

002024 31/7/71

ORE BENCH 4030

PORTION OF BENCH MINED TO JULY 31/71

ORIGINAL D.D-HOLE DATA

ORE BLOCK	ORIGINAL D.D-HOLE DATA				BLAST HOLE DATA			EST. % OF BLOCK MINED EST TONNAGE
	Pb	Zn	Cu	TONNAGE	Pb	Zn	CoNB	
- 65-1	6.6	10.0	16.6	22,1363	4.8	7.5	12.3	69 (90% ORE ZONE MINED)
- 66-44	5.8	6.7	12.5	16,3652	4.7	6.1	10.8	100
- 66-32	2.9	6.0	8.9	9,0004	2.2	5.6	7.8	100
x 66-24	3.3 (3.4)	5.7	9.0 (9.1)	157,314	2.7	5.0	7.7	30
OUTSIDE 1/2 BENCH	-	-	-	-	4.4	6.7	11.1 (2 blast holes)	
TONNAGE x	3,190,325	4,746,812	7,937,137	63,2333				TONNAGE MINED 413557
AVE GRADE	5.0	7.5	12.5		4.5	6.7	11.2	
	2671189	3850122	6521311	475,019				
	(5.6)	(8.1)	(13.7)	REVISED D.D-HOLE DATA				

TOTAL

ORE BLOCK COMPARISON SHEET

4030 Bench

Date 3/7/71

D.D. Hole _____ Grade Pb _____ Zn _____ Comb. _____ Tons _____

Blast Hole	Pb	Zn
DDH-651 80	381.3	599.7
66-44 76	358.0	464.6
66-32 13	29.2	73.0
66-24 2	5.4	10.0
66-1		
Sub-Totals	171	1147.3

OUTSIDE
1/2 BENCH

Blast Hole	Pb	Zn
2	551.6	843.7
Sub-Totals	125	843.7

Blast Hole	Pb	Zn
3		
1	773.9	1147.3
2	551.6	843.7
Page Total	296	1991.0

Average Pb 4.5 Zn 6.7 Combined 11.2

Actual Tons Ore Mined _____

Remarks:

4030 BENCH. ORIGINAL ORE RESERVE CALC. DATA

<u>IDH.</u>	<u>Pb.</u>	<u>Zn.</u>	<u>Cu+B.</u>	<u>TONNAGE</u>
✓ 65-1	6.6	10.0	16.6 -	221,363
✓ 66-44	5.8	6.7	12.5 -	163,652
✓ 66-32	2.9	6.0	8.9 -	90,004
✓ 66-24	? 3.3	? 5.7	<u>lin</u> ? 9.0 ?	157,314
✓ 66-41	4.0	8.4	12.4 -	122,356

$\Sigma Pb \times Ton$	$\Sigma Zn \times Ton$	$\Sigma Cu+B \times Ton$	<u>754,689</u>
<u>3,679,749.2</u>	<u>5,774,602.6</u>	<u>9,454,351.8</u>	

Ave. $\frac{\Sigma}{Ton}$

<u>4.9</u>	<u>7.6</u>	<u>12.5</u>
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ORE BLOCK COMPARISON SHEET

4030 Bench

Pg 1 of 2

Date 31/7/71

D.D. Hole 65-1

Grade Pb 6.6 Zn 10.0 Comb. 16.6

Tons 221,363

Blast Hole	Pb	Zn	
5913	5.7	8.2	
6053	7.4	10.2	
54	8.4	10.1	
55	6.9	8.6	
56	7.6	10.0	
57	8.3	10.4	
58	5.8	9.4	
59	9.0	11.0	
76	4.4	6.2	
77	7.1	8.9	
78	6.9	8.4	
6148	4.6	7.4	
49	6.4	9.9	
50	4.5	7.6	
51	5.3	8.5	
52	6.5	8.9	
53	6.5	8.5	
6187	1.9	3.0	
6190	3.3	4.5	
91	2.1	2.9	
6236	5.7	9.9	
37	6.0	7.5	
38	6.8	9.2	
Sub-Totals	Holes 22	135.2	186.2

Blast Hole	Pb	Zn	
6239	5.1	7.1	
40	2.4	5.8	
41	3.0	7.8	
42	4.7	7.7	
43	5.7	7.1	
44	5.2	8.7	
45	4.5	7.5	
46	5.4	7.6	
47	6.0	10.4	
48	4.3	6.9	
49	5.5	8.8	
50	5.3	8.7	
51	6.1	9.0	
52	3.6	6.1	
53	5.4	8.2	
54	2.8	4.7	
55	3.6	6.5	
56	2.6	5.0	
57	2.1	3.5	
58	2.7	4.9	
59	3.1	5.2	
Sub-Totals	Holes 21	91.1	147.2

Blast Hole	Pb	Zn	
6261	5.1	8.5	
62	3.7	6.2	
63	2.7	5.2	
64	---	---	
65	---	---	
66	---	---	
67	5.0	8.7	
68	6.0	8.8	
69	4.3	5.9	
70	4.2	6.5	
71	5.1	8.4	
72	3.6	6.1	
73	3.6	5.7	
74	2.5	4.8	
75	1.7	3.4	
76	---	---	
77	---	---	
78	6.0	9.2	
79	5.9	18.3	
80	4.3	6.6	
Sub-Totals	Holes 15	63.7	112.3
1	22	135.2	186.2
2	21	91.1	147.2
Page Total	58	290.0	445.7
S Pg 2	22	91.3	154.0
S	80	381.3	599.7

Average Pb 4.8 Zn 7.5 Combined 12.3

Actual Tons Ore Mined _____

Remarks:

Page Total

S Pg 2

S

ORE BLOCK COMPARISON SHEET

4030 Bench

Page 2
Date 3/17/71

D.D. Hole 66-44

Grade Pb 5.8 Zn 6.7 Comb. 12.5

Tons 163,652

Blast	Hole	Pb	Zn
	5915	4.7	8.2
	16	5.7	8.8
	08	5.0	6.8
	17	4.0	6.4
	18	2.5	4.2
	19	4.2	6.5
	6145	4.6	6.5
	46	4.7	8.0
	47	4.4	6.7
	6185	4.4	5.5
	86	2.3	3.6
Block A	5920	3.1	4.1
	21	6.5	7.4
	22	4.2	6.2
	23	4.0	5.6
	24	6.9	7.7
	25	4.5	5.1
	26	4.4	5.0
	27	2.8	4.2
	28	4.2	4.8
	29	7.7	8.9
	30	3.3	4.0
	31	4.1	6.2
Sub-Totals	1	Holes 23	102.2 140.4

Blast	Hole	Pb	Zn
	5932	3.6	5.5
	33	4.8	6.0
	34	5.5	7.6
	35	5.0	5.9
	36	3.9	5.6
	37	2.9	4.3
	38	4.5	5.2
	39	8.2	8.7
	40	7.1	7.4
	41	3.7	4.8
	42	3.1	4.8
	43	5.7	7.4
	44	7.4	8.1
	45	6.1	6.6
	46	4.2	5.2
	47	5.1	7.1
	48	5.3	6.3
	6260	2.8	4.5
	66		
	6312	6.5	7.6
	13	4.3	6.5
	18		
	19	5.8	8.6
Sub-Totals	2	Holes 21	105.5 133.7

Blast	Hole	Pb	Zn
	6320	5.2	6.1
	21	4.6	6.6
	6342	4.6	7.2
	43	10.6	8.4
	44	7.3	8.2
	45	5.9	6.8
	46	6.1	6.8
	47	8.3	6.1
	48	4.9	5.5
	49	4.7	5.7
	50	5.3	5.3
	51	6.3	9.2
	52	4.8	5.7
	53	3.7	5.1
	54	5.2	6.6
	55	4.8	5.6
	56	7.3	8.7
	63		
	64		
	65	2.5	4.9
	66	2.4	3.3
	70	5.5	5.3
Sub-Totals	3	Holes 20	107.0 127.1
1	23	102.2	140.4
2	21	105.5	133.7
Page Total	64	314.7	401.2
	12	43.3	63.4
	76	358.0	464.6

Average Pb 4.7 Zn 6.1 Combined 10.8

Actual Tons Ore Mined _____

Page Total ---

Σ Pg 2.

Remarks:

ORE BLOCK COMPARISON SHEET

4030 Bench

Date 3/7/71

D.D. Hole 66-32

Grade Pb 2.9 Zn 6.0 Comb. 8.9

Tons 90004

Blast	Hole	Pb	Zn		
	670	1.3	5.3		
<input checked="" type="checkbox"/>	71				
<input checked="" type="checkbox"/>	72				
	73	1.7	3.7		
<input checked="" type="checkbox"/>	75				
	6681	2.4	4.8		
<input checked="" type="checkbox"/>	82				
<input checked="" type="checkbox"/>	83				
<input checked="" type="checkbox"/>	84				
<input checked="" type="checkbox"/>	85				
	86	2.4	5.5		
	87	1.8	6.8		
<input checked="" type="checkbox"/>	88				
	89	3.1	6.9		
<input checked="" type="checkbox"/>	90				
	91	2.3	4.3		
	92	1.4	4.9		
	93	2.6	6.9		
	94	2.2	4.9		
<input checked="" type="checkbox"/>	95				
	96	3.0	5.1		
<input checked="" type="checkbox"/>	97	1.7	5.8		
<input checked="" type="checkbox"/>	98				
	99	3.3	8.1		
Sub-Totals	1	Holes	13	29.2	73.0

Blast	Hole	Pb	Zn
2	Holes		

Blast	Hole	Pb	Zn
3	Holes		
1			
2			
Page Total	13	29.2	73.0

Average Pb 2.2 Zn 5.6 Combined 7.8

Actual Tons Ore Mined _____

Remarks:

ORE ~~WORK~~ COMPARISON SHEET

4030 Bench

Date 3/7/71

D.D. Hole

Grade Pb 4.9 Zn 7.6 Comb. 12.5?

Tons 754 689

OUTSIDE BENCH

65-1
66-44
66-32
66-24
66-41

Blast Hole	Pb	Zn		
5909	3.4	5.3		
10	2.2	4.1		
11	5.2	8.3		
12	7.7	10.5		
14	1.6	3.4		
6060	6.4	9.1		
61	8.0	10.5		
62	8.4	10.5		
63	7.3	9.5		
64	6.3	9.8		
65	6.7	9.9		
66	7.6	11.6		
67	2.9	5.3		
68	3.5	5.4		
69	2.8	4.3		
70	2.8	2.3		
72	2.1	4.8		
73	3.5	7.0		
75	3.2	5.1		
6192	7.0	10.8		
Sub-Totals	1	20	98.6	147.3

Blast Hole	Pb	Zn		
6193	6.7	9.7		
94	8.6	12.4		
95	5.3	9.1		
96	6.2	9.3		
97	3.2	5.8		
6208	1.2	7.4		
09	2.9	6.2		
10	3.3	7.7		
11	5.2	7.9		
12	5.2	8.6		
13	2.2	4.2		
15	2.2	4.4		
16	0.7	13.3		
17	8.8	18.8		
Block B 5982	7.3	9.0		
Drop out Holes 83	4.8	7.3		
84	5.7	8.5		
85	6.5	7.8		
86	5.4	7.5		
87	2.1	4.8		
88	5.1	7.1		
Sub-Totals	2	21	98.6	176.8

Blast Hole	Pb	Zn		
5993	5.1	8.3		
Drop out Holes 94	5.2	7.2		
95	4.2	6.2		
96	5.0	8.3		
97	6.0	7.9		
Block C 6001	7.2	10.3		
2	9.0	11.3		
3	8.8	10.3		
Drop out Holes 4	5.0	7.8		
5	6.8	8.6		
6	5.9	7.9		
7	5.6	8.2		
8	5.4	6.3		
9	6.3	7.9		
10	7.0	8.8		
11	7.2	9.0		
12	7.2	8.1		
13	7.8	7.8		
14	6.7	8.3		
15	7.6	11.4		
16	7.9	8.5		
17	7.1	8.2		
18	6.8	8.8		
19	6.9	8.2		
20	7.4	8.7		
Sub-Totals	3	25	165.1	212.3

(7.9)

Average Pb 4.4 Zn 6.7 Combined 11.1

Actual Tons Ore Mined _____

Remarks:

Page Total

Σ P2 2

Σ P2 3

Σ

1	20	98.6	147.3
2	21	98.6	176.8
Σ	66	362.3	536.4
Σ P2 2	33	107.7	167.6
Σ P2 3	26	81.6	159.7
Σ	125	551.6	843.7

NOTE: BLOCKS B & C PARTLY ON DDH.
66-44 AND/OR 65-1 ORE BLOCKS. NOT KNOWN WHICH HOLE NUMBERS CORRESPOND TO ALL DATA ENCLOSED ON THE BENCH SHEET ONLY.

ORE ~~COMPARISON~~ SHEET

4030 Bench

Page 2 of

Date 3/7/71

D.D. Hole _____ Grade Pb _____ Zn _____ Comb. _____ Tons _____

Blast	Hole	Pb	Zn
	63	2.0	3.1
✓	24		
✓	25		
	26	5.0	6.6
	27	3.0	4.4
✓	28		
	30	2.4	3.8
	31	1.8	3.3
	32	2.9	4.6
	33	4.1	6.3
	35	2.7	4.5
	36	2.8	4.2
✓	37		
✓	38		
	39	4.5	7.1
	40	2.0	3.2
✓	63		
	98	2.3	4.4
	99	2.2	4.5
	6404	2.8	5.2
	05	2.8	4.6
	06	3.2	5.2
Sub-Totals	1 16	46.5	75.0

Blast	Hole	Pb	Zn
	6474	2.8	7.9
	76	2.9	5.2
	77	2.7	5.8
✓	6299		
	6300	6.4	7.2
	09	3.9	5.1
	10	2.9	5.4
	11	2.6	3.4
	14	6.7	7.8
	15	4.9	5.8
	16	5.2	6.0
	17	4.2	6.1
✓	65		
✓	58		
✓	59		
✓	60		
✓	61		
✓	62		
✓	63		
✓	64		
✓	65		
✓	66		
✓	67		
✓	68		
✓	69		
✓	70		
✓	71		
✓	72		
✓	73		
✓	74		
✓	75		
Sub-Totals	2 11	45.2	65.7

Blast	Hole	Pb	Zn
✓	76		
✓	77		
✓	78		
✓	79		
✓	80		
✓	81		
	91	1.8	5.0
✓	82		
✓	83		
	94	1.8	3.3
	95	3.0	3.6
	6411	3.0	5.3
	12	3.4	5.1
✓	84		
✓	85		
✓	86		
✓	87		
✓	88		
✓	89		
✓	90		
	17	3.0	4.6
✓	91		
✓	92		
✓	93		
✓	94		
✓	95		
✓	96		
✓	97		
Sub-Totals	3 6	16.0	26.9
	1 16	46.5	75.0
	2 11	45.2	65.7
Page Total	33	107.7	167.6

Average Pb _____ Zn _____ Combined _____

Actual Tons Ore Mined _____

Remarks:

D.D. Hole _____ Grade Pb _____ Zn _____ Comb. _____ Tons _____

Blast Hole	Pb	Zn
6423	6.0	1.8
6308	5.8	6.4
6865	2.8	5.7
67	2.9	5.2
68	3.4	5.8
69	3.5	7.1
70	10.9	7.4
96	2.1	6.7
97	2.9	7.4
99	2.1	3.6
6903	3.2	4.2
04	2.4	5.2
05	1.5	3.9
06	1.8	5.2
9655		
57		
58		
9659	2.0	8.0
60	2.0	4.4
61	1.9	7.0
62	2.5	3.6
63	2.0	3.8
64		
Sub-Totals	Holes	
1	19	61.8 102.4

Blast Hole	Pb	Zn
65	2.1	4.1
66	4.2	6.1
67	2.0	3.9
68	2.9	4.8
70	2.9	6.5
9729		
28		
9729	4.0	6.2
30	1.7	5.7
31		
Sub-Totals	Holes	
2	7	19.8 37.3

Blast Hole	Pb	Zn
65-1	80	381.3 599.7
66-40	76	358.0 464.6
66-32	13	29.2 73.0
66-24	2	5.4 10.0
66-41	0	0 0
Sub-Totals	Holes	
3	111	773.9 1147.3

Average Pb _____ Zn _____ Combined _____

Actual Tons Ore Mined _____

Page Total --- 197 855.5 1287.0
 ✓ 26 81.6 139.7

Remarks:

4030 BENCH

ORIGINAL DDW DATA

DDW 66-32

Cons 8.9 20'

Cons:	4293.2	4293.2
	<u>4030</u>	<u>4065</u>
	263.2	228.2

225-30 5.0
 35
 40
 45
 50
 55
 60
 65

4.5 7.4
 3.4 6.4
 2.6 7.8
 2.9 6.8
 2.7 2.9
 .1 .1
 1.2 .1
 .1 Te.

$\frac{11.6}{4} = 2.9$ $\frac{23.9}{4} = 6.0$

8.9

~~DDW~~ DDA 66-24

Cons 9.0% 35'

	4308.9	4308.9
	<u>4030</u>	<u>4065</u>
	278.9	243.9

240 - 45
 50
 55
 60
 65
 70
 75
 80

5.1 6.3
 4.9 6.7
 6.7 6.7
 5.1 4.3
 2.4 7.8
 3.5 5.6
 .7 5.5
 .7 ~~5.5~~ 3.7

$\frac{24.0}{7} = 3.4$

$\frac{40.3}{7} = 5.75$

use $\frac{33}{5.7} = 9.0$

$\frac{24.0}{7} = 3.4$

DDW 66-41

Cons 12.9 35'

CVD	4280.3	4280.3
	<u>4030</u>	<u>4065</u>
	250.3	215.3

215 - 20
 25
 30
 35
 40
 45
 50
 55

4.3 6.7
 3.1 4.9
 3.8 10.5
 3.4 6.2
 3.8 9.6
 5.6 11.4
 4.4 8.8
 3.2 9.1

$\frac{31.6}{8} = 3.95 = 4.0$

$\frac{67.2}{8} = 8.4$

12.4

4030 BENCH.

66-44

COMP. 12.5 35'

GND 4298.6 4298.6
4030
 268.6 4065
 233.6

230-35	7.4	5.3
40	3.3	3.7
45	2.8	4.9
50	3.5	4.5
55	9.8	11.7
60	6.8	8.7
65	6.5	6.0
70	6.3	9.0

$$\frac{46.4}{8} = 5.8$$

$$\frac{53.8}{8} = 6.7$$

$$\frac{12.5}{1} =$$

~~65-1~~

65-1

COMP. 16.6 35'

GND 4304.1 4304.1
4030
 274.1 4065
 239.1

238.0	41.1	3.1	4.5	7.8
*	43.4	2.3	6.2	10.6
	46.5	3.1	7.1	11.4
	50.5	4.0	5.7	8.7
	51.3	0.8	6.9	5.7
	55.0	3.7	6.7	11.1
	58.0	3.5	4.9	9.8
	61.0	2.0	7.5	11.2
	64.0	3.0	7.8	12.4
	68.0	4.0	6.5	12.3
	73.0	5.0	7.1	9.8
	81.0	8.0	8.7	9.7

$$\frac{79.6}{12} = 6.6$$

$$\frac{120.5}{12} = 10.0$$

$$\frac{16.6}{1} =$$

66-1

$$\begin{array}{r} \text{Callan} = 4329.0 \\ 4065 \\ \hline 264.0 \end{array}$$

$$\begin{array}{r} 4329.0 \\ 4030 \\ \hline 299.0 \end{array}$$

264-268	4.0	2.2;	5.1	2.08	8.8	20.4	8.32
272.3	4.3	1.4	3.3	1.44	6.0	14.2	6.19
277.3	5.0	1.8	4.4	0.86	9.0	22.0	4.30
					13.3	23.8 5.6 4.3	18.81 1.41
281.0	3.7	Tr.	1.0	0.26	—	3.7	0.96
285.4	4.4	Tr.	0.5	0.38	—	2.2	1.67
290	4.6	Tr.	Tr.	0.20	—	—	0.92
294.5	4.5	1.0	0.1	—	4.5	0.5	—
299	4.5	Tr.	0.1	Tr.	—	0.5	—
	<u>35</u>				<u>283</u>	<u>63.5</u>	<u>22.36</u>
					0.8	1.8	0.63

65-1

$$\begin{array}{r} \text{Callan} 4304.1 \\ 4065 \\ \hline 239 \end{array}$$

$$\begin{array}{r} 4304.1 \\ 4030 \\ \hline 274 \end{array}$$

238.0	239	241.1	2.1	4.5	7.8	0.86
		243.4	2.3	6.2	10.6	2.50
		246.5	3.1	7.1	11.4	3.00
		250.5	4.0	5.7	8.7	2.30
		251.3	0.8	6.9	5.7	1.68
		255	3.7	6.7	11.1	1.84
		258.5	3.5	4.9	9.8	1.40
		261.0	2.5	7.5	11.2	2.68
		264	3.0	7.8	12.4	2.68
		268	4.0	6.5	12.3	2.44
		273	5.0	7.1	9.8	2.72
(73-81)		274	1.0	8.7	9.7	3.08
			<u>35.0</u>	<u>2283</u>	<u>36370</u>	

6.5 104.

66-44

Callan

4298.6

4298.6

4065

4030

233.6

268.6

233.6 - 235 = 1.4

3.9

5.2

4.4

5.0

2.8

4.1

2.0

5.0

2.4

4.8

1.4

5.0

3.2

4.4

1.7

5.0

9.5

11.6

4.0

5.0

6.4

8.6

1.8

5.0

6.1

6.1

2.6

3.6

6.1

9.1

2.0

350'

1794.2

23804

5.1

6.8

66-25

Callan

4321.2

4321.2

4065

4030

256.2

291.2

WASTE

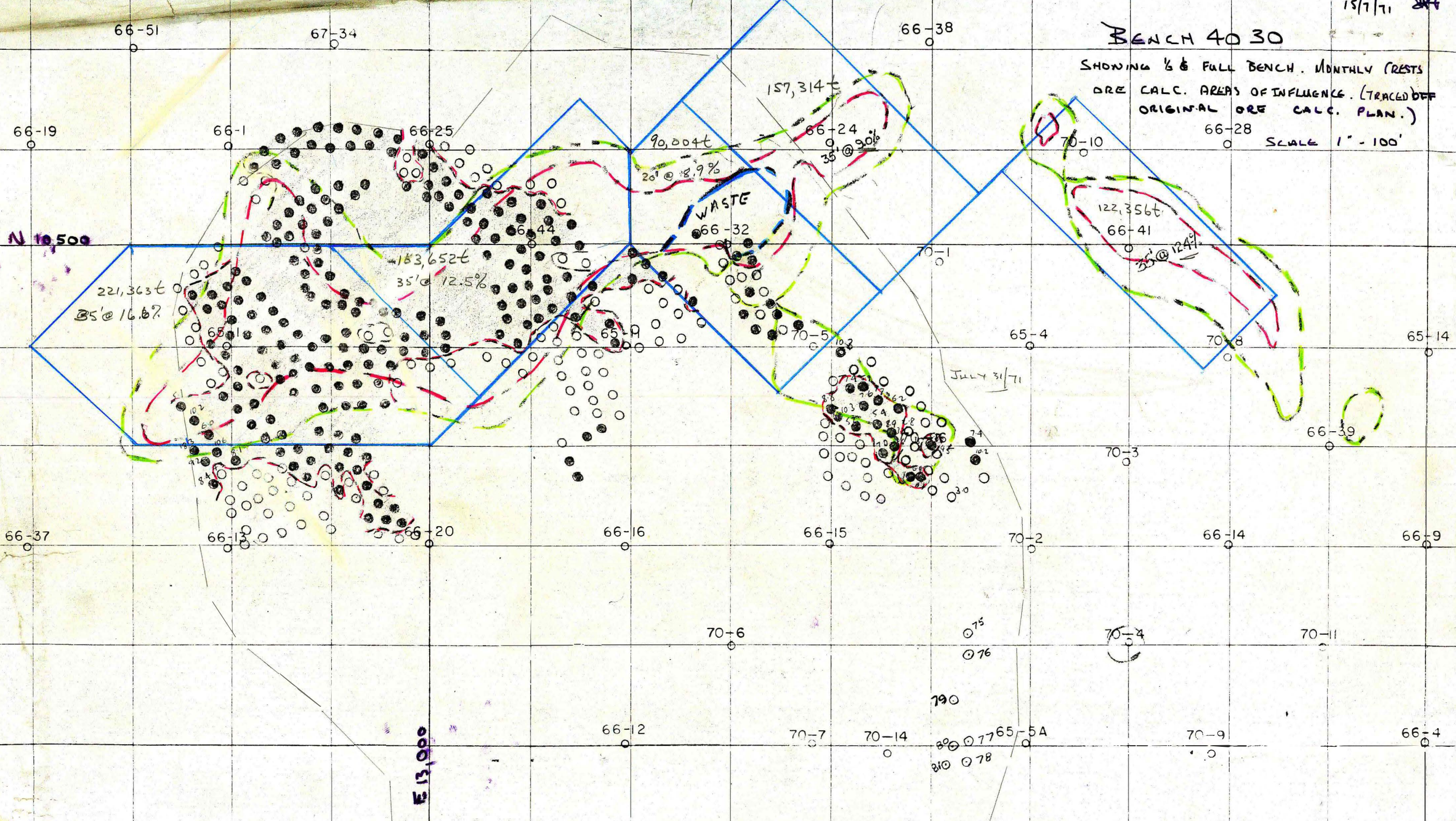
5' band from 4 to 9' on 4030 Band

15/7/71 ~~277~~

BENCH 4030

SHOWING 1/2 & FULL BENCH. MONTHLY CRESTS
ORE CALC. AREAS OF INFLUENCE. (TRACED OFF
ORIGINAL ORE CALC. PLAN.)

SCALE 1" = 100'



N 10,500

WASTE

JULY 31/71

E 13,900

790

66-51

67-34

66-38

66-19

66-1

66-25

90,004t

157,314t

66-24

70-10

66-28

221,363t
35' @ 16.6%

183,652t
35' @ 12.5%

20' @ 8.9%

35' @ 9.0%

122,356t

66-41

35' @ 12.4%

66-37

66-13

66-20

66-16

66-15

70-2

66-14

66-9

70-6

75

76

70-4

70-11

66-12

70-7

70-14

77 65-5A

70-9

66-4

80 78