

000

MICROFILMED

EXPLORATION LICENCE 30/86

C. W. DAVIS

CUPRONA AREA - N. W. TASMANIA

ANNUAL REPORT - 1988/89

89-2945

MINES	
File Ref. E.L. 30/86	
18 APR 1989	
Doc. Ref.	
Action Officer	Initials
REFER	TO
CORRES	13.4.89
Resubmit to	Date

OPEN FILE

- Circulation - C. W. Davis (3)
 - Mines Department (1)
 - C. H. Whitehead (1)

C. H. Whitehead
 C. H. Whitehead,
 Geologist.
 13th April 1989.

EXPLORATION LICENCE 30/86C.W. DAVISCUPRONA, N. W. TASMANIAANNUAL REPORT 1988-89TABLE OF CONTENTS

	<u>Page No.</u>
Introduction and Summary.	1
A. Over - review - General Information	2
B. Exploration Objectives - Work Programme Summary.	4
C. Cuprona - Northern Quarries Hematite Deposit Geological Investigations/Drilling Programme.	5
1. Introduction and summary	5
2. Location - Regional setting	7
3. Investigations Completed	8
A - Drilling Programme	8
B - Surface Investigations	10
4. Review of Results	10
5. Ore reserve calculations.	11
D. Proposed Future Work.	14
E. E.L. Expenditures (1988-89).	14

ANNUAL REPORT 1988-89 - E.L. 30/86PLANS

- Plan No. 1/89 - Northern Quarries hematite deposit, Cuprona.
Drill site location plan. Scale 1:500.
- Plan No. 2/89 - Northern Quarries hematite deposit, Cuprona.
Drill section line A-A' - Scale 1:250.

FIGURES

- Fig. No. 1 - E.L. 30/86, Location Plan.
- Fig. No. 2 - Blythe River Hematite Deposits, Location.

APPENDICES

- Appendix A - Drill hole records/assay sheets
Holes CH 1 to CH 26.
- Appendix B - Northern Quarries - drill sections,
Scale 1:250.
- Appendix C - Sample Assay Results - Purple Crag Deposit.

SUMMARY.

Exploration Licence 30/86 covers 43sq. kms in the Cuprona - Natone district of N.W. Tasmania.

This Annual Report (1988/89) documents results of exploration/evaluation work completed during the second year term of the licence tenency.

Work has primarily been concentrated upon a geological assessment of the hematitic iron resources located in the central sections of the E.L. area and extending over a 2.2kms strike distance, straddling the NE and SW flanks of the Blythe River.

Following regional examinations of these resources, more detailed investigations of the two individual deposits were completed, namely at the Purple Crag and Northern Quarries (Cuprona) hematite deposits.

The Northern Quarries hematite deposit was the target of a detailed geological investigation and a programme of evaluation drilling completed to ascertain near surface (to 20m depth) reserves of high grade Fe ore (75-80% Fe_2O_3) over a strike distance of 180m. The evaluation permitted a reserve delineation and categorisation into mineable reserves and both indicated and potential geological reserves. The market potential and feasibility of a small scale open pit mining operation at these deposits is being studied.

Investigations to date would indicate the Purple Crag hematite deposit to be less siliceous in nature, and studies will be commenced to evaluate definitive reserve potential and grade variability.

A - Over Review - General Information

..2

E.L. 30/86 originally covering 35sq. kms was granted to Mr. C. W. Davis, Warrandyte, Victoria on the 29th April 1987. On 23rd May 1987, application was made to extend this area and the E.L. now covers a total of 43sq. kms within the Cuprona - Natone region, district of Devon (Please refer to Figure No. 1).

Following the discovery of the Blythe River Iron Deposits, the Cuprona district first received attention at the turn of the present century, and subsequent interest in these deposits was reactivated by the Department of Mines and the B.M.R. during the late 1950's and early 1960's. Since 1966, a number of Companies have been involved in exploration work over the current E.L. 30/86 licence area, the most notable being Shell Metals (1980 - 84) and Shell/C.R.A. (1985 - 86).

Geologically, the region shows a range of formations from an oldest flysch - turbidite sequence of the Precambrian BURNIE FORMATION, overlain unconformably by a series of ferruginous sandstones, siltstones, shales, dolomites and ironstones belonging to the Cambrian - Precambrian OONAH FORMATION, which in turn are overlain by Ordovician sequence of conglomerates, sandstones, and limestones. All the above sequences have a general regional strike trending NE - SW, and in the SW extremities of the licence area have been intruded by the Devonian Husetop Granite Intrusion. With the exception of the Blythe River Valley, and W and S margins of the E.L, Tertiary basalt masks a large proportion of the licence area.

Known mineralisation is restricted to copper mineralisation occurring in shear zones hosted by the Burnie Fm, (eg. Cuprona, Copper King Mine, Rutherfords Prospect Natone), plus hematitic ironstone zones associated with the unconformity between the Precambrian quartzite and lower members of the Cambrian. Finally dolomitic/calcareous OONAH Fm sequences are host to a large body of skarn in the vicinity of Natone. This shows development of both calc silicate assemblages and magnetite pyrrhotite varieties.

During the 1st year of the E.L. the aim of exploration work was twofold. Firstly, to regionally assess the possible gold, platinum, tin, iron and tungsten potential of the licence area, and in this respect regional programmes were conducted in the Blythe River Valley, the Husetop Granite, and around Camena. Secondly to investigate in more detail the possible gold/platinum anomalism of both the Natone magnetite skarn and the Copper King Mine at Cuprona. Results of this work were documented in the E.L. 1987/88 Annual Report.

B - Exploration Objectives - Work Programme Summary.

..4

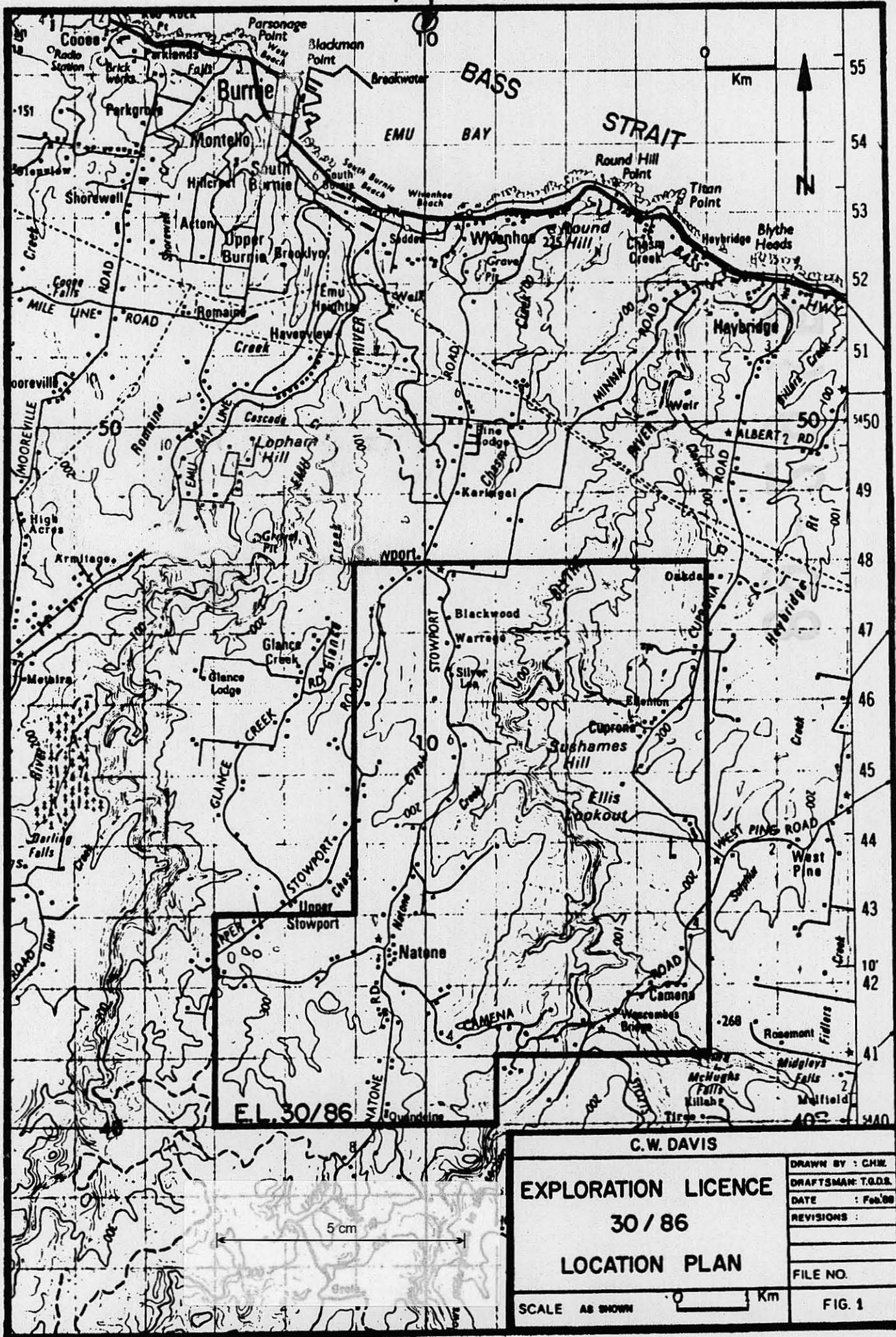
The priority objective of the current year exploration work, was to investigate the potential of the Blythe River Hematite Deposits, in particular the identification of a Fe deposit of low siliceous content, and one favourable to extraction by open pit methods.

The Blythe River Fe occurrence consist of seven known surface exposed occurrences of iron extending over a strike distance of 2.2kms and straddling the Blythe River (see Figure No. 2).

Exploration and evaluation work completed to date has included the following:-

- Review of all past literature applicable to these Fe deposits (namely, Dept. of Mines, Rio Tinto, B.H.P, B.M.R.).
- Field orientation/identification of, and geologic reconnaissance of the hematite deposits both to the north and south of the Blythe River.
- Relocation, and on-site examination of old adits, trenches and pits at individual hematite bodies.
- Geologic examination, surveying, and preliminary potential reserve estimates of both the Purple Crag iron deposit (SW of the Blythe River) and the Northern Quarries hematite deposit at Cuprona (N of the Blythe River).
- Preliminary surface sampling and analyses of the two previously mentioned hematite deposits, in particular for orientation on Fe grade variability and range of SiO₂ content (Please refer to Appendix C for assays of the Purple Crag hematite deposit.)
- The decision was made to concentrate upon a detailed geologic examination of the Cuprona "Northern Quarries" hematite deposit. A drilling programme consisting of 28 shallow airtrack holes (252m drilled) permitted a successful demarcation and compilation of hematite reserves over a total strike distance of 180 metres at the deposit. A market potential study of the hematite is currently underway. Section C of the current report documents details of the investigation of this particular deposit.

410,000 E



CUPRONA HEMATITE DEPOSITDRILLING PROGRAMME - RESERVE EVALUATION1. INTRODUCTION AND SUMMARY

A percussion drilling programme was recently completed (November 2nd - 7th 1988) at the "Northern Quarries" hematite deposit near Cuprona (E.L. 30/86).

The prime objectives of the programme were to ascertain the near surface continuity and grade of hematitic ore, and whether reserves would be sufficient to sustain a small scale mining operation producing at the rate of approx 10,000 to 15,000 tonnes per annum.

A total of 28 shallow holes, of between 6 to 15m depth, were drilled with a total drill depth of 252m. Samples were collected over 3m drill intervals, and a total of 83 samples have been subsequently assayed for Fe₂O₃ and SiO₂.

The results of drilling, combined with a detailed geologic survey, have permitted a successful demarcation and compilation of ore reserves over a total strike distance of 180m. A classification of reserves has been made to use the following categories:

- Measured Mineable Reserves, totalling 74,989 tonnes with an average grade of 78.92% Fe₂O₃. These reserves were compiled in the oreblock recently drilled and down to a mining depth of 20 metres.
- Indicated Geologic Reserves, totalling an additional 172,645 tonnes of hematite ore. These reserves include the geologically interpreted ore block down to a mining level incorporating existing adit data (approx 30m mine depth).

- Potential Geological Reserves. Incorporating data from past exploratory diamond drilling (Mines Dept), potential reserves of the oreblock over 180m strike length down to a drilled depth of 65m, total 1,170,000 tonnes.

2. LOCATION - REGIONAL SETTING

The "Northern Quarries" hematite deposit is located within Exploration Licence 30/86, embracing 43 sq. kms of the Blythe River region immediately south of Heybridge and between the townships of Cuprona and Natone.

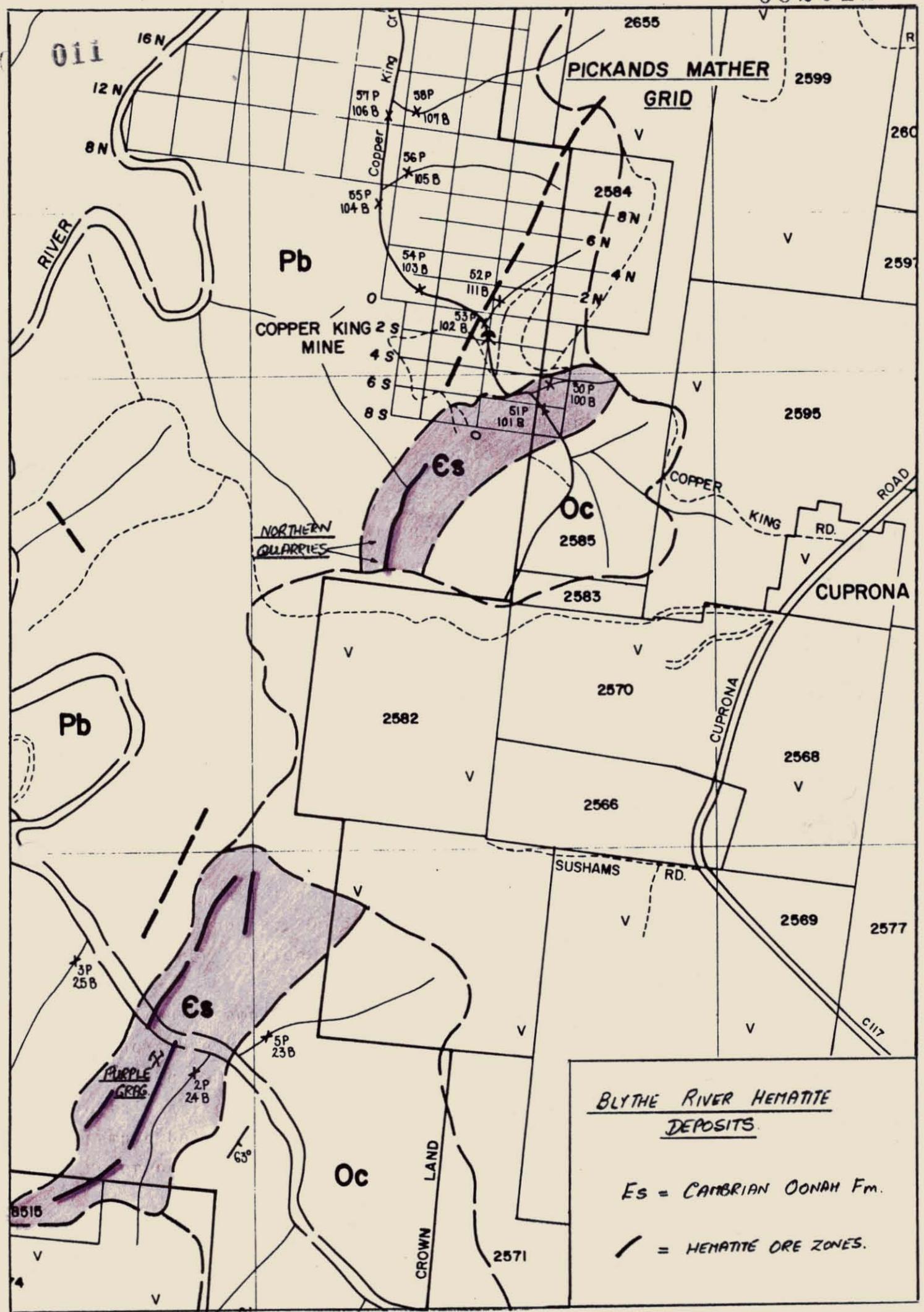
The iron deposit in question is one of seven known surface exposed iron deposits extending over a 2.2kms strike distance and straddling the Blythe River.

The Northern Quarries deposit is the most readily accessible of the Fe occurrences being located 820 metres due west of the township of Cuprona (Fig. No. 2) The deposit itself straddles Crown Land and a private land block (No. 2582), and is reached by dirt track.

Two existing small quarries have already been developed at the deposit, these resulting from minor mining activities during the period 1938/39 when approximately 10,000 tonnes of iron ore were mined and extracted.

The entire Blythe River Fe deposits were extensively explored towards the end of the last century, and numerable trenches and adits were constructed on or into the deposits. One such adit ("Upper Tunnel") was driven into the Northern Quarries deposit, and although assay records are available, the adit is no longer accessible.

During the period July to November 1965, the Department of Mines completed a diamond drill programme at the Northern Quarries deposit, completing three holes (BRI to BR3) totalling 212m drilling. Drill logs and assay records have been acquired.



BLYTHE RIVER HEMATITE DEPOSITS.

Es = CAMBRIAN OONAH Fm.

/ = HEMATITE ORE ZONES.

FIGURE N° 2.

3. INVESTIGATIONS COMPLETED

The recent investigations of the N. Quarries Fe deposit have consisted of the following:-

- Completion of a percussion drilling programme, with subsequent assaying (Fe_2O_3 and SiO_2) of the samples.
- Detailed geologic and topographic survey of the deposit.
- Review of current and past work and results.
- Evaluation of hematite reserves and grades.

A - Drilling Programme

Between November 2 - 7th 1988, a total of 28 shallow percussion holes (Atlas Copco Rig) were drilled at the N. Quarries deposit over a total strike distance of 150m. Total drilled metreage amounted to 252m, the individual holes being shallow in depth ranging from 3m to 15m. Drill statistics/data, plus individual hole depths are recorded on Table No. 1.

The prime objectives of the drill programme were partially to prove the actual interpreted disposition of the orezone, but primarily to evaluate the measured reserves of near surface high grade hematitic ore.

Drill section - lines traversing the strike of the orezone were spaced at approx. 20m intervals, with between 1 and 5 holes being drilled per section line.

Total bulk samples were collected over 3m drill intervals, these being subsequently mixed, quartered and riffled to a representative 5 to 6kg sample. This was eventually reduced by riffling to obtain a 1kg sample for analytical work, the remainder of the sample being retained for lithological examination and future reference.

The sample for analysis was submitted to the Department of Mines laboratories at Launceston, and assayed for Fe_2O_3 and SiO_2 . Individual combined drill hole logs and assay records have been prepared and are attached as Appendix A.

TABLE NO. 1E. L. 30/86 - NORTHERN QUARRIES - CUPRONADRILL STATISTICS - HOLE CUPRONA

Drill Rig - Atlas Copco Hydraulic Drill Rig

Drillers - North West Exploration Services, M. McCullagh

Dates Drilled - November 2nd to 7th 1988

No. of Holes - 28

Total Depth Drilled - 252 metres

Total No. of Samples - 83

<u>Hole No</u>	<u>Depth</u> <u>(m)</u>	<u>No. Of</u> <u>Samples</u>	<u>Hole No</u>	<u>Depth</u> <u>(m)</u>	<u>No Of</u> <u>Samples</u>
1	6	2	14	9	3
1A	12	4	15	12	4
2	12	4	16	6	2
3	12	4	17	9	3
4A	3	0	18	9	3
4	12	4	19	9	3
5	12	4	20	9	3
6	15	5	21	6	2
7	9	3	22	6	2
8	9	3	23	9	3
9	9	3	24	9	3
10	9	3	25	6	2
11	9	3	26	6	2
12	9	3			
13	9	3			
			Totals	252 metres	83

014

B Surface Investigations

The Northern Quarries location and drill collars have been surveyed, and the hematite deposit and enclosing host rocks been mapped geologically.

The boundary between Crown Land and Private Block No. 2582 has been surveyed and demarcated on site by licenced surveyors, Peacock, Darcey and Anderson, Burnie.

4 REVIEW OF RESULTS

Results acquired from past (diamond drilling) and present (percussion) drilling, have been coordinated with geological observations and records available from past sampling of the "Upper Tunnel".

Overall results of this review are presented in Plan (Plan No. 1/89) and in section (drill sections, Appendix B and Plan No. 2/89)

The main section of the Fe deposit extends for a total exposed strike distance of 190 metres from 5m south of Hole CH 9 north to Section Line M.

To the south the deposit reappears in the vicinity of Holes CH 1 and 1A, before disappearing beneath Tertiary basalt cover. In a northerly direction, the deposit has been accurately mapped for a distance of 90 metres along strike from the most northerly drilled hole (No. CH 24) and although there is no decrease in orezone width, there is a slight decrease in quality within an increase in jasper content.

The width of the orezone varies only slightly between 17 and 25 metres wide, and from both adit and past diamond drill core data, the width shows no decrease downgrade to a maximum depth of 65m below surface.

At the location in question, the strike of the orezone is N.16°E, and the dip varies from 70°E at the northern extremity of the deposit, to vertical at Section F, and overturned to 85°W at the site of the existing quarry to the south.

Plan 2/89 provides two sectional/drill assay result presentations of the orezone - Section H incorporates percussion/diamond drill data with adit assay results, and the northerly Section L provides diamond drill information from Holes BR2 and 3.

As will be shown by reference to the drill log assay records, the Fe₂O₃ content of the orezone varies from 63 to 88%, and the ore is siliceous in nature. The hematite between Sections G and H average 86.24% Fe₂O₃, but is extremely hard and durable.

5. ORE RESERVE CALCULATIONS

The hematite ore reserves at the Northern Quarries deposit have on the basis of availability and density of drill/geologic data been divided into measured mineable reserves and geological reserves of both an indicated and potential classification.

The various oreblocks and ore types have been delineated and shown on seven drill sections (Appendix B). Reserves have been calculated on both a drill section basis and a 5m bench interval basis.

Fe₂O₃ grades can and have been calculated for "Measured ore reserves". A S.G. factor of 4 has been used in all conversions volume to tonnes.

A - Measured Reserves

These have been calculated from data gained from the recent close-spaced shallow percussion drilling executed at 5m intervals on 20m spaced drill section lines. The reserves have been calculated from surface down to 85R.L. Bench, ie. four 5m mine bench levels.

Ore blocks of this category are delineated in red on the drill sections, and Table No. 2 tabulated a summary of reserves on both a section and bench level basis.

As shown, measured mineable reserves total 74,989 tonnes at an average grade of 78.92% Fe₂O₃.

AS the oreblocks of measured ore are still enclosed both along footwall and hanging wall contacts within the interpreted orezone, there has been no necessity to incorporate dilution or ore-loss factors in these present calculations.

As can be seen, the reserves of measured ore as calculated to date are sufficient to sustain a small scale mining operation for a 6 year period at the approx rate of 12,000 tonnes per annum.

If mining proceeds from the north, working south along the two uppermost 5m levels (95 + 100RL) a total of 43,300 tonnes at a grade of 81.53% Fe₂O₃ are available.

The optimum ore grades could be acquired between Sections Lines G and H where 27053 tonnes averaging 86.24% Fe₂O₃ have been calculated.

B INDICATED RESERVES

Reserves classified as "indicated" incorporate ore blocks as delineated by geological interpretation down to a maximum depth of ore as proven by the intersections in the "Upper Tunnel" (Approx 30m downdip).

Indicated reserves are bordered in blue on the drill sections, and total 172,645 tonnes of hematite ore (additional to measured reserves) Table No. 3 summaries the above reserves on a sectional mine bench level basis.

C POTENTIAL RESERVES

Total potential reserves of the N. Quarries deposit over a strike distance of 180m strike length and extending downdip to a depth of 65m (as proved by diamond drilling) would provide a tonnage amounting to 1,170,000 tonnes.

MEASURED MINERABLE RESERVES.NORTHERN QUARRIES HEMATITE DEPOSIT.R.L. 30/86.C.W. DAVIS.

BENCH LEVEL	BENCH 100L.		BENCH 95L.		BENCH 90L.		BENCH 85L.		TOTALS.	
	t	% Fe ₂ O ₃	t	% Fe ₂ O ₃	t	% Fe ₂ O ₃	t	% Fe ₂ O ₃	t	% Fe ₂ O ₃
J	1200	76.80	2000	71.60	NIL		NIL		3200	73.60
I	2240	75.23	3400	80.03	NIL		NIL		5640	78.12
H.	4433	85.06	4920	85.29	NIL		NIL		9053	85.15
HI	2800	88.27	3500	87.75	NIL		NIL		6300	87.95
G	2700	87.47	4500	84.21	4500	87.23	NIL		11,700	86.12
F	720	86.90	5600	81.95	5600	77.62	NIL		11,920	80.21
E	NIL	-	3990	66.54	5500	64.15	5400	62.40	14,940	64.16
QUARRY	NIL	-	1596	84.60	5320	82.90	5320	64.43	12,236	75.09
TOTALS.	13,793	83.96	29,506	80.40	20,970	77.46	10,720	63.40	74,989	78.92

INDICATED GEOLOGICAL RESERVES - NORTHERN QUARRIES HEMATITE DEPOSIT.

F.L. 30/86 - C.W. DAVIS.

BENCH LEVEL.	BENCH 100	BENCH 95	BENCH 90	BENCH 85	BENCH 80	BENCH 75	TOTAL
SECTION LINE.	TONNES	TONNES	TONNES	TONNES	TONNES	TONNES	TONNES
J	2020	6400	8400	8400	8400	NIL	33,620.
I	7520	3320	6720	6720	6720	NIL.	31,000.
H	1027	1470	6390	6390	6390	NIL.	21,667.
HI.	NIL.	900	4400	4400	4400	NIL.	14100
G.	1206.	1950	1950	6450	6450	NIL.	18006.
F.	160	2800	2800	8400	8400	NIL	22560
E	NIL	NIL	150	300	5700	5700	11,850
QUARRY.	NIL	662	2135	2135	7455	7455	19842.
TOTALS (TONNES)	11,933	17,502	32,945	43,195	53,915	13,155	172,445.

652020

TABLE NO 3.

D. Proposed Future Work

Exploration is currently in progress, and during the third year term of E.L. tenency, work proposals would be as follows:-

- Blythe River Iron Deposits
 - Complete the ongoing assessment of the market potential and economic viability of a small scale open pit mining operation at the Cuprona Northern Quarries hematite deposit.
 - Complete a detailed geological examination, surface sampling, and possible drill programme at the Purple Crag hematite deposit, south of the Blythe River, the objective being to evaluate a source of near surface non-siliceous type hematite ore.
 - Complete the regional geological investigations of hematite ore zones from the Blythe River north-east along strike to Sushames Hill.

- Regional Work
 - Assess the possible gold potential of surface enriched iron deposits along the N.W. banks of the Blythe River and around Camena.
 - Continue with the surface geological examination of the Natone skarn zone immediately adjacent to the Housetop granite intrusion in the S.W. extremities of the E.L.

E. E.L. 30/86 Expenditures

A breakdown of exploration expenditures incurred within E.L. 30/86 during the 12 months period, to 31st March 1989 is tabulated below:-

	<u>\$</u>
Geology	9090
Geochemistry	3721
Drilling	8820
Other Exploration	2412
Administration	<u>1656</u>
Total Expenditure	<u>\$25699</u>

Cumulative expenditure total since April 29th 1987 = \$52114.



Cliff H. Whitehead.
13th April 1989.

APPENDIX A. (1)

DRILL HOLE LOGS/ASSAY RECORDS.

DRILL HOLES AND COORDINATES - NORTHERN QUARRIES.

<u>WELL NO</u>	<u>NORTHING</u>	<u>EASTING</u>
CH 1	5445504	412349
CH 1A	504	350
CH 2	521	346
CH 3	560	345
CH 4	560	350
CH 4A	560	349
CH 5	560	340
CH 6	567	335
CH 7	550	347
CH 8	543	349
CH 9	540	344.
CH 10.	549	330
CH 11.	579	345
CH 12.	577	350
CH 13	577	354
CH 14	596.	353
CH 15	595	356.
CH 16.	591	362
CH 17	605	360
CH 18	603	367
CH 19.	608	356.
CH 20.	616	368
CH 21	632	367
CH 22	638	381
CH 23	641	370
CH 24	651	370
CH 25	616	355
CH 26.	621	361.

C.W. DAVISEXPLORATION LICENCE 30/86.DRILL RECORD.

LOCATION - NORTHERN IRON QUARRIES - CURRONA.

DRILL RIG - ATLAS COPCO HYDRAULIC PERCUSSION DRILL.

DRILLER - M. McULLASH (N.W. EXPLORATION SERVICES)

ASSAYERS - DEPT. OF MINES, LAUNCESTON.

HOLE N° CH. 5DATE DRILLED. NOV. 3. 1988DEPTH DRILLED 12.00 m

<u>SAMPLE NUMBER.</u>	<u>DEPTH DRILLED.</u>			<u>ROCK TYPE.</u>	<u>ASSAYS.</u>			
	<u>FROM (m)</u>	<u>TO (m)</u>	<u>INTERVAL (m)</u>		<u>Fe₂O₃</u>	<u>SiO₂</u>		
884006	0	3	3	HEMATITE RUBBLE	58.6	26.5		
007	3	6	3	HEMATITE	76.6	19.4		
008	6	9	3	HEMATITE	78.3	18.1		
009	9	12	3	HEMATITE.	73.7	22.7		

HOLE N° CH. 6DATE DRILLED NOV 3 1988.DEPTH DRILLED 15.00 m

<u>SAMPLE NUMBER.</u>	<u>DEPTH DRILLED</u>			<u>ROCK TYPE.</u>	<u>ASSAYS</u>			
	<u>FROM (m)</u>	<u>TO (m)</u>	<u>INTERVAL (m)</u>		<u>Fe₂O₃</u>	<u>SiO₂</u>		
884010	0	3	3	RUBBLE	26.3	71.0		
011	3	6	3	HEMATITE	54.7	42.7		
012	6	9	3	HEMATITE	79.1	14.1		
013	9	12	3	"	79.1	18.5		
014	12	15	3	"	75.8	24.2		

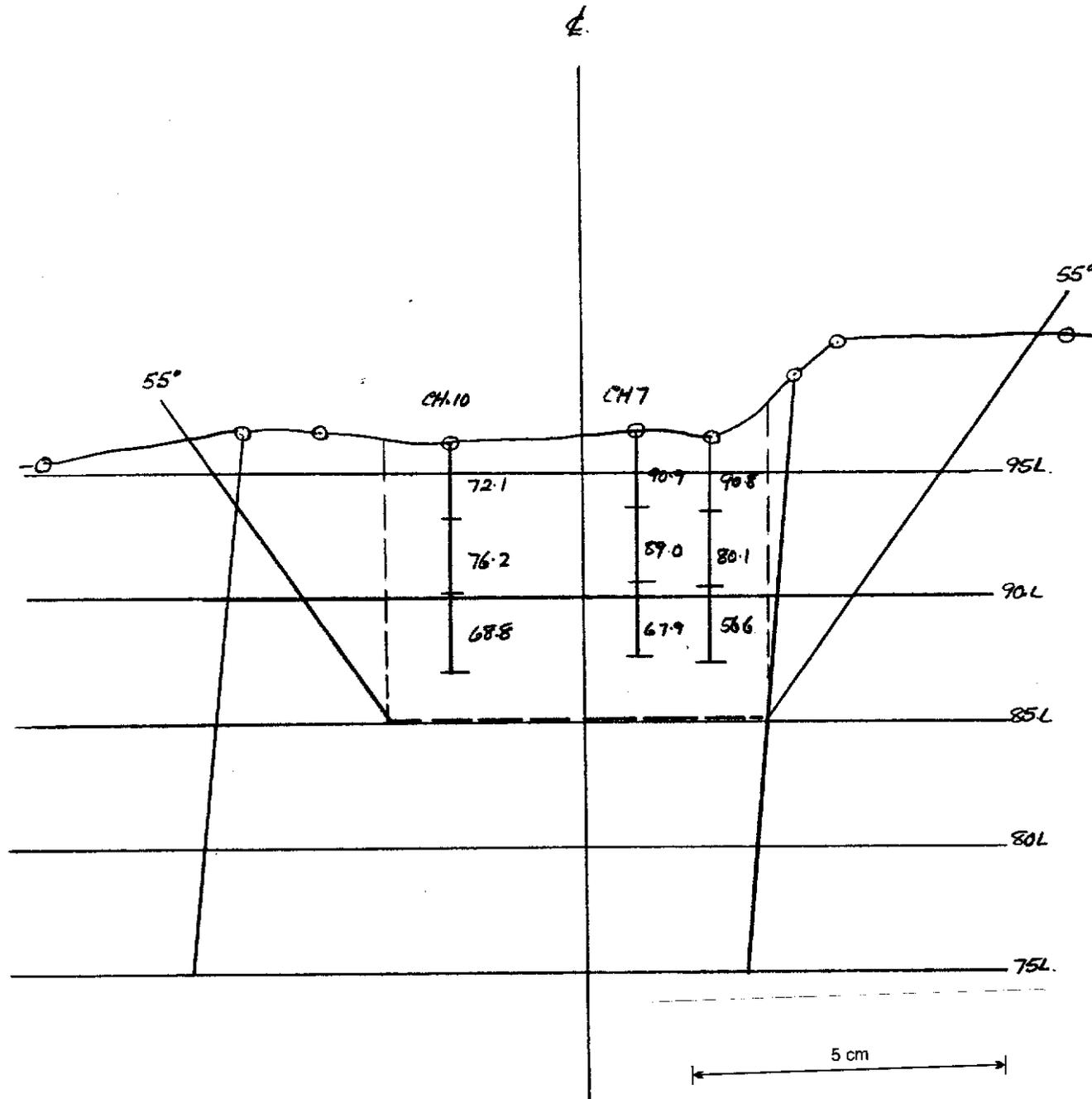
APPENDIX B. (2)

DRILL SECTIONS.

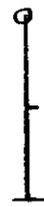
038

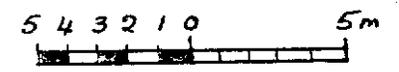
EXPLORATION LICENCE 30186

SECTION - QUARRY
NORTHERN Fe QUARRIES.



 = MEASURED RESERVES
 = INDICATED RESERVES.

CH.7
 90.9
 DRILL HOLE
 + Fe₂O₃ ASSAY
 (3m INTERVAL)



SCALE 1:250

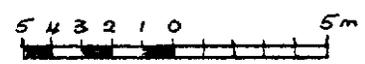
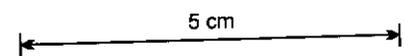
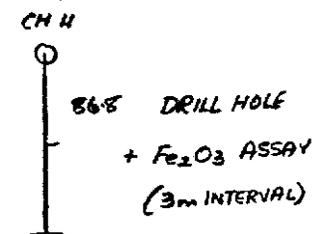
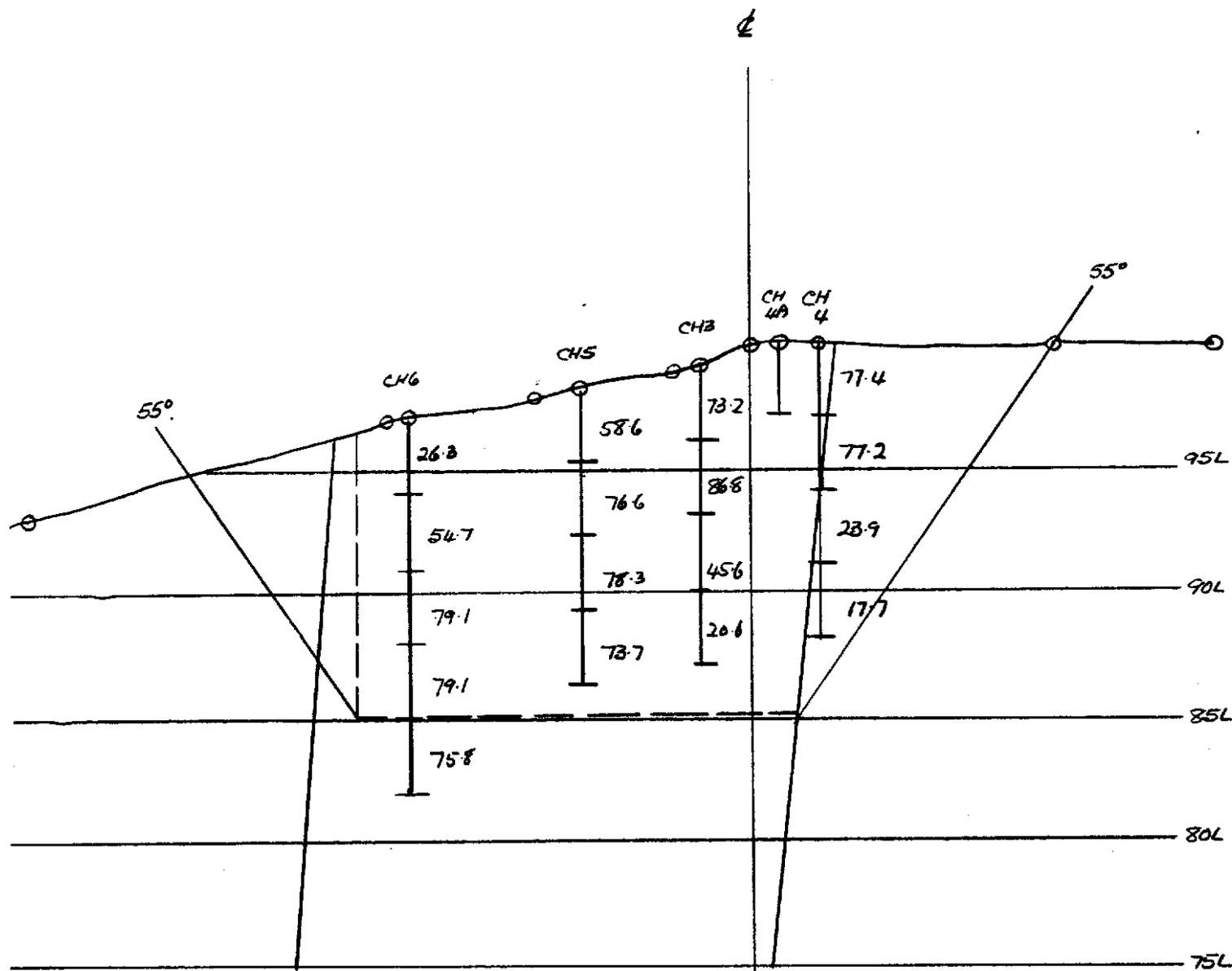
NOV. 1988

652040

039

EXPLORATION LICENCE 30/86

SECTION E.
NORTHERN Fe QUARRIES

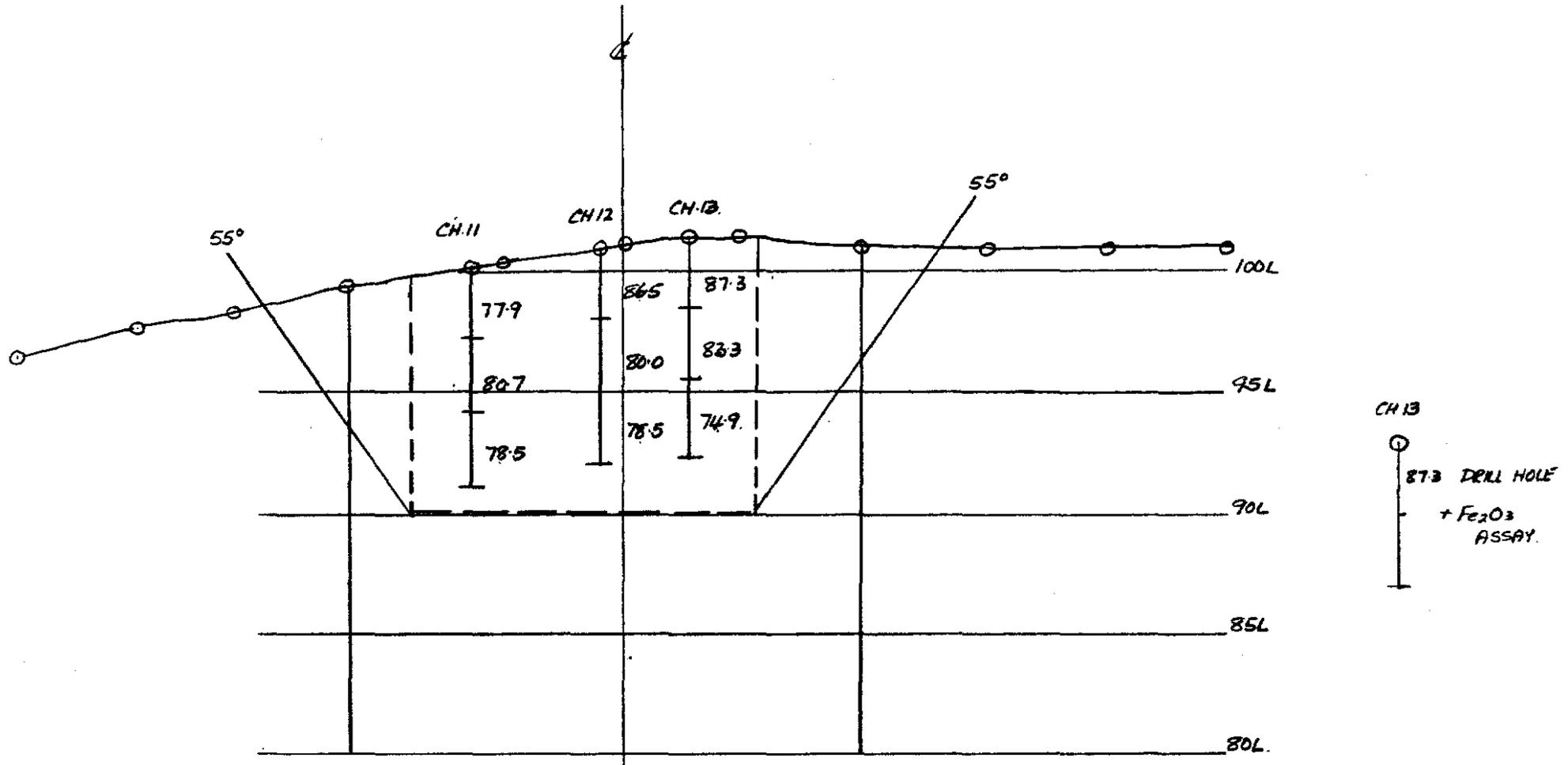


SCALE 1:250

NOV 1988.

652041

- = MEASURED RESERVES
- = INDICATED RESERVES.



 = MEASURED RESERVES
 = INDICATED RESERVES

5 4 3 2 1 0 5m
 SCALE 1:250.

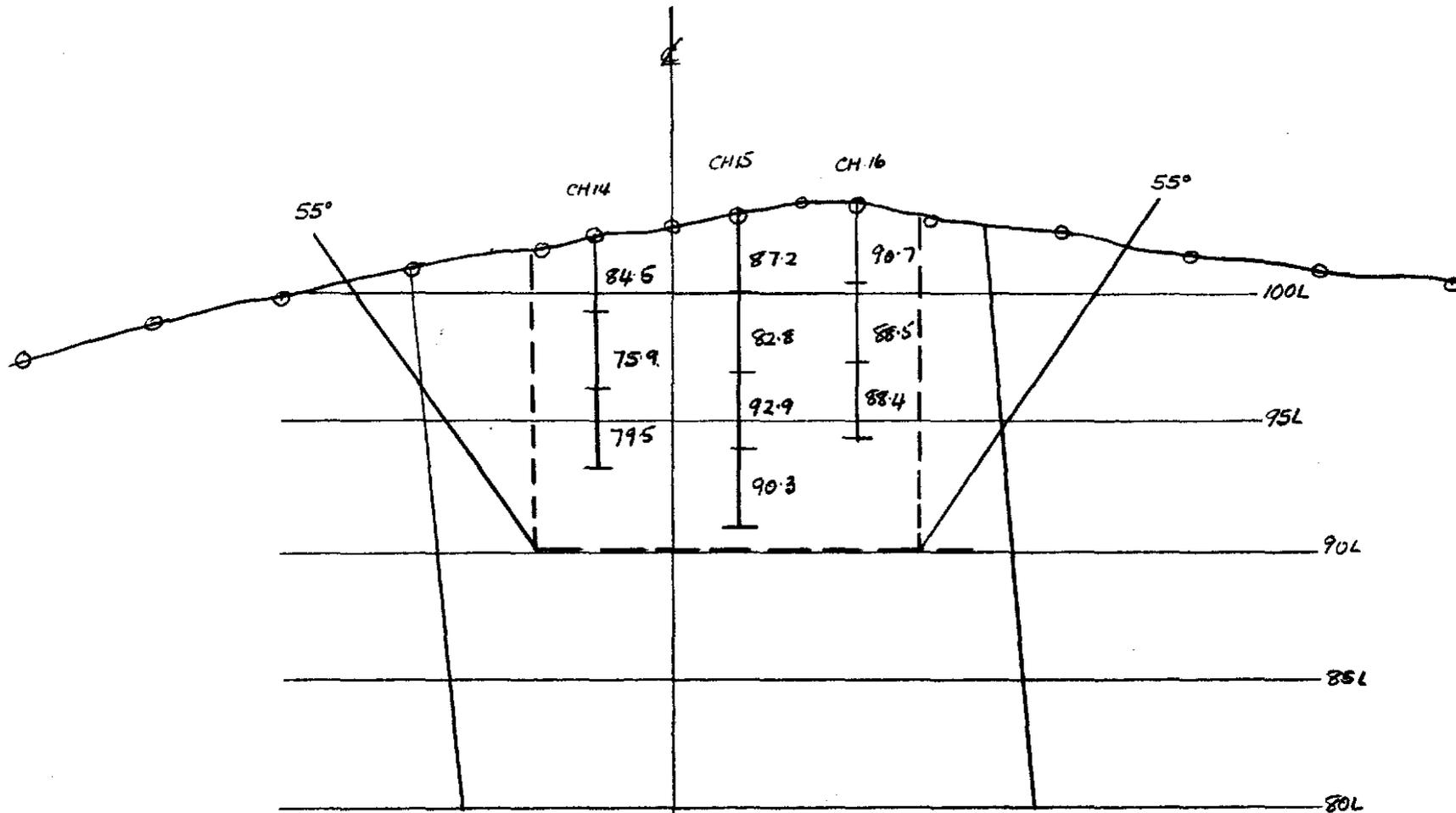
NOV 1988

652042

041

EXPLORATION LICENCE 30/86.

SECTION G.
NORTHERN Fe QUARRIES.



 = MEASURED RESERVES.

 = INDICATED RESERVES.

 82.8
 DRILL HOLE
 + Fe₂O₃ ASSAY
 (3m INTERVAL).

5 cm

5 4 3 2 1 0 5m

SCALE 1:250

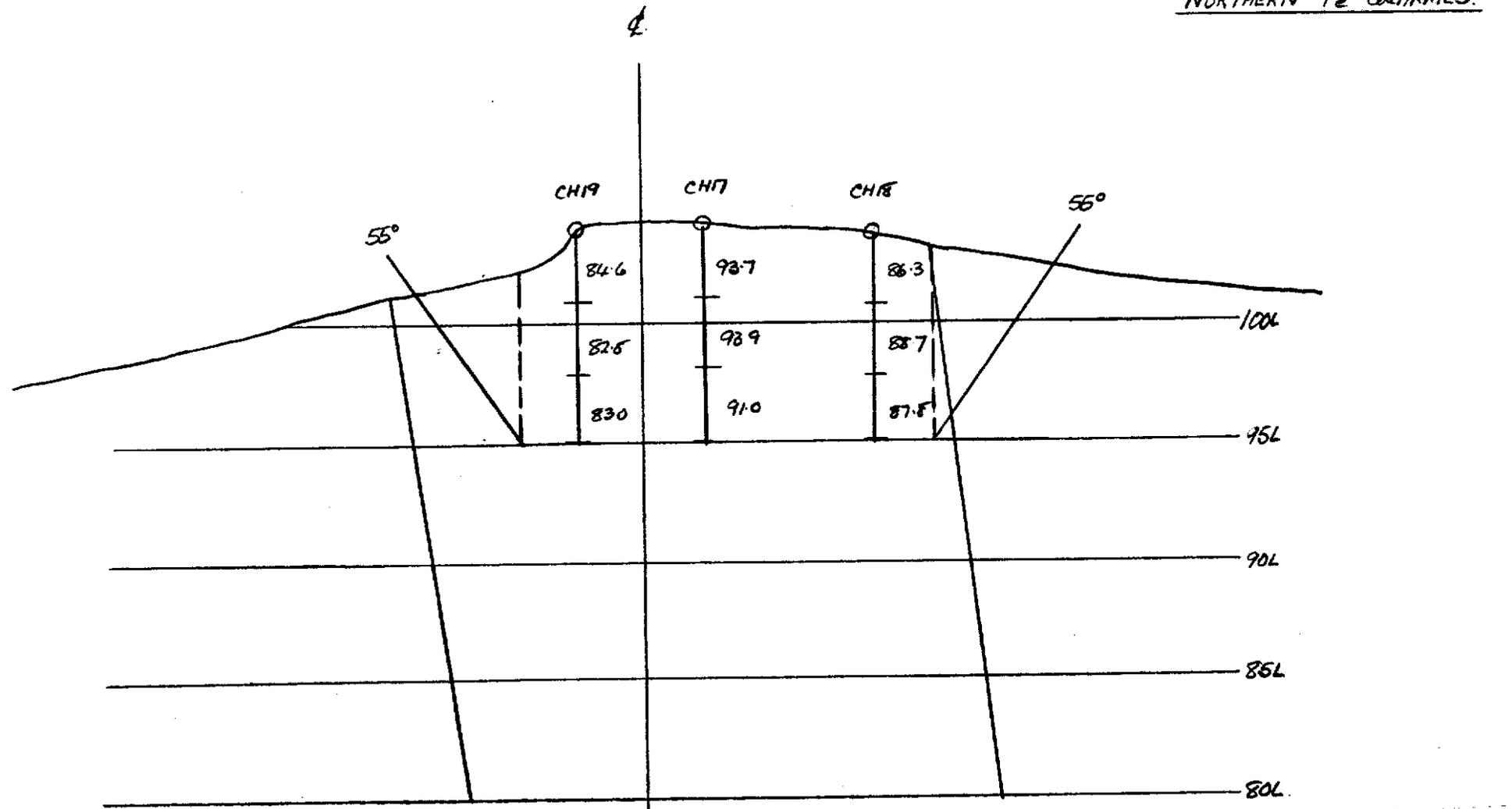
NOV 1988

652043

042

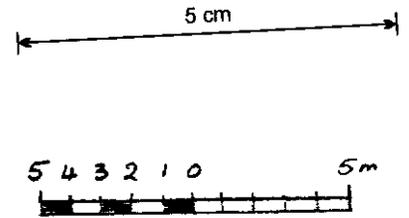
EXPLORATION LICENCE 30186

SECTION. HI.
NORTHERN Fe QUARRIES.



= MEASURED RESERVES
 = INDICATED RESERVES

CH. 17
 93.9 DRILL HOLE.
 + Fe₂O₃ ASSAY
 (3m INTERVAL)



SCALE 1:250

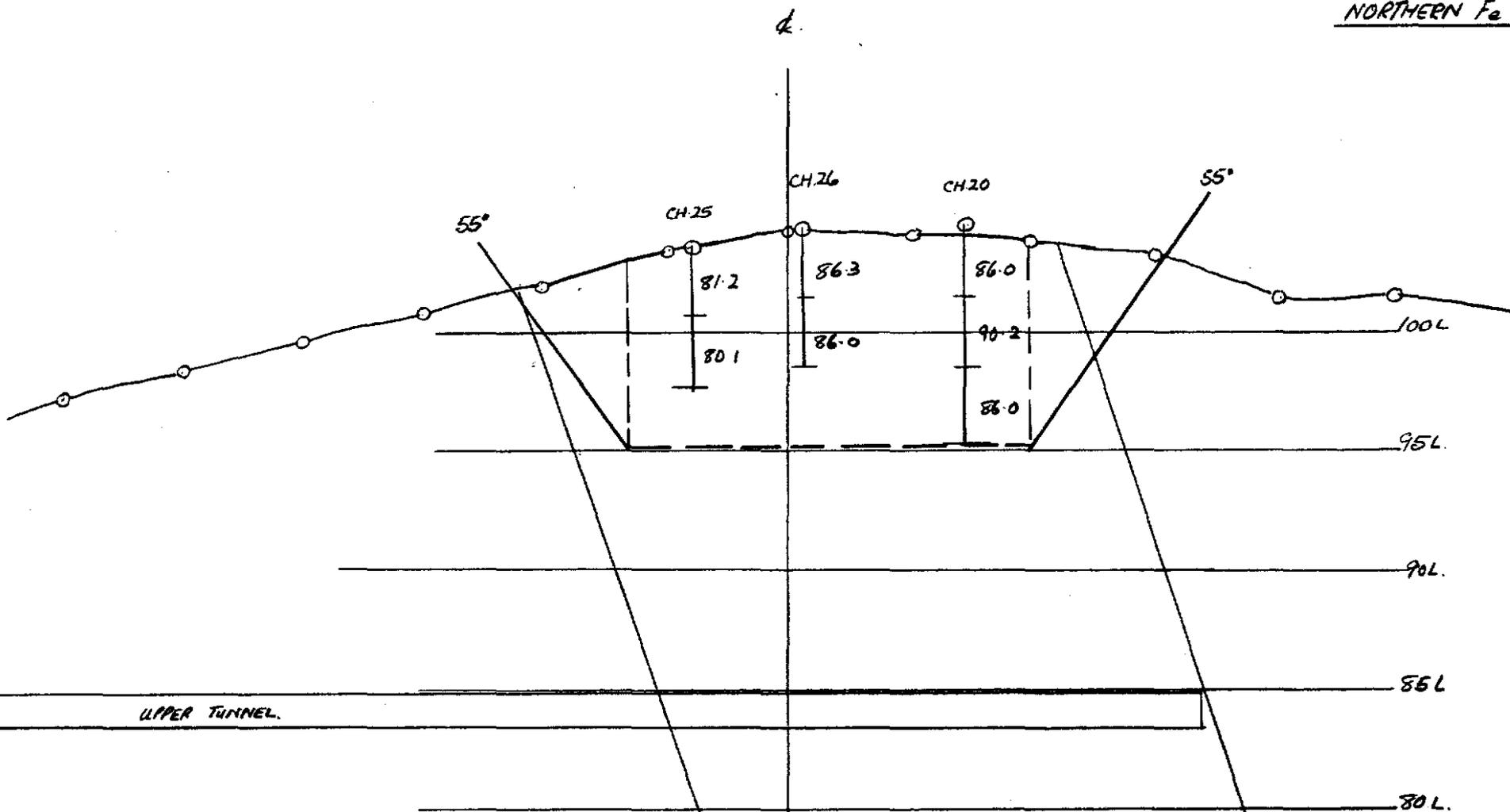
NOV. 1988

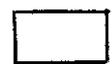
652044

043

EXPLORATION LICENCE 30/86.

SECTION H
NORTHERN Fe QUARRIES.



 = MEASURED RESERVES
 = INDICATED RESERVES

5 cm

CH.26
 86.3
 DRILL HOLE
 + Fe₂O₃ ASSAY
 (3m INTERVAL)

5 4 3 2 1 0 5m
 SCALE 1:250

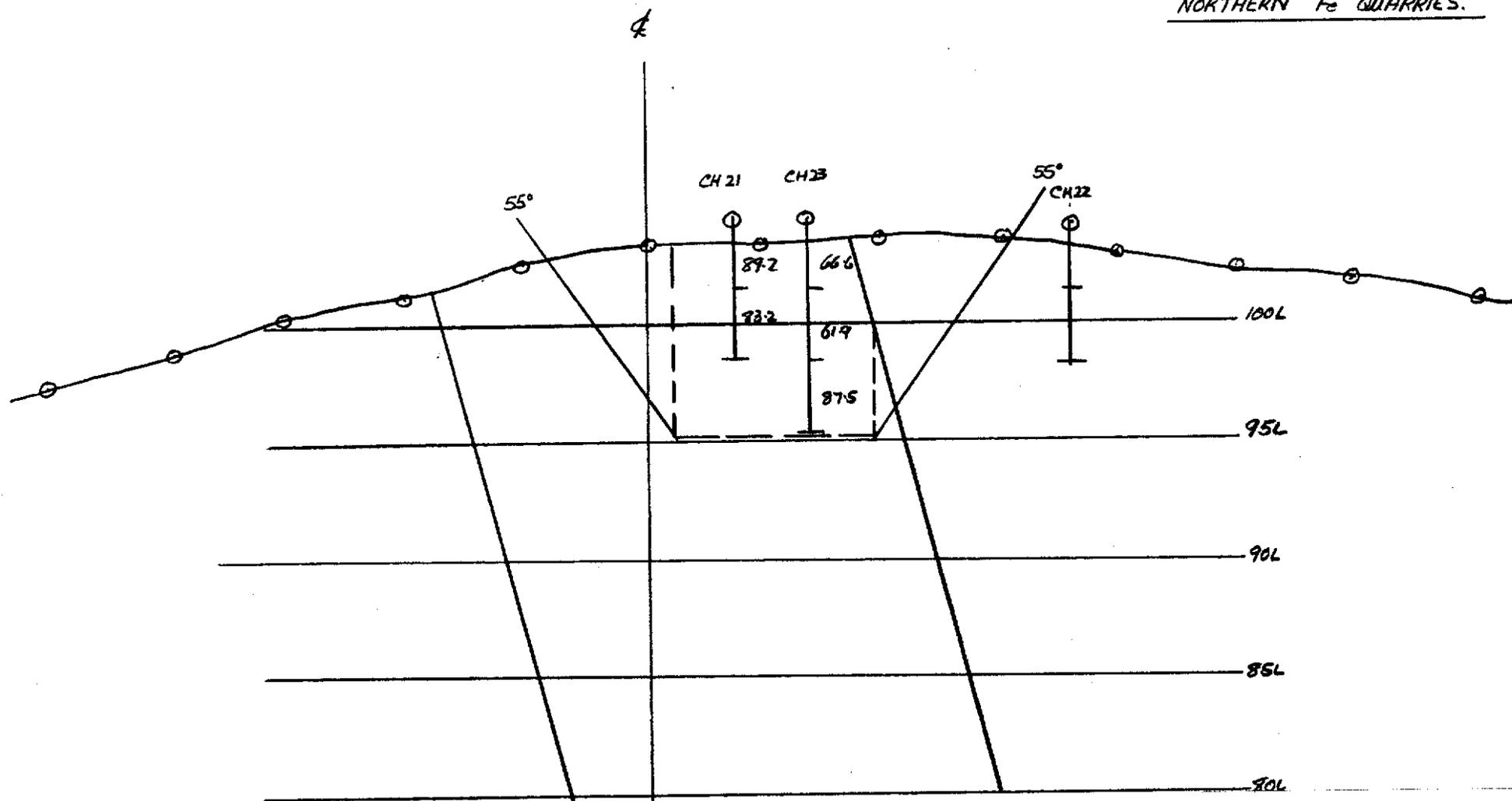
652045

NOV. 1988

044

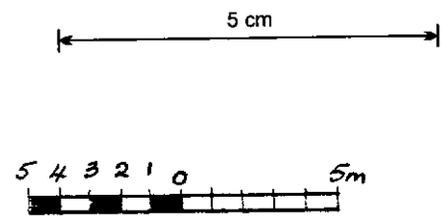
EXPLORATION LICENCE 30/86.

SECTION I
NORTHERN Fe QUARRIES.



- = MEASURED RESERVES
- = INDICATED RESERVES

CH.23
 66.6
 DRILL HOLE
 + Fe₂O₃ ASSAY.
 (3m INTERVAL)



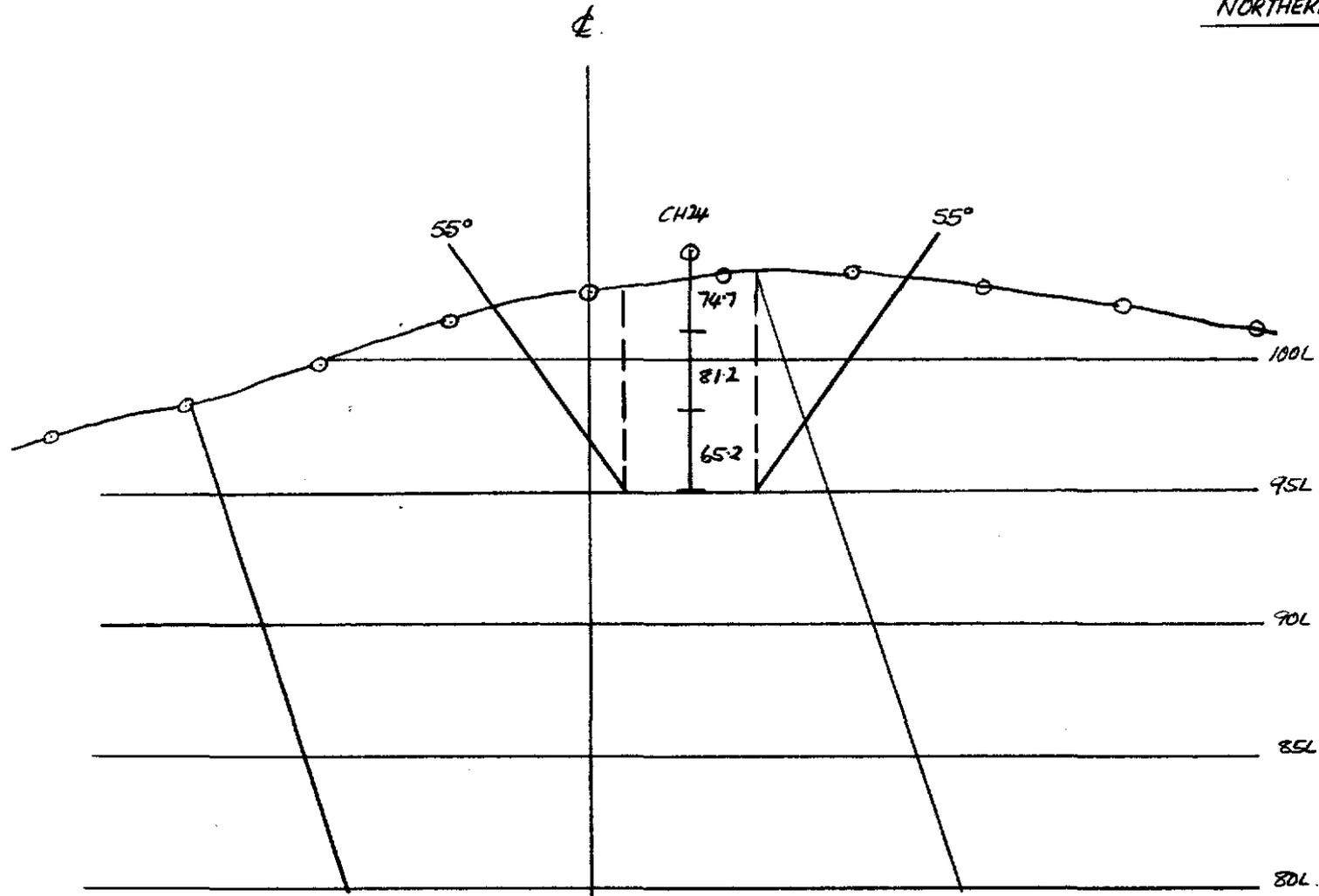
SCALE 1:250.

NOV 1988

652046

045

SECTION N. J
NORTHERN Fe QUARRIES



☐ = MEASURED RESERVES

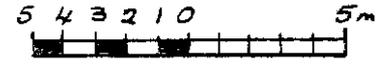
☐ = INDICATED RESERVES

5 cm

CH24



DRILLHOLE
+ Fe₂O₃ ASSAY
(3m INTERVAL)



SCALE 1:250

NOV. 1988

652047

APPENDIX NO. 3E.L. 30/86 - C. W. DAVISHEMATITE ORE SAMPLES - BLYTHE RIVER IRON DEPOSITS

<u>Sample No.</u>	<u>Location</u>	<u>Fe₂O₃ Fe</u>	<u>SiO₂</u>	<u>Al₂O₃</u>
		%	%	%
P.S. 1	Purple Crag	94.5 60.20	1.7	1.43
P.S. 3	" "	87.5 45.30	11.2	0.63
P.S. 4	" "	95.1 56.30	3.7	0.634
P.S. 5	" "	32.5 15.16	67.2	0.241
P.S. 6	" "	93.9 40.90	1.8	0.583
P.S. 7	" "	59.4 34.90	37.5	1.130
P.S. 8	Northern Quarries	94.1 45.20	3.90	0.590

<u>Sample No.</u>	<u>Location</u>	<u>Fe₂O₃</u>	<u>SiO₂</u>	<u>Al₂O₃</u>	<u>TiO₂</u>	<u>MgO</u>	<u>CaO</u>	<u>P₂O₅</u>
		%	%	%	%	ppm	%	%
B.R. 1	N. Quarries	89.0	9.50	0.45	0.04	250	0.01	0.098
B.R. 2	" "	91.2	8.05	0.25	0.03	100	0.01	0.087

5 cm



SCALE 1:500.

MAG. NORTH.



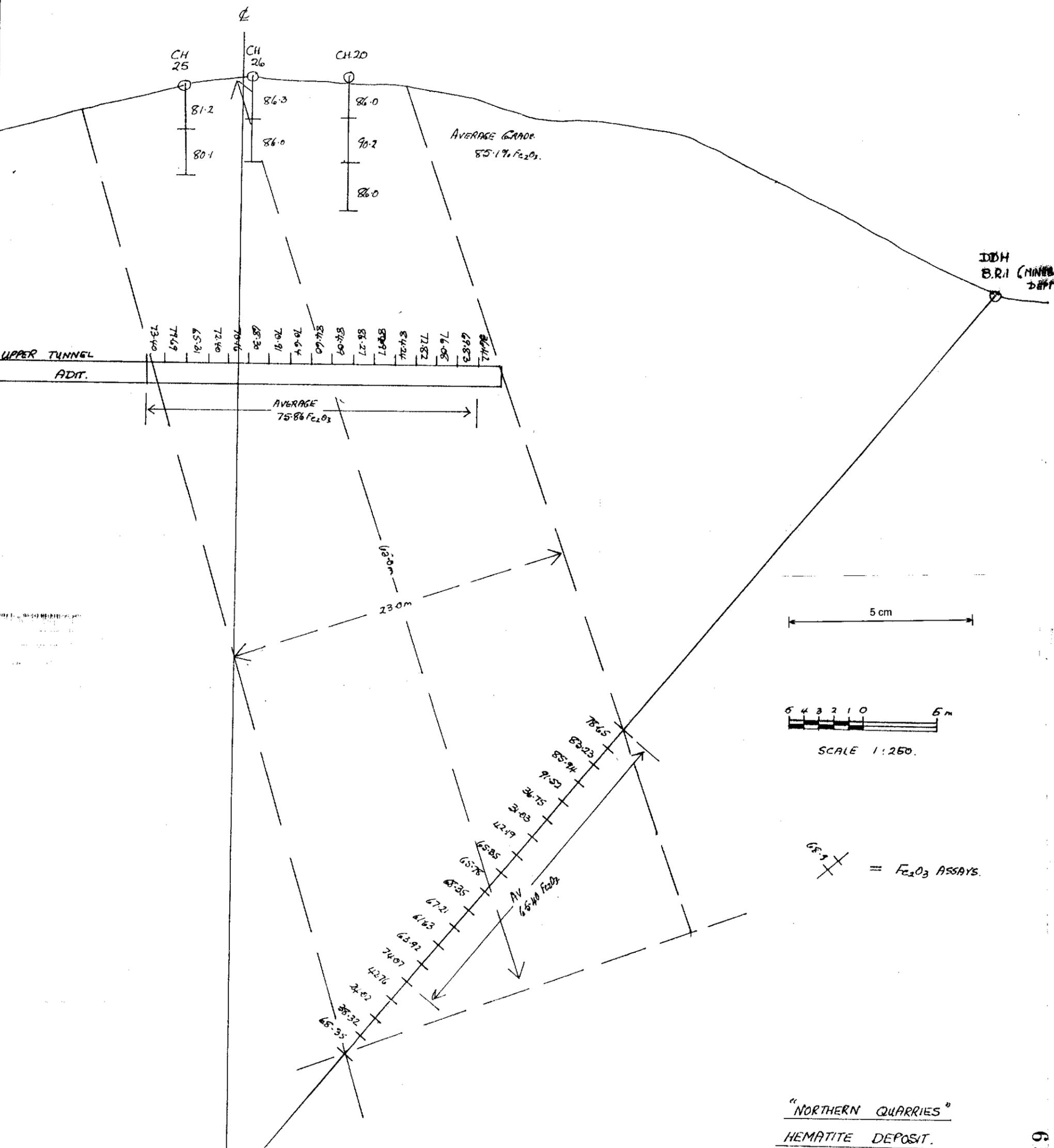
"NORTHERN QUARRIES"

HEMATITE DEPOSIT, CUPRONA.

- CH.H = PERCUSSION DRILL HOLE (1988)
- B.R.I = DIAMOND DRILL HOLE (MINES DEPT)
- = "UPPER TUNNEL"
- = EXISTING QUARRIES
- + = SURVEY RES.
- = BASE LINE.
- = DRILL SEC. LINE.
- = HEMATITE OREZONE
- = HEMATITE FLAT.

B.R.I.
50°
100-49m.

See Appx A for AMG Co-ords of drill Holes



"NORTHERN QUARRIES"
HEMATITE DEPOSIT.

SECTION A-A'

PLAN. No. 2/89 DATE NOV. 1988.

652050

100.49m