

002026 31/7/71

ORE BENCH 3990

PORTION OF BENCH MINED TO JULY 31/71

ORE BLOCK	ORIGINAL D.D. HOLE DATA			TONNAGE	BLAST HOLE DATA			EST. % OF BLOCK MINED TONNAGE
	Pb	Zn	COMB		Pb	Zn	COMB	
* 65-1	8.7	9.6	18.3	^{Pb} 16.3 196,038	5.2	7.7	12.9	42%
✓ 66-20	6.5	7.9	14.4	146,654	4.5	7.5	12.0	100% -
✓ 66-44	5.7	6.8	12.5	293,308	6.3	8.5	14.8	100% -
✓ 66-24	2.7	5.4	8.1	211,376	3.6	5.7	9.3	75% -
✓ 70-5	2.3	4.4	6.7	160,122	3.5	6.1	9.6	82% -
* 70-16	3.8	7.6	11.4	106,998	3.8	6.3	10.1	44%
OUTSIDE 1/2 BENCH.	-	-	-	<u>1,114,496</u>	3.9	5.9	9.8	-
TONNAGE x	5,686,825	7,694,178	13,370,403					<u>TONNAGE MINED</u> 84,655
Avg. GRADE	<u>5.3</u>	<u>6.9</u>	<u>12.0</u>		5.0	7.4	12.4	

31/7/21

3990 BENCH.

ORIGINAL ORE RESERVE CALC. DATA. (JULY 15/70)

<u>J.D.H.</u>	<u>Pb</u>	<u>Zn</u>	<u>COMB</u>	<u>TONNAGE</u>
✓ - 65-1	8.7	9.6	18.3 76.3	196,038
✓ - 66-20	6.5	7.9	14.4	146,654
✓ - 66-44	5.7	6.8	12.5	293,308
✓ - 66-24	2.7	5.4	8.1	211,376
✓ - 70-5	2.3	4.4	6.7	160,122
✓ - 70-16	3.8	7.6	11.4	106,998
✓ 66-41	2.3	5.6	7.9	106,998
✓ 70-8	2.9	7.6	10.5	79,313
✓ 66-39	2.8	6.6	9.4	74,823
✓ 70-2	3.4	6.8	10.2	14,216
✓ 70-4	3.1	5.9	9.0	98,019
✓ 65-14	2.9	4.4	7.3	9,353
✓ 66-18 (A)	3.3	6.9	10.2	38,160
✓ 66-18 (B)	3.3	6.9	10.2	6,734
	$\Sigma Pb \times T$ 688,930.1	$\Sigma Zn \times T$ 10,415,879.9	$\Sigma Comb \times Ton.$ 17305,180.0	<u>1,542,112</u>
Ave.	<u>4.5</u>	<u>6.7</u>	<u>11.2</u> 10.5	

5,76225

5,676,225
5.3

7,694,177.8
6.9

13,370,403.2
12.0

111,4496

ORE BLOCK COMPARISON SHEET

3990 Bench

Date 3/7/71

D.D. Hole 65-1

Grade Pb 8.7 Zn 9.6 Comb. 18.3

Tons 196,038

Blast Hole	Pb	Zn	
6563	7.5	11.2	
64	6.6	9.2	
89	2.3	7.7	
90	1.8	9.6	
6705	8.0	10.8	
06	6.7	10.4	
07	6.3	10.0	
08	7.0	10.5	
09	4.9	6.7	
15	9.3	11.4	
16	7.4	9.2	
17	5.2	6.9	
18	7.4	10.8	
19	7.5	10.0	
20	7.8	9.8	
21	6.1	9.0	
22	5.9	7.8	
6874	1.9	3.6	
75	4.0	1.4	
76	3.0	5.6	
77	3.3	5.5	
78	7.2	9.8	
79	5.7	8.1	
Sub-Totals 1	Holes 23	132.8	195.0

Blast Hole	Pb	Zn	
6882	3.8	6.6	
83	3.7	5.2	
84	2.8	4.5	
85	4.8	6.0	
86	7.2	8.8	
87	3.7	5.9	
6937	2.6	5.1	
38	3.9	5.5	
39	3.5	6.2	
40	2.4	4.6	
41	2.1	8.1	
42	7.2	8.7	
Sub-Totals 2	Holes 12	47.7	75.2

Blast Hole	Pb	Zn	
Sub-Totals 3	Holes		
1	23	132.8	195.0
2	12	47.7	75.2
Page Total	35	180.5	270.2

Average Pb 5.2 Zn 7.7 Combined 12.9

Actual Tons Ore Mined _____

Remarks:

ORE BLOCK COMPARISON SHEET

3990 Bench

Date 3/7/71

D.D. Hole 66-20

Grade Pb 6.5 Zn 7.9 Comb. 14.4 Tons 146,654

Blast	Hole	Pb	Zn
6599		3.9	6.0
6600	→	2.3	4.1
	6601	4.5	5.7
	08	1.7	5.3
	6501	4.5	7.0
	02	3.3	5.6
	04	4.6	6.8
	05	1.8	4.0
	06	3.5	5.5
	07	2.2	4.4
	08	4.0	6.4
	6522	2.7	4.7
	23	2.4	3.8
	24	1.8	3.6
	25	4.6	8.2
	26	5.3	8.8
	27	3.3	5.4
	28	4.7	7.1
	29	4.0	6.1
	30	4.5	6.8
Sub-Totals	1 Holes 20	69.6	115.3

Blast	Hole	Pb	Zn
	6531	6.2	9.2
	32	7.0	10.3
	33	5.0	6.5
	34	3.1	4.5
	35	4.8	7.5
	36	6.9	10.1
	37	6.6	7.8
	38	6.2	8.9
	39	5.4	8.8
	40	5.5	8.6
	41	6.7	10.3
	42	5.7	9.8
	43	5.1	8.0
	44	4.5	7.9
	45	5.0	9.0
	46	3.0	5.6
	47	3.0	5.6
Sub-Totals	2 Holes 17	89.7	138.4

Blast	Hole	Pb	Zn
	6541		
	6542		
	6543		
	6565	7.4	9.0
	66	8.1	10.3
	67	7.9	10.7
	70	5.0	8.4
	71	6.6	8.5
	72	7.1	11.3
	73	6.7	8.5
	74	4.1	6.3
	75	6.5	9.2
	84	2.9	8.8
	85	3.9	10.5
	86	2.9	9.0
Sub-Totals	3 Holes 12	69.1	110.5

Average Pb 4.5 Zn 7.5 Combined 12.0

Actual Tons Ore Mined _____

Remarks:

Page Total	Holes	Pb	Zn
1	20	69.6	115.3
2	17	89.7	138.4
Σ	49	228.4	364.2
Σ	9	34.6	69.1
Σ	58	263.0	433.3

ORE BLOCK COMPARISON SHEET

3970 Bench

Date 31/7/71

D.D. Hole 66-44

Grade Pb 5.7 Zn 6.8 Comb. 12.5

Tons 293,308

Blast	Hole	Pb	Zn
	6424	5.2	7.4
	25	7.9	9.7
	26	6.6	8.9
	27	7.1	9.9
	28	8.0	11.1
	29	7.8	11.2
	30	9.1	9.1
	31	6.0	9.2
	32	8.3	9.0
	33	7.3	9.8
	34	7.6	10.6
	35	6.4	9.3
	36	8.8	11.2
	37	8.9	11.5
	38	6.2	9.6
	39	7.7	9.8
	40	5.6	9.6
	41	8.0	10.8
	42	8.1	9.8
	43	7.2	9.4
	44	6.8	9.8
	45	9.9	11.7
Sub-Totals	1 Holes 22	164.5	218.4

Blast	Hole	Pb	Zn
	6446	7.2	9.6
	47	6.2	8.8
	48	6.8	9.2
	49	8.4	11.1
	50	8.2	11.3
	51	8.3	11.6
	52	6.7	10.0
	53	6.2	8.6
	54	5.8	8.7
	55	7.0	10.6
	56	7.7	10.3
	57	7.0	9.8
	58	5.5	10.0
	59	5.5	9.6
	60	5.7	7.8
	61	6.8	9.0
	62	7.1	10.2
	6478	4.7	7.8
	79	2.6	5.2
	80	2.7	4.8
	81	6.8	10.9
	82	6.9	9.8
Sub-Totals	2 Holes 22	139.8	204.7

Blast	Hole	Pb	Zn
	83	7.0	10.6
	84	6.7	10.2
	85	4.2	7.2
	86	7.0	11.1
	87	6.8	9.0
	88	6.6	10.1
	89	7.3	10.6
	90	5.1	8.4
	91	4.4	7.0
	92	4.5	7.5
	93	7.1	10.6
	94	7.5	10.7
	95	5.8	8.7
	96	3.9	5.3
	97	2.9	4.6
	98	6.3	10.3
	99	5.9	9.0
	8500	6.6	10.8
	6710	6.1	7.7
	11	6.3	9.0
	12	8.3	11.7
	13	7.7	11.4
Sub-Totals	3 Holes 22	134.0	201.5

Average Pb 6.3 Zn 8.5 Combined 14.8

Actual Tons Ore Mined _____

Remarks:

Page Total	Holes	Pb	Zn
1	22	164.5	218.4
2	22	139.8	204.7
	66	438.3	624.6
P. 2	52	304.0	393.0
P. 3	26	163.0	213.9
Σ	144	905.3	1231.5

2136.8

ORE BLOCK COMPARISON SHEET

3990

Bench

Date 2 of 3

D.D. Hole 66-44

Grade Pb

Zn

Comb.

Tons

Blast	Hole	Pb	Zn
	6714	7.5	10.0
	23		
	23	6.4	9.2
65	94	5.6	8.2
	95	5.6	7.8
	96	5.1	7.5
	97	6.4	9.0
	98	4.3	7.4
66	29	6.1	6.7
	30	4.7	5.3
	31	5.9	7.1
	32	5.5	6.7
	33	5.8	7.0
	34	6.8	9.0
	35	6.0	7.2
	36	4.6	5.7
	37	5.5	6.0
	38	5.7	7.0
	41	4.3	6.8
	42	3.7	5.0
	43	5.4	6.9
	44	5.4	6.9
	47	3.7	5.2
Sub-Totals	1 Holes 22	120.0	157.6

Blast	Hole	Pb	Zn
	48	3.5	5.9
	49	4.7	6.0
	51	3.2	5.4
	52	5.1	4.8
	53	6.0	7.0
	54	4.7	7.0
	55	5.8	7.6
	56	5.4	8.6
	57	5.7	8.6
	58	6.7	8.8
	59	6.2	8.4
	60	6.5	8.6
	61	7.5	8.8
	62	5.5	7.6
	63	4.8	6.6
	64	4.5	7.0
	67	9.3	13.3
	68	8.1	11.7
	69	9.4	10.0
	70	9.3	9.9
	71	9.7	10.0
Sub-Totals	2 Holes 21	131.6	171.6

Blast	Hole	Pb	Zn
	72	7.7	9.2
	73	7.0	7.8
	74	5.6	6.4
	75	5.1	8.0
	76	6.0	6.0
	77	2.9	6.0
	78	5.6	6.5
	79	6.4	7.2
	6680	6.1	6.7
Sub-Totals	3 Holes 9	52.4	63.8
	1	22	120.0
	2	21	131.6
Page Total		52	304.0

Average Pb _____ Zn _____ Combined _____

Actual Tons Ore Mined _____

Remarks:

ORE BLOCK COMPARISON SHEET

3990

Bench

Date 31/7/71

D.D. Hole 66-44

Grade Pb

Zn

Comb.

Tons

Blast Hole	Pb	Zn			
6881	5.6	7.8			
80	4.6	7.0			
88	4.8	7.1			
89	3.1	6.0			
6969	2.3	3.5			
70	4.9	3.7			
71	7.4	10.1			
72	7.6	9.6			
73	6.4	8.6			
74	8.8	11.0			
75	4.7	8.4			
80	7.2	8.8			
81	7.4	8.9			
82	7.3	10.1			
83	5.6	8.2			
84	8.2	9.3			
85	7.0	9.8			
86	7.6	9.2			
87	6.9	8.6			
88	6.0	7.8			
89	6.2	9.1			
Sub-Totals	1	Holes	21	129.6	172.6

Blast Hole	Pb	Zn			
90	6.6	8.7			
91	7.0	9.6			
92	6.7	10.0			
711					
72					
73					
74					
75					
76					
77					
78					
7027					
7027	3.6	4.7			
9862	9.5	8.3			
Sub-Totals	2	Holes	5	33.4	41.3

Blast Hole	Pb	Zn			
Sub-Totals	3	Holes	26	163.0	213.9

Average Pb Zn Combined

Actual Tons Ore Mined

Remarks:

Page Total

ORE BLOCK COMPARISON SHEET

3990 Bench

Date 31/7/71

D.D. Hole 70-5

Grade Pb 2.3 Zn 4.4 Comb. 6.7

Tons 160,122

Blast Hole	Pb	Zn		
7000				
01				
7006				
07				
08				
09				
10				
14	4.5	6.2		
16	2.2	4.0		
17				
18				
19	8.9	16.5		
20				
21	5.7	7.3		
22	2.4	4.9		
23				
24				
25				
7163	2.0	5.2		
9871	5.2	6.7		
72	5.7	6.0		
73	5.0	6.0		
Sub-Totals	1	Holes 9	41.6	62.8

Blast Hole	Pb	Zn		
74	4.6	6.0		
75				
76				
77	4.9	5.4		
78	2.1	3.0		
Sub-Totals	2	Holes 3	11.6	14.4

Blast Hole	Pb	Zn		
9740	2.7	4.7		
41	2.6	6.3		
2	2.5	6.1		
3	2.9	5.5		
4	2.5	4.3		
5	2.9	6.1		
6	3.0	4.3		
7	2.5	4.3		
48	2.1	3.4		
59	2.7	7.5		
60	2.3	7.3		
63	1.4	5.8		
4	3.6	6.5		
5	3.6	6.1		
6	3.3	6.1		
7	3.7	8.1		
8	4.9	6.1		
9	4.1	6.6		
70	3.6	5.7		
1	2.8	6.9		
2	3.3	6.8		
73	3.8	6.2		
	22	66.8	130.7	
Sub-Totals	3	Holes 22	66.8	130.7
1	9	41.6	62.8	
2	3	11.6	14.4	
Page Total	34	120.0	207.9	

Average Pb 3.5 Zn 6.1
~~4.4~~ ~~6.4~~

Combined 9.6
~~10.8~~

Actual Tons Ore Mined _____

Remarks:

ORE ~~COMPARISON~~ SHEET

3990 Bench

Date 31/7/71

D.D. Hole OUTSIDE 1/2 BENCH

Grade Pb

Zn

Comb.

Tons

Blast Hole	Pb	Zn
6602	3.2	5.5
03	2.5	5.0
04	3.4	6.3
05	2.8	5.3
06	4.3	6.6
07	3.9	5.0
10	4.0	4.8
11		
12		
13		
14	3.1	6.2
15		
16		
17	4.9	7.3
18	4.6	6.0
19	4.0	5.7
20	6.0	7.8
21	6.1	7.3
30	4.7	5.3
31	5.9	7.1
35	6.0	7.2
36	4.6	5.7
37	5.5	6.0
22	7.9	9.3
Sub-Totals	14	60.7 88.1

Blast Hole	Pb	Zn
6503	3.1	6.5
09	2.8	3.7
10		
11	2.3	4.3
12	3.6	5.6
13		
14		
15		
16		
17	2.2	4.7
18		
19		
20	1.9	3.6
21		
22		
50	3.4	2.6
51		
52		
55	8.4	5.1
56	5.5	4.0
57	5.1	3.8
58	5.4	7.4
Sub-Totals	11	43.7 51.3

Blast Hole	Pb	Zn
59	4.4	7.6
60	5.5	7.3
61	7.3	8.7
62	3.0	5.6
63		
64		
76	1.3	5.0
77	1.4	5.1
78		
79		
80		
6639	4.3	7.7
40	1.7	5.1
41		
42		
6650	1.6	3.4
6840	2.0	3.1
41	4.0	5.2
42	2.1	3.4
43-50		
Sub-Totals	11	37.2 62.1

Average Pb 3.9 Zn 5.9

Combined 9.8

Actual Tons Ore Mined _____

Remarks:

No DATA ON D.D.H BLOCKS TO DATE.

- 66-41
- 70-8
- 66-39
- 70-2
- 70-4
- 65-14
- 66-18(A)
- 66-18(B)

Page Total	Pb	Zn
1	14	60.7 88.1
2	11	43.7 51.3
3	12	42.6 60.1
Σ 65-1 DDH	35	180.5 270.2
Σ 66-20	58	263.0 433.3
Σ 66-44 ✓	144	905.3 1231.5
Σ 66-24	6	21.7 32.8
Σ 70-5	12	83.2 77.2
Σ 70-16	4	21.3 26.6
Total	348	1781.6 2549.5
	341	1765.2 2553.8
Σ OUTSIDE 1/2 BENCH	82	320.2 482.2

4311+
4319.0

ORE ~~WORK~~ COMPARISON SHEET

3990 Bench

Date 3/7/71

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

Blast	Hole	Pb	Zn
69	#		
11	#	3.5	5.1
12	#	3.3	4.4
13	#		
14	#	5.9	1.7
15	#		
16	#		
18	#	1.8	3.5
19	#		
20	#	1.5	4.2
21	#		
22	#		
23	#		
24	#		
25	#		
26	#		
27	#		
28	#		
29	#	2.5	3.5
30	#		
31	#		
32	#		
33	#		
Sub-Totals	1	6	18.5 22.4

Blast	Hole	Pb	Zn
34	#		
35	#		
36	#		
37	#		
38	#		
39	#		
40	#		
68	#		
91	#	2.4	4.9
92	#		
93	#	1.7	3.8
94	#		
6908	#	?	
6945	#	5.6	8.1
46	#	3.0	6.4
47	#	2.9	5.3
49	#	5.5	8.1
50	#	6.0	9.1
51	#	5.9	10.0
52	#	5.2	9.1
53	#	6.9	8.3
54	#	6.2	9.8
55	#	5.0	9.4
56	#	4.6	7.5
57	#	3.9	6.8
58	#	5.2	8.3
Sub-Totals	2	15	70.0 114.9

Blast	Hole	Pb	Zn
59	#	3.8	7.5
60	#	3.5	4.9
61	#	4.3	6.1
62	#	2.7	2.9
63	#	3.6	6.0
6976	#	2.9	5.9
75	#		
78	#	1.8	4.2
79	#	3.8	5.9
93	#	7.0	9.6
94	#	4.3	9.5
95	#		
96	#		
97	#		
98	#		
99	#		
100	#		
101	#		
102	#		
103	#		
104	#		
105	#		
11	#	4.6	6.9
12	#	3.8	7.0
13	#	2.0	6.9
Sub-Totals	3	13	48.1 83.3
1	6	18.5	22.4
2	15	70.0	114.9
Page Total	34	136.6	220.6

Average Pb _____ Zn _____ Combined _____

Actual Tons Ore Mined _____

Remarks:

ORE ~~COMPARISON~~ COMPARISON SHEET

3990 Bench

Date 3/7/71

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

Blast Hole	Pb	Zn		
7015	3.9	7.8		
23				
24				
25	?			
33	2.5	5.1		
34				
35				
67				
68				
69				
7044?				
45				
46				
47				
7108	2.3	4.5		
69				
70				
71				
72				
72				
Sub-Totals	1	3	8.7	17.4

Blast Hole	Pb	Zn		
71				
72				
70				
70				
72				
25	1.8	3.8		
26	2.5	4.3		
27				
28				
73	4.5	5.9		
45	7.1	4.3		
46	4.2	6.3		
47	3.6	4.5		
48				
49				
50				
51				
52				
53				
54	2.4	3.3		
55				
56				
Sub-Totals	2	7	26.1	32.4

Blast Hole	Pb	Zn		
57				
58				
59				
60	3.7	5.8		
61	3.5	4.5		
62				
63				
64				
65				
66				
Sub-Totals	3	2	7.2	10.3
1	3	8.7	17.4	
2	7	26.1	32.4	
Page Total	12	42.0	60.1	

Average Pb _____ Zn _____ Combined _____

Actual Tons Ore Mined _____

Remarks:

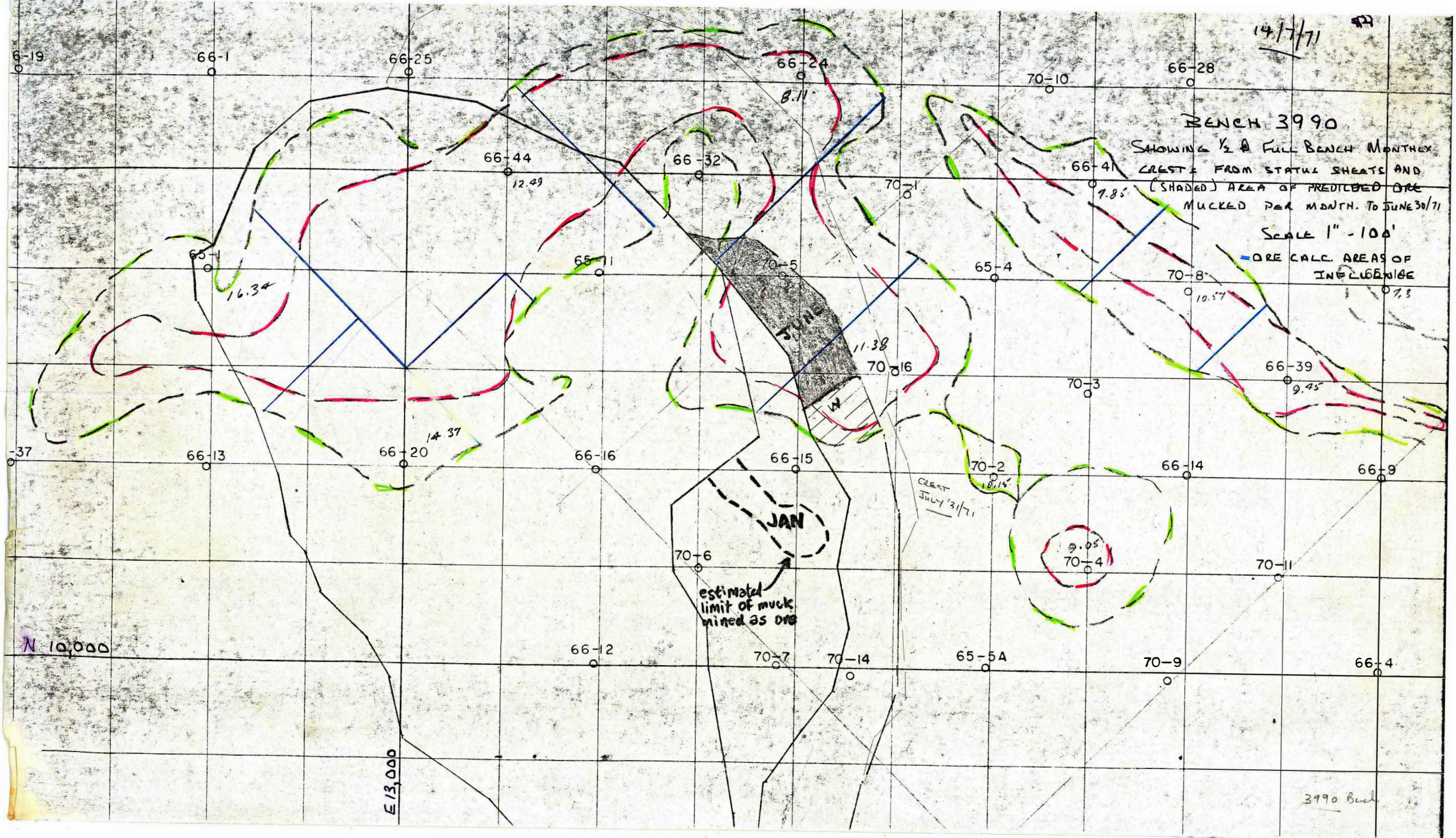
14/7/71

BENCH 3990

SHOWING 1/2 A FULL BENCH MONTHLY
CRESTS FROM STATUS SHEETS AND
(SHADED) AREA OF PREDICTED ORE
MUCKED PER MONTH. TO JUNE 30/71

SCALE 1" = 100'

— ORE CALC. AREAS OF
INFLUENCE



N 10,000

E 13,000

3990 Buel