1	26.3	1.2	4.08	6.84	6.03	.08	93.5	.55	10.94	12.87
	26.3	26.5	.2	2.75	0	0	0	0	0	0	0.00
	26.5	28.0	1.5	4.47	5.94	6.12	.09	80.5	.41	15.87	12.06
	28.0	29.0	1.0	4.66	8.54	8.56	.07	105	.27	20.37	17.10
	29.0	30.4	1.4	4.81	1.27	4.82	.02	22	.21	.19	6.09
	30.4	30.9	.5	4.52	4.68	7.58	.03	71	.27	21.21	12.26
	30.9	31.7	.8	3.31	2.38	3.29	.11	38.5	0	12.96	5.67
	31.7	32.2	.5	4.04	8.45	15.5	.07	131	.34	7.27	23.95
	32.2	32.9	.7	3.03	.51	.57	.03	5.5	0	10.81	1.08
	32.9	34.2	1.3	3.86	9.55	6.97	.11	130.5	.34	1.75	16.52
6-E-4 =	25.1	34.2	9.1	4.13	5.35	6.08	.07	74.07	.28	10.11	11.43
	50	50.7	.7	4.47	5.35	9.19	.16	95	.34	12.05	14.54
	50.7	51.2	.5	2.75	0	0	0	0	0	0	0.00
	51.2	52.7	1.5	4.52	8.15	5.84	.05	111.5	.55	17.53	13.99
	52.7	54.3	1.6	4.31	5.26	8.55	.04	89	.41	28.77	13.81
	54.3	56	1.7	4.33	2.4	5.76	.03	39	0	32.07	8.16
	56	57.3	1.3	3.65	4.61	7.45	.11	55	.21	4.33	12.06
6-E-1 =	50	57.3	7.3	4.15	4.72	6.62	.06	70.40	.27	19.30	11.34
V-47-R	38.1	39.6	1.5	3.02	4.62	5.4	.06	64	.75	.45	10.02
	39.6	40.5	.9	3.22	4.38	6.14	.07	68	.58	2.3	10.52
	40.5	42.1	1.6	4.25	5.04	6.77	.13	82.5	.96	12.53	11.81
	42.1	43.6	1.5	4.38	3.98	4.04	.16	52	1.47	5.01	8.02
	43.6	45.1	1.5	4.56	3.16	5.21	.12	51.5	.99	14.74	8.37
	45.1	45.7	.6	4.42	9.93	8.18	.05	126	.58	8.37	18.11
6-E-5 =	38.1	45.7	7.6	3.99	4.68	5.69	.11	68.43	.95	7.56	10.37
	48.2	49	.8	4.85	5.16	6.61	.09	90	.72	24.09	11.77
	49	50	1.0	3.45	3.3	3.93	.03	55	.34	9.67	7.23
	50	52	2.0	4.52	2.96	3.78	.04	50.5	.86	7	6.74
	52	53.2	1.2	4.75	3.66	7.22	.04	59.5	.24	26.98	10.88
	53.2	54.4	1.2	4.51	2.88	6.44	.02	53.5	.24	30.52	9.32
	54.4	55.9	1.5	3.94	5.06	7.34	.07	72	.58	11.08	12.40
	55.9	57.5	1.6	4.98	1.43	2.8	.04	31.5	.45	4.39	4.23
	57.5	58.8	1.3	4.83	2.22	4.17	.02	42.5	.21	23.16	6.39
	58.8	60.4	1.6	4.5	5.72	7.42	.06	86	.27	24.02	13.14
	60.4	62.1	1.7	4.2	4.22	6.93	.06	67	.34	24.87	11.15
6-E-2 =	48.2	62.1	13.9	4.46	3.62	5.59	.05	59.62	.44	17.73	9.21
V-95-R	48.1	49.8	1.7	4.11	4.9	7.24	.02	68	.17	29.11	12.14
	49.8	51.1	1.3	3.02	.83	1.66	.01	10.5	0	12.95	2.49
	51.1	52.3	1.2	3.87	3.23	6.07	.02	39	.07	29.28	9.30

	52.3	53	.7	4.25	8.62	8.52	.02	110	.34	17.84	17.14
	53	54.2	1.2	4.39	13.75	12.4	.04	160.5	.48	2.81	26.15
	54.2	55.5	1.3	4.37	2.75	6.25	.03	35.5	.1	38.9	9.00
	55.5	56.3	.8	4.77	22.3	8.87	.03	244	1.65	2.2	31.17
	56.3	57.8	1.5	4.42	6.88	8.83	.03	96.5	.68	21.19	15.71
	57.8	59.4	1.6	4.44	6.88	7.23	.06	94.5	.82	22.77	14.11
	59.4	60.7	1.3	3.84	3.95	5.93	.13	51	.34	12.28	9.88
6-E-3 =	48.1	60.7	12.6	4.13	6.64	7.17	.04	83.27	.43	20.15	13.81
	73.4	75	1.6	4.61	4.68	5.82	.29	74.00	1.10	19.87	10.50
	75	76.5	1.5	4.66	3.67	4.95	.19	65.50	1.20	11.84	8.62
	76.5	78	1.5	4.61	7.90	8.09	.15	103.00	1.65	5.66	15.99
	78	79.6	1.6	4.49	5.94	9.54	.15	86.00	0.00	28.83	15.48
	79.6	81.1	1.5	4.34	4.50	6.66	.13	62.00	.07	27.21	11.16
	73.4	81.1	7.7	4.54	5.34	7.03	.18	78.15	.80	18.83	12.37

File: VANG.6E

block	from	to	length	S.G.	Pb	Zn	Cu	Ag	Au	BaO	Pb + Zn	DDH	AREA	VOLUME	TONNAGE
SECTION 6 EAST															
6-E-4	25.1	34.2	9.1	4.13	5.35	6.08	.07	74.1	.28	10.11	11.43	V-94-R	252	15246	56713
6-E-1	50	57.3	7.3	4.15	4.72	6.62	.06	70.4	.27	19.30	11.34	V-94-R	221	13386	49980
6-E-5	38.1	45.7	7.6	3.99	4.68	5.69	.11	68.4	.95	7.56	10.37	V-47-R	285	17258	61903
6-E-2	48.2	62.1	13.9	4.46	3.62	5.59	.05	59.6	.44	17.73	9.21	V-47-R	331	20030	80381
6-E-3	48.1	60.7	12.6	4.13	6.64	7.17	.04	83.3	.43	20.15	13.81	V-95-R	357	21614	80315
averages/totals				4.18	5.02	6.24	.06	71.2	.48	15.33	11.26		1447	87533	329292

6. 8E

```
]
]RUN POLYGONAREA
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 6

COORDINATES OF VERTEX 1  (A,B)  :-40,62
               VERTEX 2  (A,B)  :180,65
               VERTEX 3  (A,B)  :144,41
               VERTEX 4  (A,B)  :90,33
               VERTEX 5  (A,B)  :25,24
               VERTEX 6  (A,B)  :-40,62

AREA = 5416.5     overburden
PRESS <RETURN> KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 5

COORDINATES OF VERTEX 1  (A,B)  :25,24
               VERTEX 2  (A,B)  :90,33
               VERTEX 3  (A,B)  :43,15
               VERTEX 4  (A,B)  :43,5
               VERTEX 5  (A,B)  :25,24

AREA = 463.5     waste rock
PRESS <RETURN> KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 5

COORDINATES OF VERTEX 1  (A,B)  :90,33
               VERTEX 2  (A,B)  :144.41
??125,29
?EXTRA IGNORED
               VERTEX 3  (A,B)  :125,36
               VERTEX 4  (A,B)  :90,33
               VERTEX 5  (A,B)  :0
??
?REENTER
 (A,B)  :
?REENTER
 (A,B)  :999
??999,999
?EXTRA IGNORED

AREA = 1528.38501
PRESS <RETURN> KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 5

COORDINATES OF VERTEX 1  (A,B)  :90,33
               VERTEX 2  (A,B)  :144,41
               VERTEX 3  (A,B)  :125,29
               VERTEX 4  (A,B)  :125,36
               VERTEX 5  (A,B)  :90,33

AREA = 125.5     waste rock
PRESS <RETURN> KEY TO RESTART PROGRAM
          AREA OF A POLYGON
```

overburden	5416.5	
waste rock	463.5	
	125.5	
ore	1025.5	→ area on [illegible] sheet = 788 → 4% different; using [illegible] [illegible] = 997.5
	7031	
total	7031	

Overburden 5416.5 * 60.5 = 327698 m³ = 428611 yd³

Waste rock 589 * 60.5 = 35635 m³ = 46608 yd³
@ 2.75 97996 tonnes

ore 990 * 60.5 = 59895 m³ = 78339 yd³
@ 3.79 = 227,002 tonnes

```
NUMBER OF VERTICES (0 TO END PROGRAM)     : 7

COORDINATES OF VERTEX 1   (A,B)   :43,15
                VERTEX 2  (A,B)   :90,33
                VERTEX 3  (A,B)   :125,36
                VERTEX 4  (A,B)   :125,29
                VERTEX 5  (A,B)   :91,17
                VERTEX 6  (A,B)   :43,5
                VERTEX 7  (A,B)   :43,15

AREA = 1025.5   O/R.
PRESS (RETURN) KEY TO RESTART PROGRAM
           AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 7

COORDINATES OF VERTEX 1   (A,B)   :-40,62
                VERTEX 2  (A,B)   :180,65
                VERTEX 3  (A,B)   :125,29
                VERTEX 4  (A,B)   :91,17
                VERTEX 5  (A,B)   :43,5
                VERTEX 6  (A,B)   :25,24
                VERTEX 7  (A,B)   :-40,62

AREA = 7019   Total pt
PRESS (RETURN) KEY TO RESTART PROGRAM
           AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 8

COORDINATES OF VERTEX 1   (A,B)   :180,65
                VERTEX 2  (A,B)   :144,41
                VERTEX 3  (A,B)   :125,29
                VERTEX 4  (A,B)   :91,17
                VERTEX 5  (A,B)   :43,5
                VERTEX 6  (A,B)   :25,24
                VERTEX 7  (A,B)   :-40,62
                VERTEX 8  (A,B)   :180,65

AREA = 7031   total Af
PRESS (RETURN) KEY TO RESTART PROGRAM
```

```
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 8

COORDINATES OF VERTEX 1  (A,B)  :91,17
                VERTEX 2  (A,B)  :43,5
                VERTEX 3  (A,B)  :25,24
                VERTEX 4  (A,B)  :-40,62
                VERTEX 5  (A,B)  :180,65
                VERTEX 6  (A,B)  :144,41
                VERTEX 7  (A,B)  :125,29
                VERTEX 8  (A,B)  :91,17

AREA = 7031
PRESS (RETURN) KEY TO RESTART PROGRAM
```

total pt different sequencie of vertices

```
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 5

COORDINATES OF VERTEX 1  (A,B)  :125,36
                VERTEX 2  (A,B)  :125,29
                VERTEX 3  (A,B)  :106,22
                VERTEX 4  (A,B)  :106,34
                VERTEX 5  (A,B)  :125,36

AREA = 180.5
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 7

COORDINATES OF VERTEX 1  (A,B)  :106,22
                VERTEX 2  (A,B)  :106,34
                VERTEX 3  (A,B)  :90,33
                VERTEX 4  (A,B)  :74,26
                VERTEX 5  (A,B)  :74,13
??91,17
?EXTRA IGNORED
                VERTEX 6  (A,B)  :106,22
                VERTEX 7  (A,B)  :9877,5567789

AREA = 796.5
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 7

COORDINATES OF VERTEX 1  (A,B)  :106,22
                VERTEX 2  (A,B)  :106,34
                VERTEX 3  (A,B)  :90,33
                VERTEX 4  (A,B)  :74,26
                VERTEX 5  (A,B)  :74,13
                VERTEX 6  (A,B)  :91,17
                VERTEX 7  (A,B)  :106,22

AREA = 460.5
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     : 5

COORDINATES OF VERTEX 1  (A,B)  :43,15
                VERTEX 2  (A,B)  :43,5
                VERTEX 3  (A,B)  :74,13
                VERTEX 4  (A,B)  :74,26
                VERTEX 5  (A,B)  :43,15

AREA = 356.5
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)     :

COORDINATES OF VERTEX 1  (A,B)  :43,15
                VERTEX 2  (A,B)  :74,26
                VERTEX 3  (A,B)  :90,33
```

8E1 ore block

8E2 ore block

8E3 ore block

```
                VERTEX 4  (A,B)  :106,34
                VERTEX 5  (A,B)  :125,36
                VERTEX 6  (A,B)  :125,29
                VERTEX 7  (A,B)  :106,22
                VERTEX 8  (A,B)  :91,17
                VERTEX 9  (A,B)  :74,13
                VERTEX 10 (A,B)  :43,5
                VERTEX 11 (A,B)  :43,15

AREA = 997.5    total use all points
PRESS <RETURN> KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)    : 7

COORDINATES OF VERTEX 1  (A,B)  :43,15
                VERTEX 2  (A,B)  :90,33
                VERTEX 3  (A,B)  :125,36
                VERTEX 4  (A,B)  :125,29
                VERTEX 5  (A,B)  :91,17
                VERTEX 6  (A,B)  :43,5
                VERTEX 7  (A,B)  :43,15

AREA = 1025.5   total use same points as earlier calcn.
PRESS <RETURN> KEY TO RESTART PROGRAM
                                  ie 7 vrs 11
```

BE1	BE2	BE3	total w.e	total w.e recheck
125,36	106,22	43,15	43,15	43,15
125,29	106,34	43,5	71,26	90,33
106,22	90,33	74,13	90,33	125,36
106,34	74,26	74,26	106,34	125,29
125,36	74,13	43,15	125,36	91,17
	91,17		125,29	43,5
	106,22		106,22	43,15
			91,17	
			74,13	
			43,5	
			43,15	

SE

Over burden

-40,62
180,65
144,41
90,33
25,24
-40,62

6 vertices

or

-40,62
180,65
144,41
25,24
-40,62

5 Vertices

Waste rock

25,24
90,33
43,15
43,5
25,24

5 vertices

Waste rock

90,33
144,41
125,29
125,36
90,33

5 vertices

ore

43,15
90,33
125,36
125,29
91,17
43,5
43,15

7 vertices

total Pit

-40,62
180,65
125,29
91,17
43,5
25,24
-40,62

7 vertices

or

-40,62
180,65
144,41
125,29
91,17
43,5
25,24
-40,62

8 vertices

Total Pit

91,17
43,5
25,24
-40,62
180,65
144,41
125,29
91,17

-40,62 V54 V320 V53R V5R V45R V303 V18R 18,65 V317

1150 1100 1050 1000 m

25,24 43,15 43,5 74,13 74,28 90,33 106,31 125,29 144,41

8E-3 8E-2 8E-1

4EG 4CE 4DE 4CF 4AE 4AB 4A

SASD

Vangorda
8E

VANGORDA DEPOSIT- main layer high grade calculation Nov. 1984

SECTION 8 EAST

DDH	from	to	length	(M) S.G.	(N) Pb	(O) Zn	(P) Cu	(Q) Ag	(R) Au	(S) BaO	(T) Pb + Zn
V-303	28.8	29.9	1.1	3.03	2.1	3.27	.09	30.5	.21	7.37	5.37
	29.9	31.0	1.1	3.33	3.73	5.38	.07	68.5	.37	11.61	9.11
	31.0	32.1	1.1	3.84	7.62	12.6	.06	101.0	.12	2.67	20.22
	32.1	32.8	.7	2.96	1.09	.92	.01	12.0	.15	3.63	2.01
	32.8	34.1	1.3	3.62	5.93	7.79	.12	75.5	.21	12.22	13.72
	34.1	35.4	1.3	2.72	1.34	2.1	.04	15.0	.24	1.66	3.44
	35.4	36.8	1.4	3.49	3.63	6.53	.3	70.0	.61	10.5	10.16
8-E-1 =	28.8	36.8	8.0	3.30	3.76	5.75	.11	55.5	.29	7.39	9.51
	44.3	45.5	1.2	4.05	2.75	4.25	.06	45.0	.68	12.73	7.00
	45.5	46.7	1.2	4.34	8.60	9.01	.06	110.5	.87	14.59	17.61
	46.7	48.4	1.7	3.99	8.82	12.79	.06	94.5	.78	3.69	21.61
	44.3	48.4	4.1	4.11	6.98	9.18	.06	84.7	.78	9.53	16.16
V-45-R	31.7	33.2	1.5	4.63	5.79	8.80	.07	88.5	.75	30.68	14.59
	33.2	34.7	1.5	4.42	3.70	6.89	.09	60.5	.68	22.49	10.59
	34.7	36.3	1.6	4.34	3.59	8.24	.02	56.0	.25	35.21	11.83
	36.3	37.8	1.5	4.44	3.65	8.88	.01	56.0	.25	36.54	12.53
	37.8	39.3	1.5	4.60	3.91	8.34	.01	59.0	.07	35.07	12.25
	39.3	40.8	1.5	4.33	2.91	7.40	.01	46.0	.11	34.40	10.31
	40.8	42.4	1.6	4.25	3.87	7.65	.05	59.0	.53	28.78	11.52
	42.4	43.9	1.5	4.53	4.61	7.43	.01	89.0	.18	33.11	12.04
	43.9	45.4	1.5	4.44	5.65	8.96	.07	67.0	.36	24.06	14.61
	45.4	46.9	1.5	4.06	5.32	7.18	.05	86.5	.36	28.62	12.50
8-E-2 =	31.7	46.9	15.2	4.40	4.29	7.98	.04	66.6	.35	30.91	12.27
V-302	41.9	43.4	1.5	4.29	8.70	7.66	.18	122.5	1.60	6.38	16.36
	43.4	44.7	1.3	4.58	4.79	5.41	.23	62.0	.79	14.90	10.20
	44.7	46.3	1.6	4.67	3.42	5.68	.20	57.5	1.59	12.19	9.10
	46.3	47.9	1.6	4.30	2.72	3.42	.37	48.0	1.17	9.75	6.14
	47.9	49.3	1.4	4.28	2.74	5.17	.09	53.5	.75	15.36	7.91
	49.3	50.7	1.4	4.40	3.99	6.26	.18	62.5	.71	18.12	10.25
	50.7	52.6	1.9	4.65	5.04	6.24	.16	67.0	1.98	16.94	11.28
8-E-3 =	41.9	52.6	10.7	4.46	4.50	5.70	.20	67.6	1.28	13.37	10.19
	62.8	64.4	1.6	4.55	5.24	4.29	.16	68.00	.85	4.92	9.53
	64.4	65.6	1.2	4.36	5.35	6.22	.14	64.50	1.91	15.46	11.57
	65.6	67.0	1.4	4.60	8.17	9.79	.17	87.50	1.95	9.38	17.96
	67.0	68.5	1.5	4.27	3.02	1.88	.22	35.50	1.26	3.13	4.90
	68.5	69.8	1.3	4.30	4.40	5.16	.06	58.50	1.53	10.58	9.56

62.8	69.8	7.0	4.42	5.21	5.37	.15	62.57	1.47	8.29	10.58

File: VANG.8E

SECTION 8 EAST

block	from	to	length	S.G.	Pb	Zn	Cu	Ag	Au	BaO	Pb + Zn	DDH	AREA	VOLUME	TONNAGE
8-E-1	28.8	36.8	8.0	3.30	3.76	5.75	.11	55.5	.29	7.39	9.51	V-303	190	11503	34188
8-E-2	31.7	46.9	15.2	4.40	4.29	7.98	.04	66.6	.35	30.91	12.27	V-45-R	442	26756	106016
8-E-3	41.9	52.6	10.7	4.46	4.50	5.70	.20	67.6	1.28	13.37	10.19	V-302	356	21568	86586
averages/totals				4.21	4.29	6.77	.11	65.3	.70	20.67	11.06		988	59827	226790

10 E

```
]RUN POLYGONAREA
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)    : 8

COORDINATES OF VERTEX 1  (A,B)  :-12,56
                VERTEX 2  (A,B)  :22,59
                VERTEX 3  (A,B)  :144,59
                VERTEX 4  (A,B)  :200,60
                VERTEX 5  (A,B)  :132,19
                VERTEX 6  (A,B)  :80,25
                VERTEX 7  (A,B)  :38,26
                VERTEX 8  (A,B)  :-12,56

AREA = 5534    overburden
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)    : 4

COORDINATES OF VERTEX 1  (A,B)  :80,25
                VERTEX 2  (A,B)  :132,19
                VERTEX 3  (A,B)  :117,10
                VERTEX 4  (A,B)  :80,25

AREA = 279    waste rock
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)    : 4

COORDINATES OF VERTEX 1  (A,B)  :38,26
                VERTEX 2  (A,B)  :80,25
                VERTEX 3  (A,B)  :117,10
                VERTEX 4  (A,B)  :80,3

AREA = 869     ore
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)    : 7

COORDINATES OF VERTEX 1  (A,B)  :-12,56
                VERTEX 2  (A,B)  :22,59
                VERTEX 3  (A,B)  :144,59
                VERTEX 4  (A,B)  :200,60
                VERTEX 5  (A,B)  :132,19
                VERTEX 6  (A,B)  :80,3
                VERTEX 7  (A,B)  :-12,56

AREA = 6625.5    total pit
PRESS (RETURN) KEY TO RESTART PROGRAM
          AREA OF A POLYGON

NUMBER OF VERTICES (0 TO END PROGRAM)    : 7

COORDINATES OF VERTEX 1  (A,B)  :-12,56
                VERTEX 2  (A,B)  :22,59
                VERTEX 3  (A,B)  :144,59
                VERTEX 4  (A,B)  :200,60
                VERTEX 5  (A,B)  :117,10
```

overburden 5534
waste rock 279
ore 869
6682 vs 6625

or 561 on grade calculation sheet ⇒ 6614 vs 6625

overburden = 5534 * 60.5 = 334807 m³ = 437909 yd³

waste rock 279 * 60.5 = 16880 m³ = 22077 yd³
@ 2.75 = 46420 tonnes

ore 869 * 60.5 = 52575 m³ = 68764 yd³
@ 3.56 = 187167 tonnes

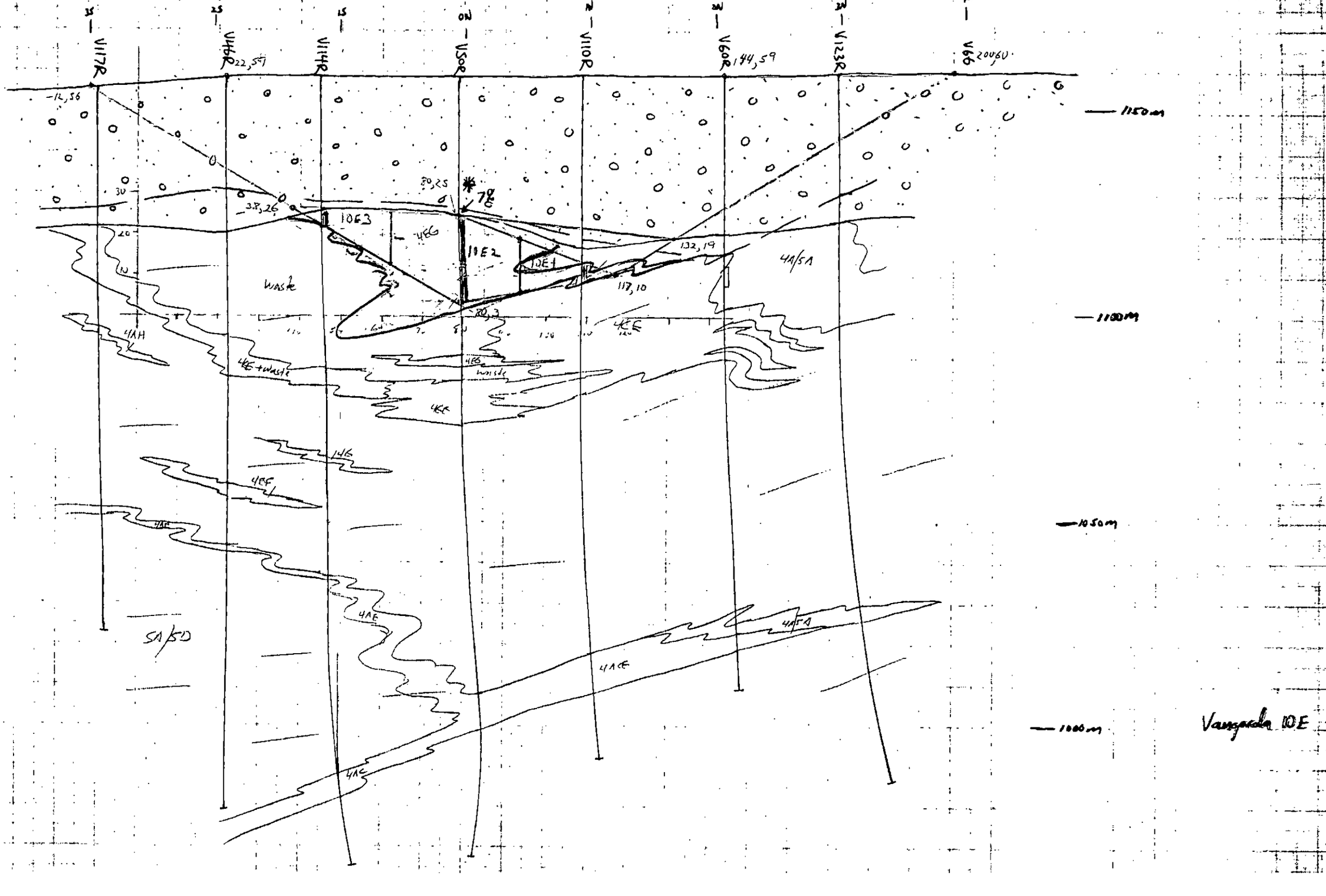
```
                VERTEX 6  (A,B)   :80,3
                VERTEX 7  (A,B)   :-12,56
```

total pt repeat

```
AREA = 6625.5
PRESS (RETURN) KEY TO RESTART PROGRAM
```

10E

Overburden	waste rock	ore	total Pit
-12, 56	80, 25	38, 26	-12, 56
22, 59	132, 19	80, 25	22, 59
144, 59	117, 10	117, 10	144, 59
200, 60	80, 25	80, 3	200, 60
132, 19	4 vertices	4 vertices	[illegible]
80, 25			117, 10
38, 26			80, 3
-12, 56			-12, 56
8 vertices			7 vertices


3S — V117R
2S — V114R 22,57
1S — V111R
0N — V50R
1N — V110R
2N — V60R 144,59
3N — V123R
4N — V66 200,60
1150
1100 m
1050
1000 m
-12,56
30
-38,26
20
10
80,25
7%
106 3
106
10E2
10E1
132,19
117,10
80,3
Waste
4A/5A
4AH
4AG+Waste
4AG
4AG Waste
4AF
4AE
5A/5D
4AE
4A/5A
4AE
4AE
1150 m
1100 m
1050 m
1000 m
Vanzaela 10E

File: VANG.10E

VANGORDA DEPOSIT- main layer high grade calculation Nov. 1984

SECTON 10 EAST

DDH	from	to	length	(M) S.G.	(N) Pb	(O) Zn	(P) Cu	(Q) Ag	(R) Au	(S) BaO	(T) Pb + Zn
V-110-R	46.0	47.5	1.5	3.97	7.75	8.31	.12	61.0	.01	.19	16.06
	47.5	49.1	1.6	3.84	6.51	9.77	.11	57.0	.02	1.11	16.28
	49.1	50.8	1.7	3.74	6.94	10.58	.10	60.0	.02	1.52	17.52
10-E-1 =	46.0	50.8	4.8	3.85	7.05	9.60	.11	59.3	.02	.97	16.65
V-50-R	34.1	34.7	.6	4.26	4.09	5.84	.10	43.0	.89	21.65	9.93
	34.7	36.3	1.6	4.39	4.46	4.16	.13	37.0	1.14	1.41	8.62
	36.3	37.9	1.6	4.62	5.42	5.34	.07	55.5	.96	4.21	10.76
	37.9	40.1	2.2	3.81	5.86	8.80	.05	54.0	.39	15.56	14.66
	40.1	41.8	1.7	4.38	7.85	7.31	.07	114.5	.50	25.38	15.16
	41.8	43.3	1.5	4.26	6.54	6.77	.08	83.0	.71	23.50	13.31
	43.3	44.8	1.5	4.15	6.42	7.52	.10	103.0	.68	32.84	13.94
	44.8	46.3	1.5	4.45	6.02	8.49	.05	88.0	.50	29.59	14.51
	46.3	47.9	1.6	4.18	6.63	8.92	.05	90.0	.53	23.30	15.55
	47.9	48.7	.8	2.89	1.13	2.00	.02	12.5	.14	9.04	3.13
	48.7	50.0	1.3	4.26	5.79	8.56	.08	56.5	.14	21.10	14.35
	50.0	51.5	1.5	4.35	6.15	9.47	.07	58.0	.82	25.95	15.62
	51.5	53.0	1.5	4.33	6.96	10.24	.03	73.0	.14	23.55	17.20
	53.0	54.0	1.0	4.47	5.02	8.44	.02	44.0	.17	21.72	13.46
	54.0	55.2	1.2	4.25	3.84	6.05	.15	40.5	.17	19.62	9.89
10-E-2 =	34.1	55.2	21.1	4.23	5.75	7.44	.07	67.1	.54	19.89	13.19
	67.8	68.9	1.1	4.68	5	6.65	.06	41.5	.17	11.93	11.65
	68.9	70.7	1.8	3.73	5.94	7.59	.04	55.0	.14	4.19	13.53
	67.8	70.7	2.9	4.09	5.58	7.23	.05	49.9	.15	7.13	12.82
	73.9	75.3	1.4	4.27	6.08	9.52	.06	94.5	.62	22.14	15.60
	75.3	76.7	1.4	4.46	5.82	7.73	.1	56.0	.27	21.05	13.55
	73.9	76.7	2.8	4.37	5.95	8.62	.08	75.2	.44	21.59	14.57
V-114-R	32.9	33.5	.6	4.49	4.61	7.99	.06	64.5	.07	37.94	12.60
	33.5	36.9	3.4	2.79	4.79	3.34	.09	35.0	.07	25.94	8.13
10-E-3 =	32.9	36.9	4.0	3.05	4.76	4.04	.09	39.4	.07	27.74	8.80
	70.9	71.8	.9	4.18	5.78	7.67	.02	67.0	.62	21.19	13.45
	74.7	76.0	1.3	4.29	4.67	5.86	.22	47.0	.55	12.86	10.53
	92.4	93.6	1.2	4.61	5.66	8.1	.11	98.0	.62	19.73	13.76
	93.6	94.9	1.3	4.45	5.75	8.09	.16	80.5	.55	18.67	13.84
	92.4	94.9	2.5	4.53	5.71	8.09	.14	88.9	.58	19.18	13.80

SECTION 10 EAST

block	from	to	length	S.G.	Pb	Zn	Cu	Ag	Au	BaO	Pb + Zn	DDH	AREA	VOLUME	TONNAGE
10-E-1	46.0	50.8	4.8	3.85	7.05	9.60	.11	59.3	.02	.97	16.65	V-110-R	153	9241	31982
10-E-2	34.1	55.2	21.1	4.23	5.75	7.44	.07	67.1	.54	19.89	13.19	V-50-R	552	33396	127089
10-E-3	32.9	36.9	4.0	3.05	4.76	4.04	.09	39.4	.07	27.74	8.80	V-114-R	156	9438	25865
averages/totals				3.95	5.84	7.34	.08	61.8	.38	17.72	13.17		861	52075	184935

File: VANG.0E

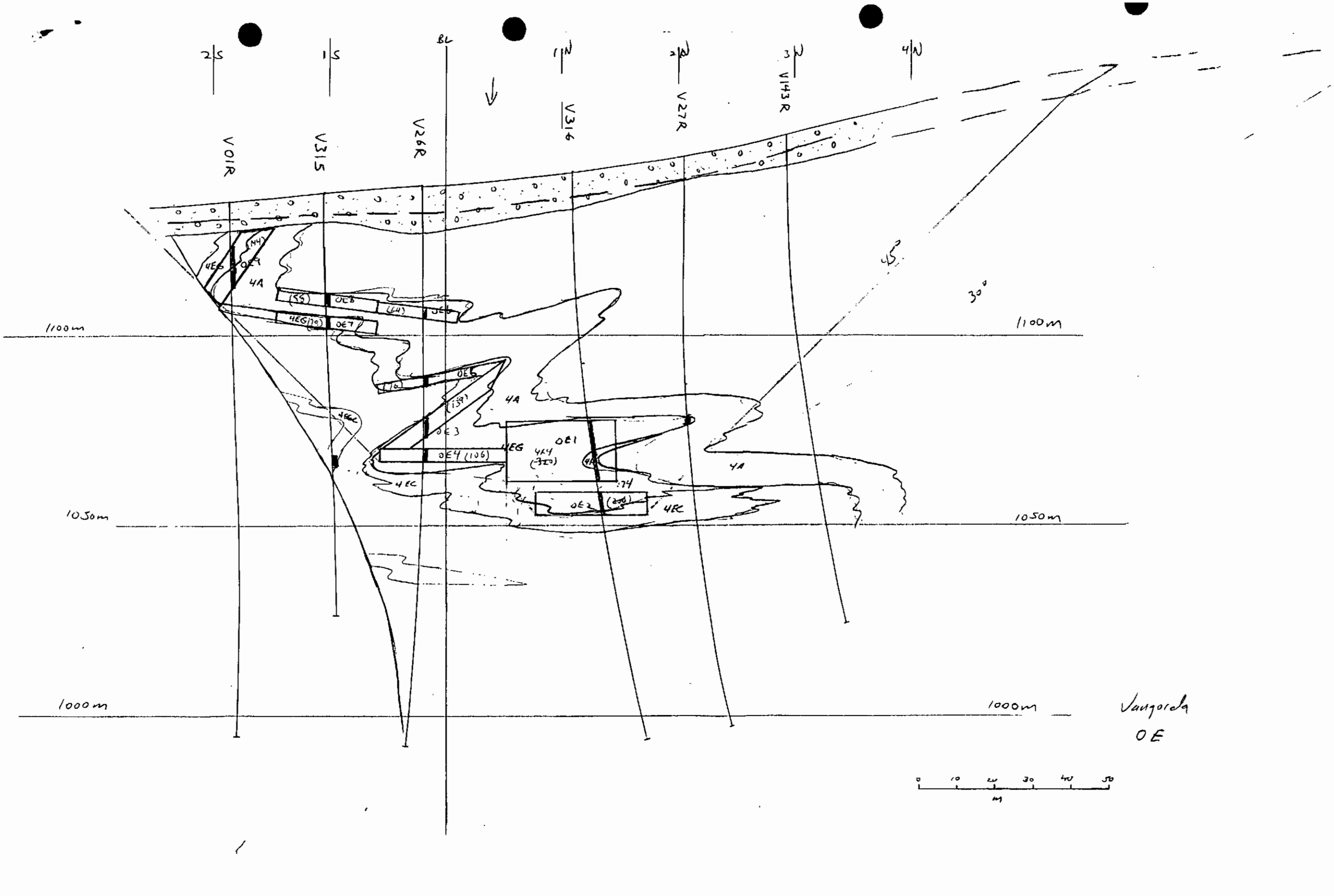
SECTION 0E

D.D.H.	from	to	length	S.G.	Pb	Zn	Cu	Ag	Au	BaO	Pb+Zn
V-27-R	68.5	70	1.5	4.44	7.35	8.71	.02	119.0	.62	25.13	16.06
	70	70.2	.2	3.04	1.53	1.52	.05	23.0	.10	6.78	3.05
	70.2	70.8	.6	4.06	8.44	9.03	.05	138.5	.51	9.16	17.47
	68.5	70.8	2.3	4.22	7.13	8.17	.03	115.7	.55	19.37	15.30
V-316	65.5	66.3	.8	3.21	4.39	5.79	.04	65.5	.15	4.14	10.18
	66.3	67.4	1.1	4.27	4.79	8.39	.04	88.0	.34	19.79	13.18
	67.4	68.9	1.5	4.06	6.63	7.39	.03	94.0	.46	19.32	14.02
	68.9	70.6	1.7	4.35	8.29	7.73	.04	118.0	.46	13.44	16.02
	70.6	71.8	1.2	4.15	12.95	5.94	.06	149.5	.40	.44	18.89
	71.8	73	1.2	4.00	13.11	3.98	.05	143.0	1.04	1.61	17.09
	73	73.8	.8	4.02	4.04	8.35	.05	78.5	.26	19.38	12.39
	73.8	74.8	1	4.29	19.12	8.14	.06	216.5	.22	.82	27.26
	74.8	75.7	.9	3.29	2.12	2.06	.07	22.5	.15	7.55	4.18
	75.7	77.4	1.7	4.07	8.23	6.74	.14	96.5	.22	1.86	14.97
	77.4	79.6	2.2	4.09	4.27	3.39	.24	52.0	.22	.30	7.66
	79.6	81.1	1.5	4.13	5.26	6.30	.04	86.5	.41	11.00	11.56
0-E-1	65.5	81.1	15.6	4.05	7.67	6.09	.08	99.3	.37	7.87	13.76
	84.6	86.3	1.7	4.02	4.59	6.05	.1	65	1.22	11.81	10.64
	86.3	87.8	1.5	3.47	2.74	4.6	.04	42	.33	15.78	7.34
	87.8	89.3	1.5	4.3	5.44	7.73	.06	68.5	.7	15.76	13.17
	89.3	90.6	1.3	4.28	3.5	7.35	.03	64	.37	30.51	10.85
0-E-2	84.6	90.6	6	4.01	4.10	6.39	.06	59.91	.68	17.84	10.49
V-26-R	32.1	33.5	1.4	3.08	3.19	8.19	.04	52.5	.65	.14	11.38
	33.5	34.9	1.4	3.34	4.98	9.82	.09	93	1.27	.11	14.80
0-E-6	32.1	34.9	2.8	3.21	4.08	9.00	.07	72.75	.96	.12	13.09
	50.3	51.4	1.1	4.63	5.48	8.45	.27	84	2.13	16.68	13.93
	51.4	52.6	1.2	4.59	5.61	9.05	.26	89	.89	14.9	14.66
0-E-5	50.3	52.6	2.3	4.61	5.55	8.76	.26	86.61	1.48	15.75	14.31
	61.2	62.8	1.6	4.5	4.24	4.98	.14	61.5	.78	14.86	9.22
	62.8	64.3	1.5	4.44	5.05	5.94	.15	66.5	1.57	9.44	10.99
	64.3	65.6	1.3	4.06	5.21	5.67	.22	49	.82	11.87	10.88
	65.6	66.2	.6	3.83	3.71	5.53	.13	58.5	.46	20.64	9.24
0-E-3	61.2	66.2	5	4.29	4.67	5.51	.16	59.39	.99	13.15	10.18
	69.4	70.9	1.5	4.38	3.61	6.18	.14	55.5	.78	22.61	9.79
	70.9	72.4	1.5	4.54	6.82	5.14	.08	84	1.1	23.32	11.96
0-E-4	69.4	72.4	3	4.46	5.21	5.66	.11	69.75	.94	22.96	10.88

V-315	26.3	28.1	1.8	3.01	5.7	9.25	.06	88.5	1.27	.12	14.95
	28.1	29.9	1.8	3.18	3.2	5.13	.12	51.5	.93	.3	8.33
0-E-8	26.3	29.9	3.6	3.09	4.45	7.19	.09	70.00	1.10	.21	11.64
	32.9	34.4	1.5	4.63	5.5	7.29	.2	116.5	.93	12.33	12.79
	34.4	35.9	1.5	4.58	5.79	8.11	.2	102.5	2.02	9.97	13.90
0-E-7	32.9	35.9	3	4.61	5.65	7.70	.20	109.50	1.48	11.15	13.34
	69.4	70.7	1.3	4.51	5.31	5.6	.14	69.5	.79	10.06	10.91
	70.7	72.2	1.5	4.58	5.64	5.85	.16	62	.51	13.94	11.49
	69.4	72.2	2.8	4.55	5.49	5.73	.15	65.48	.64	12.14	11.22
V-01-R	11.6	13.1	1.5	4.34	6.7	13.11	.57	111.5	1.77	18.06	19.81
	13.1	14.6	1.5	4.47	5.14	11.6	.2	105.5	1.27	26.88	16.74
	14.6	16.2	1.6	5.04	9.54	19.2	.5	154	1.81	4.51	28.74
	16.2	17.5	1.3	4.29	.67	.81	.04	96	.45	6.1	1.48
	17.5	20.4	2.9	3.79	9.4	19.03	.53	16	2.3	.39	28.43
	20.4	22.3	1.9	3.79	6.41	12.08	.23	101.5	1.3	7.63	18.49
0-E-9	11.6	22.3	10.7	4.21	6.85	13.74	.37	87.47	1.61	9.18	20.59

SECTION 0 EAST

block	from	to	length	S.G.	Pb	Zn	Cu	Ag	Au	BaO	Pb+Zn	DDH	AREA	VOLUME	TONNAGE
0-E-1	65.5	81.1	15.6	4.05	7.67	6.09	.08	99.3	.37	7.87	13.76	V-316	~~320~~ 464	19341	70417
0-E-2	84.6	90.6	6	4.01	4.10	6.39	.06	59.91	.68	17.84	10.49	V-316	~~206~~ 171	12451	44922
0-E-6	32.1	34.9	2.8	3.21	4.08	9.00	.07	72.75	.96	.12	13.09	V-26-R	64	3866	11169
0-E-5	50.3	52.6	2.3	4.61	5.55	8.76	.26	86.61	1.48	15.75	14.31	V-26-R	76	4613	19136
0-E-3	61.2	66.2	5	4.29	4.67	5.51	.16	59.39	.99	13.15	10.18	V-26-R	139	8410	32448
0-E-4	69.4	72.4	3	4.46	5.21	5.66	.11	69.75	.94	22.96	10.88	V-26-R	106	6413	25742
0-E-8	26.3	29.9	3.6	3.09	4.45	7.19	.09	70.00	1.10	.21	11.64	V-315	88	5351	14904
0-E-7	32.9	35.9	3	4.61	5.65	7.70	.20	109.50	1.48	11.15	13.34	V-315	79	4792	19859
0-E-9	11.6	22.3	10.7	4.21	6.85	13.74	.37	87.47	1.61	9.18	20.59	V-01-R	144	8715	33022
				4.08	5.77	7.45	.15	80.94	.92	11.80	13.21			73950	271619


2S
1S
BL
1N
2N
3N
4N
V01R
V315
V26R
V316
V27R
V143R
45°
30°
1100m
1100m
1050m
1050m
1000m
1000m
4EG
OE9
4A
(55)
OE8
(44)
OE6
4EG(70)
OE7
OE5
(39)
OE3
OE4 (106)
4EG
4K4
(30)
OE1
4EC
74
OE2
(30)
Vangorda
OE
0
10
20
30
40
50
M