

000

097001

18 OCT 1982

DK59

AAE

of M	A.O.	C.G.	E.O.	D.S.M.E
				Registrar
Received	18 OCT 1982			E & IL
Answered				
DEPT. OF MINES				
REF. No. 8519/82				

PROJECT NAME:

Exploration Licence 22/80
South Esk

TITLE:

Final Report
to the
Department of Mines, Tasmania
Period 1/3/82 to 6/9/82

AREA NAME/S, STATE 1:250,000 SHEET NO/S & COORDINATES:

Cornwall, Fingal
SK55-4 (Launceston)
E580 000m N5 400 000m

COMMODITY/IES:

Gold

TEXT PAGES NO:

8

PLAN NOS:

8 (TAS -9-4,9,31,60,64,65,66,67)

TABLE NOS:

3

APPENDICES:

2

AUTHOR/S:

Bruce D. Mellor

DATE:

82-1848.

OPEN FILE
MICROFILMED

AUSTRALIAN ANGLO AMERICAN LIMITED

Incorporated in the State of Victoria

AUSTRALIAN ANGLO AMERICAN SEARCHES PTY. LTD.E.L.22/80, STH. ESKFINAL REPORTC O N T E N T S

1. SUMMARY
2. WORK DONE, PERIOD 1/3/82 to 6/9/82
 - 2.1 DRILLING
 - 2.1.1 Drilling and sampling methods
 - 2.1.2 Marshalls Flat
 - 2.1.3 Gemco Hole D4
 - 2.2 CONGLOMERATE
 - 2.3 STREAM GEOCHEMICAL SURVEY
 - 2.3.1 Introduction
 - 2.3.2 Orientation
 - 2.3.3 Results
 - 2.3.3.1 Western Area
 - 2.3.3.2 North-east area
 - 2.3.3.3 Other responses
 - 2.3.4 Ground follow-up and conclusions
- Appendix 1. Drill hole logs
- Appendix 2. Assay result sheets
- Plans
- Statutory Declaration

002

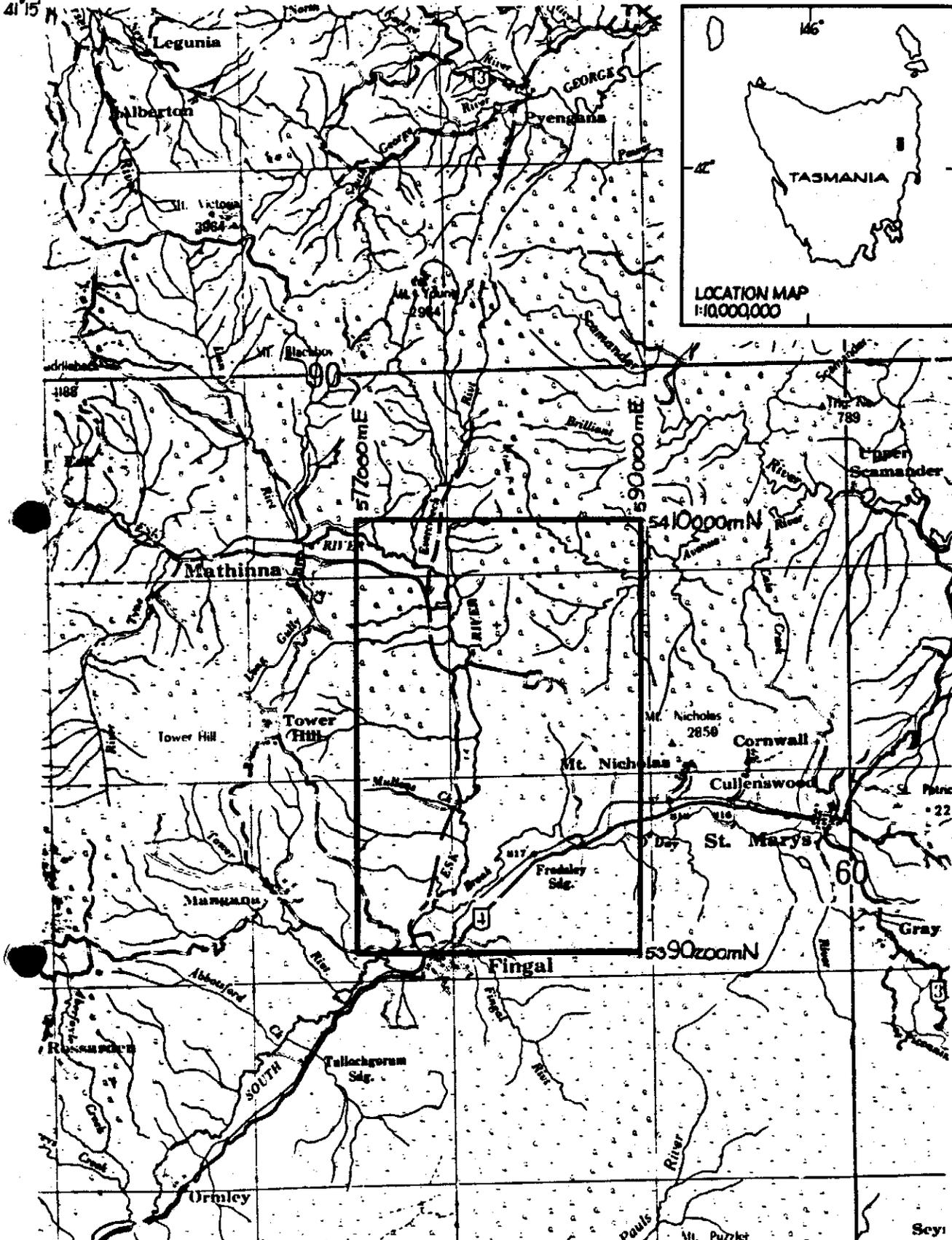
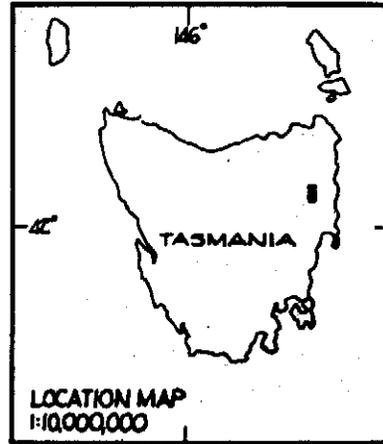
697003

PLANS

- | | | | |
|----|----------------------------------|--|-----------------------|
| 1. | TAS-9-4 . | Location Plan | 1: 250 000 |
| 2. | TAS - 9-31 . | Churn drill hole locations | 1: 50 000 |
| 3. | TAS - 9-60 .
<i>In Pocket</i> | Section, drill hole SR62 to 228 and SCD1 to 10 | H-1:4000
V-1: 200 |
| 4. | TAS-9-65 . | Locations, drill holes SCD4 to SCD14 | 1:2500 |
| 5. | TAS-9-66 . | Sections, drill holes SCD13 to 14 | H 1:2500
V 1: 200 |
| 6. | TAS-9-67 . | Section, drill holes SCD11 to 12 | H 1: 2500
V 1: 200 |
| 7. | TAS-9-9 .
<i>In Pocket</i> | Gemco drill hole locations | 1: 50 000 |
| 8. | TAS-9-64 .
<i>In Pocket.</i> | Stream geochemical survey | 1: 25 000 |

697004

147°45'
41°15'



AUSTRALIAN ANGLO AMERICAN LIMITED

SOUTH ESK PROJECT
EL 22/80 - TASMANIA
LOCATION MAP

COMPILED MPE DRAWN HD 4/80 SCALE 1:250,000 TAS-9-4

004

697005

AUSTRALIAN ANGLO AMERICAN SEARCHES PTY. LTD.

E.L. 22/80 - SOUTH ESK

FINAL REPORT

1. SUMMARY (Plan TAS9-4)

The E.L. 22/80 was taken up to enable the area to be prospected for alluvial gold deposits. It was hoped that there was a situation analogous to the Ringarooma Valley, with Quaternary sediments covering and hiding Tertiary sediments in the valley of the South Esk, with alluvial gold deposits in the Tertiary sediments, provenance being the numerous small gold-quartz veins in the Mathinna Beds. The potential of the area was tested by three stages of drilling.

In the first stage, widely spaced lines of holes were drilled, using a Gemco rig with a tricone roller bit with water flush to recover the sample. Occasionally, a core was taken with a diamond bit. It was recognised and accepted that the sample quality was probably poor, so that little reliance was placed on grade indicated by this drilling. This stage of drilling showed:-

- (1) There were no Tertiary sediments below the Quaternary river alluvials
- (2) North of a basement high near the Beauty Flat road, the river alluvials were high activity sediments (sands, gravel, shingle) with minor clay bands. Quite a few samples contained gold.
- (3) South of Beauty Flat road, sediments were low activity sediments (clay, carbonaceous sands and clays). Few samples contained gold
- (4) Below the alluvial sediments, some holes intersected consolidated conglomerate.

The results of this first stage are reported in the Six Monthly Report for the period 28/2/81 to 28/8/81 (McBride 1981). 81-1278

In the second stage, the effort was concentrated on the alluvials north of the Beauty Flat road. 228 holes were drilled at 80m interval, on lines approximately 800m apart. The drilling was done by a Jetstream dual tube reverse circulation rig. This stage of drilling showed that the alluvial deposits were shallow and that the gold grade was low. The results of this drilling are reported in the Six Monthly Report for the period 29/8/81 to 28/2/82 (Scott, 1982) 82-1114

2.

In the third stage, the grade indicated by the Jetstream drilling was checked. Holes were also drilled to determine the extent and grade of a gutter indicated by the first stage Gemco drilling. In this third stage, a conventional churn drill (Cable tool percussion drill) rig was used. The results of this stage of drilling are presented in this report.

The three stages of drilling have shown that there is gold present in the alluvials, but the grade is low. The average thickness of the alluvials is about 6 metres. North of Beauty Flat road, there is probably about 1 to 2 million cubic metres (1-2Mm³) of gold bearing alluvials, grade about 30mg Au/m³. Deposits of this size and grade have no economic potential.

Limited stream geochemical survey indicates that, in the Mathinna Beds in the hills flanking the South Esk river flats, there is poor potential for tin mineralisation, although base metal anomalies indicate there may be gold-quartz vein mineralisation.

2. WORK DONE, PERIOD 1/3/82 to 6/9/82

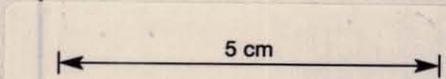
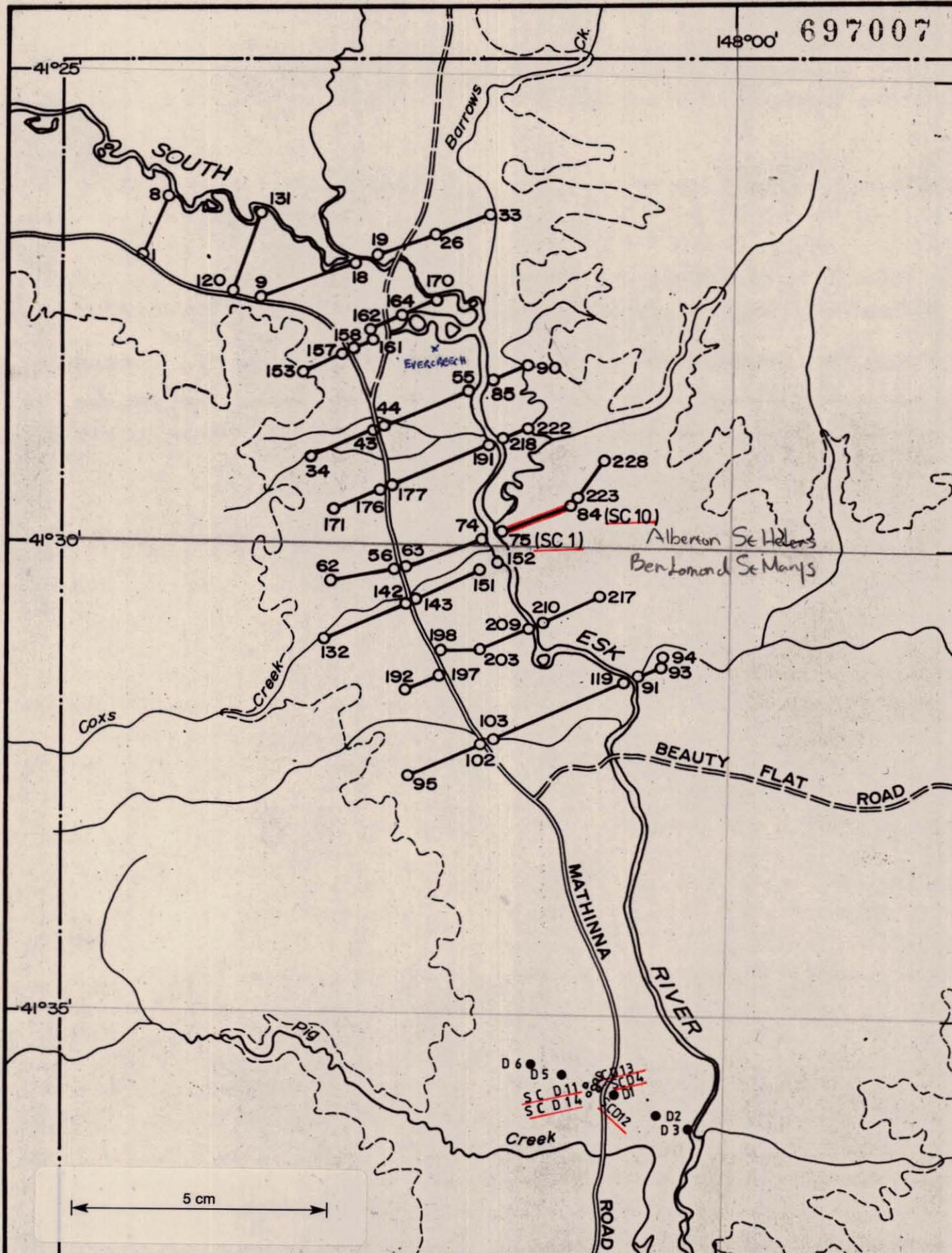
2.1 Drilling (Plans TAS-9-31)

2.1.1 Drilling and Sampling Methods

The objective of the drilling was to obtain the most reliable indication of grade possible. Consequently, the rig used was a conventional churn drill (cable tool percussion) rig, as this is generally considered to be the best tool for testing alluvial deposits. 150mm (6 inch) casing was driven ahead, and the sample inside the casing was recovered by a sand pump with clack valve. Samples were collected over 1m interval and transported to the Amdex Mining Ltd. sample treatment shed at Pioneer. The 1m samples were combined to form 2m samples, then the volume was measured and a concentrate obtained as outlined in Table 1. Where gold was recognised in the concentrate, the tailings were re-treated and the second concentrate combined with the first. The concentrates were assayed for gold by Fire Assay/AAS determination by Analabs Pty. Ltd. Laboratory at Coee, Tasmania.

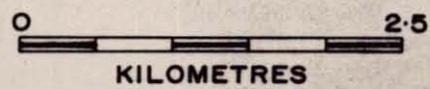
006

148°00' 697007



--- 300m contour: approximate limit of target area

○ 9 ○ 18 ○ 27 Line of jetstream drillholes with hole numbers



AUSTRALIAN ANGLO AMERICAN LIMITED

TASMANIAN DIVISION

SOUTH ESK PROJECT

COMPILED T.K.S. DRAWN 4/81 SCALE 1:50,000 TAS-9-31

007

3.

2.1.2 Marshall's Flat (Plan TAS-9-60, TAS-9-68)

Ten Jetstream reverse circulation holes (SR75 to 84) extended over a line length of 720m, showing a tenor of 56mg Au/m³ to a depth of approximately 6m. This was the best representation of gold mineralisation encountered in the Jetstream drilling programme. To check the indicated grade, 10 churn drill holes (SC1 to 10) were drilled adjacent to the Jetstream holes. Details of the drilling are shown on Table 2. A comparison between the Jetstream and churn drill results is included as Table 3, and Plan TAS-10-68 shows the comparison in the form of sections. Logs of SR75 to 84 and SC1 to 10 are appended.

Table 3 shows that the mean grade indicated by the churn drill (28mg Au/m³) is half that indicated by the Jetstream rig (56mg Au/m³) while the volumes of sample recovered were respectively 41% and 57% of the theoretical volume. The sediments sampled contained quite a high proportion of flat lying oblate cobbles. Both rigs would push some of the cobbles aside, resulting in a loss of sample volume, but, for the Jetstream rig, the suction effect at the annulus of the bit would result in a comparatively greater proportion of fines, and presumably gold, in the sample. Consequently the grade indicated by the churn drill is probably low, and the grade indicated by the Jetstream rig is probably high, and the actual grade is probably between the two, say 45 to 50mg Au/m³. For both rigs, in the calculation of the grade, the theoretical volume was reduced by a factor of 80% to compensate for the sample lost.

Assuming a grade of 50mg Au/m³, then the value of the gold in a cubic metre of gravel is as follows:-

<u>Gold price</u> A\$	<u>Value of gold in lcu.m</u> A\$
300	0.48
400	0.64
500	0.80

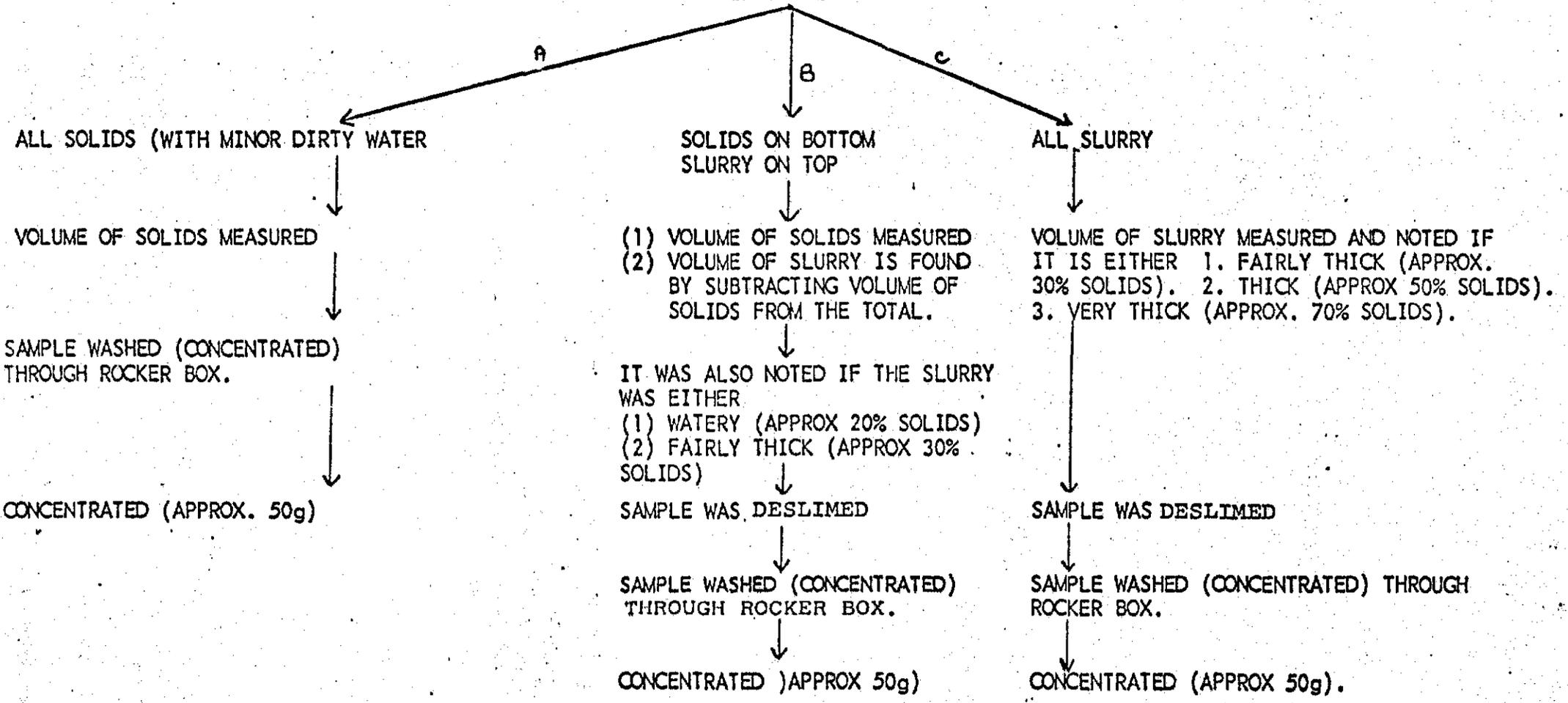
In summary, the drilling north of Beauty Flat road has shown:-

1. There are no Tertiary sediments
2. The Quaternary river gravels are shallow, averaging 6 to 8 metres, maximum 14 metres.

TABLE 1 CONCENTRATION PROCEDURE FOR DRILL HOLE SAMPLES

1 SAMPLE PLACED IN METAL BIN

IF SAMPLE IS



509

697010

TABLE 2

DRILL HOLE DETAILS

Hole No.	Coordinates E(m) N(m)	Adjacent to Hole	Depth Drilled (m)	Depth Basement (m)	Grade to Basement mg Au/m ³
SC1	81320 ^s 5350 st	SR75	4.70	4.30	6.84
SC2	81390 5370	SR76	7.60	7.30	41.60
SC3	81450 5420	SR77	6.00	5.70	13.10
SC4	81515 5460	SR78	5.50	4.30	1.80
SC5	81575 5500	SR79	5.00	4.30	76.45
SC6	81645 5535	SR80	6.00	5.60	12.08
SC7	81715 5585	SR81	6.00	5.30	33.45
SC8	81780 5650	SR82	4.30	4.10	34.21
SC9	81830 5700	SR83	4.00	3.70	11.47
SC10	81890 5735	SR84	6.20	5.80	44.55
SC-D4	82200 ^s 99940 st	D4	11.75	8.75	113.42
SC-D11	82260 99915		8.10	8.10	Tr
SC-D12	82130 99970		7.60	5.00	35.50
SC-D13	82230 99995		12.00	8.00	71.63
SC-D14	82180 99885		10.00	?10.00	11.88

010

697011

TABLE 3

SOUTH ESK

COMPARISON BETWEEN JETSTREAM REVERSE CIRCULATION (RC)
AND CHURN (CD) DRILL RESULTS

		CHURN DRILL				JETSTREAM REVERSE CIRCULATION DRILL			
From	To	Hole No.	% Volume Recoverd	Grade mg Au/m ³	Cumulative Tenor mg Au/m ³	Hole No	% Volume Recoverd	Grade mg Au/m ³	Cumulative Tenor mg Au/m ³
0	4.3	SC1	62	6.84	6.84	SR75	75	25.22	25.22
0	7.3	SC2	33	41.60	28.71	SR76	30	50.50	41.13
0	5.7	SC3	34	13.10	23.57	SR77	45	Trace	27.58
0	4.3	SC4	31	1.80	19.24	SR78	26	106.98	43.38
0	4.3	SC5	32	76.45	28.74	SR79	75	18.76	39.30
0	5.6	SC6	64	12.08	25.77	SR80	67	232.50	73.64
0	5.3	SC7	35	33.45	26.88	SR81	57	4.18	63.64
0	4.1	SC8	60	34.21	27.61	SR82	60	10.30	58.29
0	3.7	SC9	34	11.47	26.27	SR83	86	Trace	53.46
0	5.8	SC10	58	44.55	28.38	SR84	50	78.55	56.34
			Mean 41%				Mean 57%		

4.

- 3. There are probably about 1 to 2 million cubic metres of gold bearing gravels.
- 4. The grade of the best deposit of gold-bearing gravels at Marshalls Flat is about 50mg Au/m³.
- 5. Deposits of this size and grade are not economically viable.

2.1.3 Gemco Drill Hole D4 (Plans TAS-9-65, TAS-9-66, TAS-9-67)

The Gemco hole D4 (E82200 N99940), drilled early in 1981 on the terrace west of the South Esk River showed the presence of alluvial gold in gravels in a gutter of about 10m in depth, cut into lacustrine clay deposits. The latest programme of churn drilling was designed to indicate the grade of the alluvials and the extent and disposition of the gutter. SCD4 was drilled adjacent to the Gemco hole D4, SCD13 and 14 were 60m northerly and southerly from D4. Details of the holes are on Table 2 (page). Sections are on plans TAS-9-66 and TAS-9-67. Logs of the holes are appended.

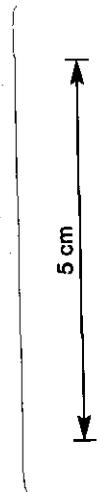
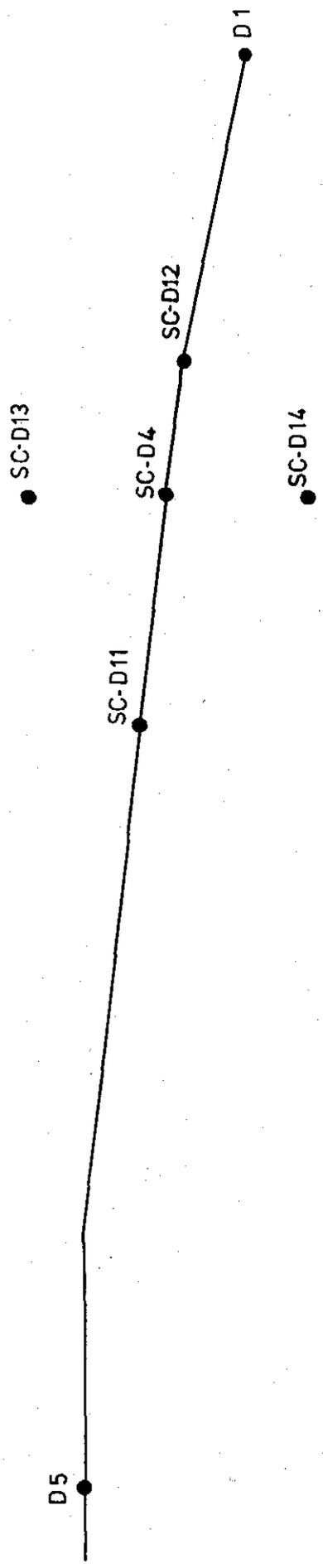
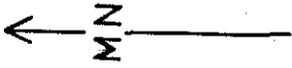
The gutter was intersected in 4 holes (SCD4, 12, 13 and 14). The hole SCD14 failed to reach a definite basement before drilling problems caused the abandonment of the hole at 10metres, and although gold values are low, there is no conclusive drop in value down hole indicative of the intersection of basement.

There does appear to be a north-south trending gold bearing channel in this area, although the drilling has not defined the extent and attitude accurately. The cross section through SCD4 and SCD12 shows the width to be up to 250 metres. The mineralisation is shallow, concentrated in the 4-10metre interval, with the highest grade (113mg Au/m³) in hole SCD4. The mean grade for the holes SCD4, 12 and 13 is 80mg Au/m³.

Assuming a constant width of 150 metres and depth of 10 metres, then 1 kilometre of gutter contains 0.75 million cubic metres. The maximum length of gutter between the outcropping Mathinna Beds to the west and the South Esk River to the east would be of the order of 2 to 4 kilometres, so that maximum potential size of the gutter is of the order of three million cubic metres. A deposit of this size and grade is not economically viable.

012

697013



AUSTRALIAN ANGLO AMERICAN LIMITED
 SOUTH ESK E.L. 22 / 80
 CABLE TOOL PERCUSSION (SC-D) AND GEMCO
 DIAMOND DRILL (D) HOLE PLAN

COMPILED BEA DRAWN 6/82 SCALE 1:2500 TAS-9-65

W

D5

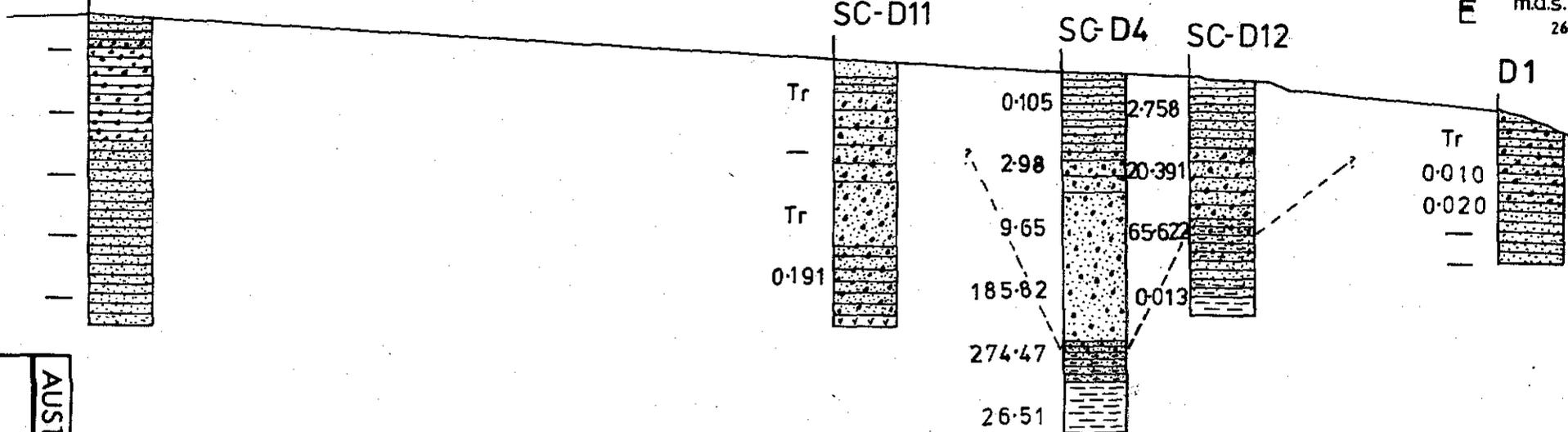
SC-D11

SC-D4

SC-D12

E m.a.s.l. 260

D1



COMPILED BY BEA DRAWN 6/82 SCALE 1:2500 TMS-9-66

AUSTRALIAN ANGLIO AMERICAN LIMITED

SOUTH ESK E.L. 22/80

CABLE TOOL PERCUSSION (SC-D) AND GEMCO DIAMOND DRILL (D) HOLE SECTION

LINE WEST TO EAST

DRILL RESULTS.

HOLE NO.	DEPTH DRILLED (m)	DEPTH BASEMENT (m)	GRADE TO BASEMENT (mgAu/m ³)
SCD11	8.10	8.10	Tr
SCD12	7.6	5.0	35.5
SCD4	11.75	8.75	113.42

- KEY.
- CLAY
 - SAND
 - GRAVEL
 - SHALE (MATHINNA GROUP)
 - DOLERITE
 - CARBONACEOUS.
- GRADE (mgAu/m³)
- Tr : TRACE
- BELOW DETECTION.
- BASEMENT

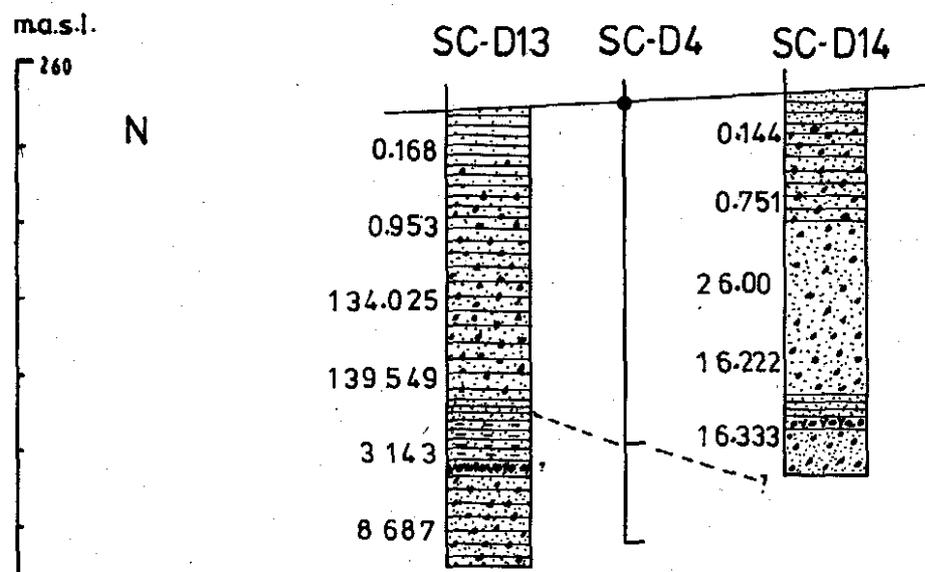
5 cm

0 100 200

MN

014

697015



KEY

- CLAY ; GRADE (mgAu/m³)
- SAND ; Tr TRACE
- GRAVEL -- BASEMENT
- SHALE (MATHINNA GROUP)
- DOLERITE
- CARBONACEOUS.

DRILL RESULTS.

HOLE NO.	DEPTH DRILLED (m)	DEPTH BASEMENT (m)	GRADE TO BASEMENT mgAu/m ³
SC-D13	12	8	71.63
SC-D14	10	-	17.58
SC-D4	11.75	8.75	113.42



AUSTRALIAN ANGLO AMERICAN LIMITED
SOUTH ESK E.L. 22/80
 CABLE TOOL PERCUSSION DRILL HOLE SECTION.
 LINE NORTH TO SOUTH

5.

2.2.3 Conglomerate (Plan TAS-9-9)

Conglomerate was intersected in some of the Gemco holes drilled in 1981. This conglomerate was described by Mc Bride (1981) as "well rounded granules, pebbles, cobbles and boulders of dolerite, quartz sandstone and quartz set in either a dark grey pyritic muddy matrix with coal fragments or a lighter coloured siliceous sandy matrix. In places, thin beds of sand or grey to black pyritic shales (siltstone?) are present".

The age of this conglomerate has not been determined. It may be Tertiary, but it is more likely to be basal Parmeener Super Group, as the conglomerate is well consolidated, and in the district, conglomerate with similar pebbles occur near the base of the Parmeener sediments.

with dolerite??

In several holes, cores of the conglomerate were taken by the Gemco rig. These cores were crushed and a concentrate obtained by panning. The concentrate was assayed for gold by Fire Assay/AAS determination at Analabs Pty. Ltd's Coee laboratory. The sections assayed are as follows:-

<u>Sample No.</u>	<u>Hole No.</u>	<u>From (m)</u>	<u>To (m)</u>	<u>Core Recovery (m)</u>	<u>Concentrate Weight (g)</u>	<u>Assay (g Au/t)</u>
D4, 21	D4	20	21	0.97	15.48	x
D4,,23	D4	23	24.5	0.94	15.58	x
E4A,35	E4A	35	36	0.86	14.95	x
E4A,38.4	E4A	36	38.4	2.34	24.10	x
E4A,44.2	E4A	38.4	44.2	3.20	31.97	8.45
I4,11	I4	11	12	1.90	21.44	0.009

Only one sample. E4A,44.2, contained gold. The concentrate from this sample weighed 31.97g and assayed 8.45g Au/t. By calculation, the grade of the original conglomerate sample is 48.67mg Au/m³ which is equivalent to approximately 0.126g Au/t.

2.3 Stream Geochemical Survey2.3.1 Introduction

The Mathinna Beds are potential hosts for tin mineralisation, as at Rossarden and Storys Creek, or gold mineralisation, as at Mathinna. The prospectivity of these beds in the north east and west of the E.L. was determined by broad scale stream geochemical and heavy mineral concentrate (H.M.C.) survey.

6.

A limited number of large samples were taken at trap sites in the streams, and concentrates obtained from these by panning. The concentrates were assayed for gold and tin by Analabs Pty. Ltd, Cooee. The gold was assayed by fire assay/AAS determination, and the tin was determined by assaying the slag from the gold firing by XRF.

2.3.2 Orientation

For orientation purposes, twenty one samples were collected from streams draining from known gold occurrences. Three size fractions (-20+40, -40+80 and -80) of each sample were assayed for copper, lead and arsenic. These elements were chosen as the Mathinna gold mineralisation was associated with chalcopyrite, galena, sphalerite and arsenopyrite. The orientation study showed:-

- (1) The -80 size fraction shows the highest copper and zinc results, but the arsenic results are low.
- (2) For copper and zinc, there is no significant difference in the results for the -20+40 and the -40+80 size fractions.
- (3) For arsenic, the -80 fraction shows the lowest values, and there is not very much difference in the results for the other two sizes. In two samples, there is arsenic in the -40+80 fraction, but not in the -20+40 fraction, and in one sample, the arsenic in the -20+40 fraction is higher than in the -40+80 fraction.
- (4) For lead, none of the results are strongly anomalous. The -20+40 size fraction shows the best response.

The orientation survey suggested the assay of the -20+40 size fractions.

201 stream sediment samples were collected at intervals of approximately 0.5km, and the -20+40 size fraction assayed for Cu, Zn, Pb and As, by Analabs Pty. Ltd, Cooee.

7.

2.3.3 Results (Plan TAS-9-64)

Sample locations and results are located in Plan-9-64. The anomalous areas located were as follows:-

2.3.3.1 Western Area

HMC sample BS6 and BS7 in Miami Creek and Mullers Creek contain gold but there are no base metal anomalies. The creek to the south is anomalous in arsenic (SS64) as is Little Hospital Creek (SS194 to 198).

2.3.3.2 North-East Area

(a) Pb-Zn anomalies

Three streams are anomalous.

	<u>Sample No.</u> (SS)	<u>Zn</u> ppm	<u>Pb</u> ppm	<u>Cu</u> ppm
(1)	144	735	150	60
(ii)	154	230	110	Not anomalous
(iii)	(156	190	95	" "
	(155	110	95	" "

(b) Arsenic anomalies

There are two anomalous streams.

	<u>Sample No.</u> (SS)	<u>As</u> ppm	<u>HMC sample BS11</u> mg Au/m3
(i)	(78	19)	0.345
	(80	18)	
	(82	19)	
(ii)	(184	17	
	(185	17	
	(188	17	
	(189	17	

(c) Mono-elemental Zn response

Quite a few samples show a high background to low anomalous zinc response and the samples appear to be related to either Jurassic dolerite dykes or limestone in the sediments of the Mesozoic Parmeener Super Group. Neither source appears to have economic potential.

8.

2.3.3.3 Other responses

In the north, two HMC samples show gold and tin responses i.e. Bs9 on Evercreech Rivulet (1.050 mg Au/m³) and BS10 (0.582g Sn/m³). Locals report gold has been won from Evercreech Rivulet by panning. The stream with the tin response extends approximately 1km north of the E.L. boundary. The weak response and no obvious source downgrades the significance of this response.

2.3.4 Ground follow-up and conclusions

The follow up on the ground has been very limited and has shown that, as is common throughout the area, the Mathinna Beds contain numerous quartz veins, generally thin and short in strike length. In places, the veins form stock works, and in places the veins are 30 to 45cm thick. Some veins contain gossanous limonite, indicating a sulphide origin. It is probable that all anomalies originate from such veins.

The geochemical survey indicates there is poor tin potential, but there is some potential for gold-quartz vein type mineralisation. The economic potential for gold-quartz vein type mineralisation is poor and further follow-up work is not warranted.

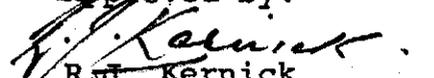
Compiled by B.D. Mellor
from reports by B.D. Mellor
& B.E. Anderson



Bruce D. Mellor
Divisional Geologist
TASMANIA

BDM:dmm

Approved by:-



R.J. Kernick
Exploration Manager

I, OSVALDO TIBURCIO FILOMENO FONSECA of 56 Partridge Crescent, Frankston, in the State of Victoria, Accountant DO SOLEMNLY AND SINCERELY declare as follows:

1. That in the three months ended 31 August 1982 we have expended \$25 797 on work on Exploration Licence 22/80 and this is further broken down into:

	\$
(a) Operational staff costs	13 136
(b) General Operational expenses	641
(c) Transport and travel	2 742
(d) Assays	979
(e) Tenement costs	1 172
(f) Contractors	64
(g) Specialist services	-
(h) Drilling and treatment	2 866
(i) Capital expenditure	450
(j) Administration costs	3 747
	\$25 797

2. That the cumulative amount expended on Exploration Licence 22/80 to 31 August 1982 is \$517 089.

AND I MAKE this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of an Act of the Parliament of Victoria rendering persons making a false declaration punishable for wilful and corrupt perjury.

DECLARED AT Melbourne.)
in the State of Victoria)
this 14th day of)
October, 1982)

O. Fonseca

Before me:

A Commissioner for taking Declarations and Affidavits under the Evidence Act 1958.

020

697021

APPENDIX 1

DRILL HOLE LOGS

AUSTRALIAN ANGLO AMERICAN LTD.

DRILL LOG

HOLE NO SC3... (SR77)

LOCATION... STH... ESK CO-ORDINATES EQ 81450... mE 5420 mN LINE SC.....

PAGE... 1... of... 1...

DRILLING METHOD Cable tool percussion DIAMETER 15.9mm THEORETICAL VOLUME 40.3 R.L. SURFACE..... m R.L. BASEMENT..... m DATE 26.1.1982.

DRILLER/CONTRACTOR... AMDEX SAMPLE WASHER... MOORE ASSAY LAB... ANALAB ASSAY METHOD... Fire/AAS GEOLOGIST... B.E. ANDERSON

FROM m	TO m	SAMPLE NO	Recovered VOLUME (l)	WEIGHT CONC.(g)	Conc. Assay (g Au/t)	Recovered GOLD (g Au)	GRADE 1 g Au/m ³	GRADE 2 g Au/m ³	DESCRIPTION OF SAMPLE							
									C	N	T	C-CLASS S-SAND-75-100% SC-SANDY CLAY- 25-49% CS-CLAY SAND-50-74% G-CLAY-0-24%	N-NATURE G-GRIT S-SAND ST-SILT	T-TENACITY H-HIGH M-MEDIUM L-LOW		
0	2		10.0	44.12	0.205	0.009		0.281								Topsoil and brown high tenacity gritty clay to grey brown fine and med. clayey sand and gravel at 1.8m. Clasts subrounded to sub-angular quartz, sandstone and dolerite? Micaceous, pyritic and carbonaceous in clay size. Fraction. Ilmenite
2	4		5.0	73.51	0.037	0.003		0.084								Grey fine and med. clayey sand to 2.5m. Changes to alternating grey silty sand with coarse sandy gravel. Clasts predominantly sub-angular sandstone with some quartz veining. Ilmenite
4	6		26.2	55.74	21.400	1.193		36.999								As above to 5.2m Begins to get softly consolidated grey, high tenacity clay (micaceous and pyritic) as matrix in coarse grey gravelly sand. From 5.7m, dark grey high tenacity clay - weathered shale (basement) 2 flakes gold. Ilmenite
																End of Hole 6m
																(SR77 Grade 0-5.7m Trace Au)

GRADE 1 CALCULATED BY RELATING RECOVERED VOLUME TO RECOVERED GOLD. GRADE 2 CALCULATED BY RELATING RADFORD FACTORED THEORETICAL VOLUME TO RECOVERED GOLD (RADF = 80%)

TOTAL RECOVERED VOLUME, SURFACE TO 6.....m = 41.2.....l
 TOTAL RECOVERED GOLD, SURFACE TO 6.....m = 1.205 mg Au

GRADE 1 FROM SURFACE TO 6.0.....m 29.2m g Au/m³ (GRADE 1)
 GRADE 2 FROM SURFACE TO 5.7.....m 13.1m g Au/m³ (GRADE 2)

697026

AUSTRALIAN ANGLO AMERICAN LTD. DRILL LOG

LOCATION STH...ESK CO-ORDINATES EQ.81515..mE.....5460N LINE.....

HOLE NO...SC4...(SR78) PAGE.1.....of...1....

DRILLING METHOD Cable tool percussion BIT DIAMETER 15.9 mm THEORETICAL VOLUME 40.32 m R.L. SURFACE..... m R.L. BASEMENT..... m DATE 27.4.19.82

DRILLER/CONTRACTOR...AMDEX SAMPLE WASHER S...MOORE ASSAY LAB. ANALB ASSAY METHOD.....Fire/AAS GEOLOGIST B.E.ANDERSON

FROM m	TO m	SAMPLE NO	Recovered VOLUME (l)	WEIGHT CONC.(g)	Conc. Assay (g Au/t)	Recovered GOLD (g Au)	GRADE 1 g Au/m ³	GRADE 2 g Au/m ³	DESCRIPTION OF SAMPLE			C	N	T	C-CLASS		N-NATURE	T-TENACITY		
									S-SAND-75-100%	SC-SANDY CLAY-25-49%	G-GRIT				H-HIGH					
																S-SAND	C-CLAY-0-24%	S-SAND	M-MEDIUM	
0	2		4.5	36.14	0.146	0.005		0.164												Dark brown gritty topsoil. Ilmenite
2	4		16.5	45.45	2.51	0.114		3.538												Dark brown very gritty clayey sand. Subangular quartz pebbles, mica flakes and carbonaceous fragments to 3.5m. Changes to grey silty sand and very coarse gravel. Clasts sub-rounded to subangular quartz, sandstone and dolerite. Slightly micaceous. Ilmenite
4	5.5		12.0	54.35	0.207	0.011		0.465												As above to 4.3m. Begins to get softly consolidated grey, highly tenaceous clay (weathered basement) At 5m, fresh hard dark grey shale (basement). Ilmenite. No trace of metal.
			End	of	Hole	5.5m														

(SR78 Grade 0-4.3m 106.98mg Au/m³)

GRADE 1 CALCULATED BY RELATING RECOVERED VOLUME TO RECOVERED GOLD. GRADE 2 CALCULATED BY RELATING RADFORD FACTORED THEORETICAL VOLUME TO RECOVERED GOLD (RADF = 80%)

TOTAL RECOVERED VOLUME, SURFACE TO 5.5 m = 33.0 l

TOTAL RECOVERED GOLD, SURFACE TO 5.5 m = 0.1309 Au

GRADE 1 FROM SURFACE TO m g Au/m³ (GRADE 1)

GRADE 2 FROM SURFACE TO 4.3 m 1.8 mg Au/m³ (GRADE 2)

697028

AUSTRALIAN ANGLO AMERICAN LTD.

S415: FORESTER
EQ 516055

DRILL LOG

LOCATION STH. ESK CO-ORDINATES 23040 mE 24400 mN LINE

HOLE NO. SR79...

PAGE 1 of 1

DRILLING METHOD RCAB BIT DIAMETER 59.9mm THEORETICAL VOLUME 5.64 R.L. SURFACE..... m R.L. BASEMENT..... m

DATE 22.12.81

DRILLER/CONTRACTOR KITCHING

SAMPLE WASHER S. MOORE

ASSAY LAB ANALABS

ASSAY METHOD Fire/AAS

GEOLOGIST T.K. SCOTT

FROM m	TO m	SAMPLE NO	Recovered VOLUME (l)	WEIGHT CONC.(g)	Conc. Assay (g Au/t)	Recovered GOLD (g Au)	GRADE 1 g Au/m ³	GRADE 2 g Au/m ³	DESCRIPTION OF SAMPLE							
									C	N	T	C-CLASS S-SAND-75-100% SC-SANDY CLAY-25-49% GS-CLAY SAND-50-74% C-CLAY-0-24%	N-NATURE G-GRIT S-SAND ST-SILT	T-TENACITY H-HIGH M-MEDIUM L-LOW		
0	2		0.50	40.07	0.253	0.010		2.2								Brown clayey fine to medium sand. Clasts quartz and mica. Trace ilmenite
2	4		1.92	38.97	4.41	0.172		38.1								As above. Gold.
4	6		6.00	32.67	0.024	Tr		Tr								Dark grey shale (basement) No trace of minerals
																End of Hole

GRADE 1 CALCULATED BY RELATING RECOVERED VOLUME TO RECOVERED GOLD. GRADE 2 CALCULATED BY RELATING RADFORD FACTORED THEORETICAL VOLUME TO RECOVERED GOLD (RADF = 80%)

TOTAL RECOVERED VOLUME, SURFACE TO 4 m = 8.47 l

TOTAL RECOVERED GOLD, SURFACE TO 4 m = 0.82 g Au

GRADE 1 FROM SURFACE TO 4 m = 20.1 g Au/m³ (GRADE 1)

GRADE 2 FROM SURFACE TO 4 m = 20.1 g Au/m³ (GRADE 2)

697031

032

AUSTRALIAN ANGLO AMERICAN LTD.

8415 : FORESTER
EG 817055

DRILL LOG

LOCATION STH. ESK CO-ORDINATES 23120 mE 24400 mN LINE

HOLE NO. SR80

PAGE 1 of 1

DRILLING METHOD RCAB BIT DIAMETER 59.9 mm THEORETICAL VOLUME 5.64 R.L. SURFACE..... m R.L. BASEMENT..... m

DATE 22.12.81

DRILLER/CONTRACTOR KITCHING SAMPLE WASHER S. MOORE

ASSAY LAB ANALABS

ASSAY METHOD Fire/AAS

GEOLOGIST T.K. SCOTT

FROM m	TO m	SAMPLE NO	Recovered VOLUME (l)	WEIGHT CONC.(g)	Conc. Assay g Au/t	Recovered GOLD m(g Au)	GRADE 1 g Au/m ³	GRADE 2 mg Au/m ³	DESCRIPTION OF SAMPLE				N-NATURE		T-TENACITY			
									C	N	T	C-CLASS S-SAND-75-100% SC-SANDY CLAY-25-49% CS-CLAY SAND-50-74% C-CLAY-0-24%		G-GRIT S-SAND BT-BILT	H-HIGH M-MEDIUM L-LOW			
0	2		1.75	40.33	x													
																		Red brown fine sandy gravel. Clasts rounded to angular sandstone and quartz. Trace ilmenite
2	4		5.75	34.99	25.6	0.896		198.5										As above. Gold
4	6		4.60	38.65	52.8	2.041		452.3										Clayey sandy gravel (yellow brown) Gold.
6	8		3.00	32.40	0.016	Tr		Tr										Dark grey shale (basement). No trace of mineral
																		End of Hole

GRADE 1 CALCULATED BY RELATING RECOVERED VOLUME TO RECOVERED GOLD. GRADE 2 CALCULATED BY RELATING RADFORD FACTORED THEORETICAL VOLUME TO RECOVERED GOLD (RADF = 80%)

TOTAL RECOVERED VOLUME, SURFACE TO 8 m = 15.10 l

GRADE 1 FROM SURFACE TO m g Au/m³ (GRADE 1)

TOTAL RECOVERED GOLD, SURFACE TO 6 m = 2.937 g Au

GRADE 2 FROM SURFACE TO 6 m 216.9 mg Au/m³ (GRADE 2)

697033

AUSTRALIAN ANGLO AMERICAN LTD.

8415: FORESTER
EQS18057

DRILL LOG

LOCATION...STH...**ESK** CO-ORDINATES...**23360**...mE **24400**...mN LINE.....
 DRILLING METHOD...**RCAB** BIT DIAMETER...**59.9**mm THEORETICAL VOLUME...**5.64** R.L. SURFACE..... m R.L. BASEMENT..... m
 DRILLER/CONTRACTOR...**KITCHING** SAMPLE WASHER...**S. MOORE** ASSAY LAB...**ANALABS** ASSAY METHOD...**Fire/AAS**

HOLE NO...**SR83**
 PAGE...**1**...of...**1**
 DATE...**22.10.81**
 GEOLOGIST...**T.K. SCOTT**

FROM m	TO m	SAMPLE NO	Recovered VOLUME (l)	WEIGHT CONC.(g)	Conc. Assay m(g Au/t)	Recovered GOLD (g Au)	GRADE 1 g Au/m ³	GRADE 2 mg Au/m ³	DESCRIPTION OF SAMPLE				N-NATURE		T-TENACITY		
									C	N	T	C-CLASS S-SAND-75-100% SC-SANDY CLAY- 25-49% CS-CLAY SAND-50-74% G-CLAY-0-24%		G-GRIT S-SAND ST-BILT	H-HIGH M-MEDIUM L-LOW		
0	2		3.00	57.07	x			-									Yellow and grey clay, medium tenacity. Ilmenite
2	4		6.90	32.22	x			-									As above. Ilmenite
4	6		4.3	39.64	x			-									Grey shale. No trace of mineral
6	8		5.00														As above. No trace of mineral
						End of Hole											

GRADE 1 CALCULATED BY RELATING RECOVERED VOLUME TO RECOVERED GOLD. GRADE 2 CALCULATED BY RELATING RADFORD FACTORED THEORETICAL VOLUME TO RECOVERED GOLD (RADF = 80%)

TOTAL RECOVERED VOLUME, SURFACE TO ...**8**...m = ...**19.201**
 TOTAL RECOVERED GOLD, SURFACE TOm =g Au

GRADE 1 FROM SURFACE TOmg Au/m³ (GRADE 1)
 GRADE 2 FROM SURFACE TOmg Au/m³ (GRADE 2)

697039

AUSTRALIAN ANGLO AMERICAN LTD.

DRILL LOG

LOCATION... STH. ESK CO-ORDINATES 23 360 mE 24 400 mN LINE.....
 DRILLING METHOD Cable tool percussion DIAMETER.....mm THEORETICAL VOLUMEl R.L. SURFACE..... m R.L. BASEMENT..... m DATE..... 19.....
 DRILLER/CONTRACTOR..... Amdex SAMPLE WASHER..... S. Moore ASSAY LAB..... Analab ASSAY METHOD..... Fire/AAS GEOLOGIST..... B. E. ANDERSON

HOLE NO. SC-10
 PAGE 1 of 1

FROM m	TO m	SAMPLE NO	Recovered VOLUME (l)	WEIGHT CONC.(g)	Conc. Assay (g Au/t)	Recovered GOLD (g Au)	GRADE 1 g Au/m ³	GRADE 2 g Au/m ³	DESCRIPTION OF SAMPLE						
									C	N	T	C-CLASS S-SAND-75-100% SC-SANDY CLAY-25-49% CS-CLAY SAND-50-74% G-CLAY-0-24%	N-NATURE G-GRIT S-SAND BT-SILT	T-TENACITY H-HIGH M-MEDIUM L-LOW	
0	2		15.8	38.49	0.186	0.007		0.22					Topsoil to 0.5m. Grey-brown gritty, softly consolidated high tenacity clayey sand. Carbonaceous, micaceous, quartz pebbles. Ilmenite		
2	4		9.45	40.55	42.20	1.711		53.08					Grey-brown medium tenacity clayey sand and small to large gravel wash to 3 metres - subrounded sandstone clasts. From 3 metres, medium tenacity clayey coarse angular sand to grey silty clay and medium sand with sandstone gravel size clasts. Two small flakes, two large flakes gold; ilmenite		
4	6		28.67	58.04	42.10	2.443		75.79					Softly consolidated medium tenacity grey clayey silt and medium sand to 5.8metres Changes to high tenacity grey slaty clay (weathered basement) Five small flakes gold; ilmenite		
6	8.62		4.05	36.02	0.110	0.004		1.23					Soft grey high tenacity clay, to hard red-brown sandy shale. (Basement); slightly micaceous. Trace ilmenite.		

GRADE 1 CALCULATED BY RELATING RECOVERED VOLUME TO RECOVERED GOLD. GRADE 2 CALCULATED BY RELATING RADFORD FACTORED THEORETICAL VOLUME TO RECOVERED GOLD (RADF = 80%)

TOTAL RECOVERED VOLUME, SURFACE TO 6.2m = 57.975 l GRADE 1 FROM SURFACE TO 6.2m = 41.67 m³ g Au/m³ (GRADE 1)
 TOTAL RECOVERED GOLD, SURFACE TO 6.2m = 4.165 g Au GRADE 2 FROM SURFACE TO 5.8m = 44.55 m³ g Au/m³ (GRADE 2)

697040

AUSTRALIAN ANGLO AMERICAN LTD.

DRILL LOG

HOLE NO SC-D4....

LOCATION.....STH...ESK CO-ORDINATES EP82250..mE..99950....mN

LINE.....D.....

PAGE.....1 of 2.....

DRILLING METHOD Cable tool BIT DIAMETER...15.9m THEORETICAL VOLUME 40.3l

R.L. SURFACE..... m R.L. BASEMENT..... m

DATE 30.4.82

DRILLER/CONTRACTOR..... AMDEX SAMPLE WASHER S...MOORE

ASSAY ANALAB

ASSAY METHOD Fire/AAS

GEOLOGIST BE..ANDERSON

FROM m	TO m	SAMPLE NO	Recovered VOLUME (l)	WEIGHT CONC.(g)	Conc. Assay (g Au/t)	Recovered GOLD (g Au)	GRADE 1 g Au/m ³	GRADE 2 g Au/m ³	DESCRIPTION OF SAMPLE												
									C	N	T	C-CLASS S-SAND-75-100% SC-SANDY CLAY-25-49% CS-CLAY SAND-50-74% C-CLAY-0-24%	N-NATURE G-GRIT S-SAND ST-SILT	T-TENACITY H-HIGH M-MEDIUM L-LOW							
0	2	1st.																			
		Conc.		47.22	0.008	0.0004		0.012													
		Tail		60.23	0.054	0.003		0.093													
		Total	17.5			0.0034		0.105													
2	4	1st		53.82	1.65	0.088		2.73													
		Conc.																			
		Tail		59.34	0.129	0.008		0.25													
		Total	24.5			0.096		2.98													
4	6	1st																			
		Conc.		49.04	6.24	0.306		9.49													
		Tail		66.03	0.078	0.005		0.16													
		Total	24.0			0.311		9.65													
6	8	1st																			
		Conc		65.97	8.60	5.845		181.30													
		Tail		56.57	2.59	0.146		4.52													
		Total	17.0			5.991		185.82													

GRADE 1 CALCULATED BY RELATING RECOVERED VOLUME TO RECOVERED GOLD. GRADE 2 CALCULATED BY RELATING RADFORD FACTORED THEORETICAL VOLUME TO RECOVERED GOLD (RADF = 80%)

TOTAL RECOVERED VOLUME, SURFACE TOm =l

GRADE 1 FROM SURFACE TOmg Au/m³ (GRADE 1)

TOTAL RECOVERED GOLD, SURFACE TOm =g Au

GRADE 2 FROM SURFACE TOmg Au/m³ (GRADE 2)

697042

AUSTRALIAN ANGLo AMERICAN LIMITED

PROSPECT: EL 22/80

AREA: SOUTH ECK

STATE: TASMANIA

Bore no: D4

Commenced time: 3:30PM

Date: 14.4.81

Machine: GENCO 210B

Casing shoe diameter: External 92 cm
Internal 75

Off-set: —

Completed time: 2:30PM

Date: 22.4.81

Foreman/panner: A. JACKSON

Supervisor: S. DOUGLAS

SHOT 1/4

Collar level: _____

DEPTH (m)	THICKNESS (m)	DESCRIPTION OF GROUND	TENACITY	THEORETICAL VOL. (1000ths. cu.m.)		ACTUAL VOLUME			WT OF MATERIALS (Kg)	WT. (%)			FIELD CONCENTRATE					REMARKS	
				section	cum.	section (1000ths. cu.m.)	cum. (1000ths. cu.m.)	section vol. rec. (%)		SANDS/GRAVELS			CLAY	actual wt. (g) record	P (mg) per cu. metre	cum. metre-gram	prog. wt. (g) per cu. m.		
										+10 mm.	-10 m + 20 #	-20 #							
0-1	1	Red-ochre clayey sand.	M			5.0	5.0		7.7					9.22	0.019				Cased only
1-2	1	Red-ochre gravelly sand	F			12.0	11.0		19.8					10.30	—				Drilled then cased.
2-3	1	" " "	F			24.0	41.0		34.7					11.34	0.002				
3-4	1	Ochre gravelly sand	F			11.5	52.5		17.9					10.20	—				
4-5	1	" " "	F			22.0	74.5		50.2					11.03	0.013				
5-6	1	" " "	F			16.5	91.0		24.9					8.74	0.355				4 colours
6-7	1	" " "	F			18.0	109.0		28.2					24.31	1.52				8 colours
7-8	1	" " "	F			13.5	122.5		21.0					9.16	4.00				40-50 colours
8-9	1	" " "	F			12.0	134.5		19.7					16.54	2.85				18 colours
9-10	1	" " "	F			5.0	139.5		8.3					11.88	0.005				

697044

Unbottomed at 23.0 metres on conglomerate bedrock.

Average field grade _____ g. per cu. m.

AUSTRALIAN ANGLO AMERICAN LIMITED

PROSPECT: EL 22180

AREA: SOUTHEAST

STATE: TASMANIA

Bore no.: D4

Commenced time: _____

Date: _____

Machine: _____

Casing shoe diameter: _____

Off-set: _____

Completed time: _____

Date: _____

Foreman panner: _____

Supervisor: _____

Collar level: _____

SHEET 2/4

DEPTH (m)	THICKNESS (m)	DESCRIPTION OF GROUND	TENACITY	THEORETICAL VOL. (1000 lbs. cu. m.)		ACTUAL VOLUME			WT OF MATERIALS (kg)	WT (%)			FIELD CONCENTRATE					REMARKS
				section	cum.	section (1000 lbs. cu. m.)	cum. (1000 lbs. cu. m.)	section vol. rec. (%)		SANDS / GRAVELS			CLAY	actual wt. (g) record.	F ₅₀ (µg) per mm.	cum. metre-gram	prog. wt. (g) per cu. m.	
										+10 mm	-10 m + 20 #	-20 #						
10-11	1	Ochre clayey sand	M			5.0	144.5		6.8					14.85	0.002			
11-12	1	" " "	M			8.0	152.5		7.6					10.11	-			
12-13	1	Grey-ochre clayey sand	M			5.0	157.5		8.8					7.87	0.003			
13-14	1	Grey-green clay	S			4.0	14.5		5.6					11.16	-			
14-15	1	Grey clays	S			6.0	167.5		9.5					14.30	0.002			
15-16	1	Semi-consolidated grey-green sands with coal fragments	M			-			-					-	-			Cored 1m. Recovered 0.39m.
16-17	1	Grey sandy clay with coal fragments	M			8.0	175.5		12.9					9.96	0.145			1 colour
17-18	1	Grey clayey sand with coal fragments	M			7.0	182.5		10.9					12.64	0.002			

Bottomed / Unbottomed at _____ metres on _____ bedrock.

Average field grade _____ g per cu. m.

697045

AUSTRAL ANGLo AMERICAN LIMITED

045

PROSPECT: EL22/80

AREA: SOUTH ESK

STATE: TASMANIA

Bore no. D4

Commenced time: _____

Date: _____

Machine: _____

Casing shoe diameter: _____

SHEET 5/4

Off-set: _____

Completed time: _____

Date: _____

Foreman/panner: _____

Supervisor: _____

Collar level: _____

DEPTH (m)	THICKNESS (m)	DESCRIPTION OF GROUND	TENACITY	THEORETICAL VOL. (1000ths cu. m.)		ACTUAL VOLUME			WT OF MATERIALS (Ks.)	WT (%)			FIELD CONCENTRATE					REMARKS	
				section	cum.	section (1000ths cu. m.)	cum. (1000ths cu. m.)	section vol. rec. (%)		SANDS/GRAVELS			CLAY	actual wt. (g) recovd.	F _U (%) mm	cum. metre-gram	cum. metre-gram		prop. wt. (g) per cu. m.
										+10 mm	-10 m + 20 #	-20 #							
18-19	1	Grey clayey sand with coal fragments	M			5.5	188.0		9.2				7.07	0.055				1 colour	
19-20	1	" " " "	M			6.0	194.0		11.7				13.00	0.002					
20-21	1	Dolerite boulder & coarse conglomerate; coarse sand & clay with coal fragments (unconsolidated)				6.0	200.0		14.0				14.51	0.550				CORED 1 colour	
21-22	1	Grey clayey sand with coal fragments	M			16.0	216.0		30.5				24.67	0.001					
22-23	1	Brown clayey sand	M			12.0	228.0		8.1				17.49	0.395				2 colours	
23-24.5	1.5	0.8m Coarse pebbly conglomerate in grey-green matrix; 0.35m coarse sand & gravels in muddy																CORED Recovered 1.15m	

Bottomed / Unbottomed at _____ metres on _____ bedrock.

Average field grade _____ g. per cu. m.

697046

047

PROJECT NUMBER. *EL. 22/80*... AREA. *SOUTH ESK*... STATE. *TASMANIA*...BORE NUMBER... *D4*.....RECORDED BY *A. JACKSON & P. McBRIDE*

Depth (m)	Wt. of Materials (Kg)	Sands/Gravels			Clay (Kg)
		+10mm (Kg)	-10mm +20# (Kg)	-20# (Kg)	
0-1	7.7				WEIGHT NOT RECORDED
1-2	19.8				WEIGHT NOT RECORDED
2-3	34.7		5.2	10.6	18.9
3-4	17.9		4.3	6.7	6.9
4-5	30.2		10.0	10.5	9.7
5-6	24.9	4 COLOURS	8.6	8.3	8.0
6-7	28.2	8 COLOURS	9.4	8.3	10.5
7-8	21.0	10-50 COLOURS	5.7	6.9	8.4
8-9	19.7	18 COLOURS	5.3	4.2	10.2
9-10	8.3		0	2.5	5.8
10-11	6.8		0	0.7	6.1
11-12	7.6		0	2.0	5.6
12-13	8.8		0	3.3	5.5
13-14	5.6		0	1.4	4.2
14-15	9.5		0	3.5	6.0
15-16	(CORED)				
16-17	12.9	1 COLOUR	0.3	4.9	7.7
17-18	10.9		0.3	6.1	4.8
18-19	9.2	1 COLOUR	0.8	5.1	3.3
19-20	11.7		0.8	3.5	8.4
20-21	14.0	1 COLOUR	0.5	5.0	8.5
21-22	30.5	2 COLOURS	3.3	14.2	13.0
22-23	8.1		0.7	3.7	3.7
FOH SILTS	10.3		0.2	2.6	7.5

APPENDIX 2

ASSAY RESULT SHEETS

ANALABS

697054

Phone (09) 458 7999

A division of MacDonald Hamilton & Co. Pty. Ltd.
52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. **6.8 08 1295**

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER No.	PROJECT
1740	8181
DATE RECEIVED	RESULTS REQUIRED
22.6.82	

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
	24.6.82	3	6

STATE OF SAMPLES	REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS				
			DRY	CRUSH	SPLIT	PUL-VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
	Sc	Various	2	1		3					Au		309

RESULTS TO

As Above

RESULTS TO

REMARKS

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock Ro	aqua regia A4	colorimetry COL
soil SO	nitric-perchloric A5	chromatography CHR
pulp PU	HF mixture A6	titration TTN
water WA	HF under pressure A7	other chemicals means CHEM
tissue TI	fusion A8	miscellaneous MISC
stream sediment SS		fluorescence FLUOR
heavy mineral HM		inductively coupled plasma ICP

AUTHORISED OFFICER *B Da*

054

ANALABS

697055

A Division of MacDonell Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1295

24.6.82

1740

1 OF 1

TUBE No.	SAMPLE No.	Wt(g)	Ru							
1	D4 21	15.48	X							
2	D4 23	15.58	X							
3	E4A 35	14.95	X							
4	E4A 38.4	24.10	X							
5	E4A 44.2	31.97	8.45							
6	I4 11	21.44	8.009							
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION									
24	DIGESTION									
25	METHOD		309							

Results in ppm unless otherwise specified
 T = element present, but concentration too low to measure
 X = element concentration is below detection limit
 --- = element not determined

AUTHORISED OFFICER *B. Dan*

ANALABS

A Division of Macmillan & Co., Inc.

697035

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER NO.

PAGE

6.8 08 1295

24.6.82

1740

1 OF 1

TUBE NO.	SAMPLE NO.	RETENTION TIME	PKT							
1	D4 21	15.48	X							
2	D4 23	15.58	X							
3	E4A 35	14.95	X							
4	E4A 38.4	24.10	X							
5	E4A 44.2	31.97	8.45							
6	I4 11	21.44	8.009							
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION									
24	DIGESTION									
25	METHOD		309							

Retention times are given in minutes.
Peak numbers are given in parentheses.
* If not determined.

ANALYST'S SIGNATURE: *[Signature]*

ANALABS

697056

Phone (09) 4587999

A Division of Macdonald International Pty Ltd
52 Murray Road, Westpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. 6.8 08 1277

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd.
269 Wellington Street
Launceston
Tasmania 7250

CASE No. 1737 PROJECT

DATE ANALYSIS 10.6.82 RESULT REQUIRED

No. OF ANALYSES OF RESULTS DATE REPORTED 11.6.82 No. OF CORES 3

TOTAL No. OF SAMPLES 5

SAMPLE NO.	DESCRIPTION	PREPARATION							ANALYSIS	REFERENCE
		NO.	REAGENT	TEMP.	TIME	NO.	REAGENT	TEMP.		
SC0	SCD14 1-10				1				Fu	309

As Above

RESULTS TO RESULTS TO

REMARKS

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock Ro	aqua regia A4	colorimetry COL
soil SO	nitric-perchloric A5	chromatography CHR
slate SL	HF-methane A6	titration TIT
coal CO	HF-methane A7	other chemical methods OCM
pyrite PY	HF-methane A8	gravimetry GRAV
pyrite PY	HF-methane A9	radioactivity RACT

AUTHORISED OFFICER *B. Doo*

050

ANALABS

607087

A Division of MacDonnell Analytical & Chemical Services

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1277

11.6.82

1737

1 OF 1

TUBE No.	SAMPLE	Wt. (g)	Flu.						
1	SCD 14 0-2	42.21	0.110						
2	SCD 14 2-4	39.10	0.619						
3	SCD 14 4-5	49.60	16.9						
4	SCD 14 6-8	41.18	12.7						
5	SCD 14 8-10	47.43	11.1						
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION								
24	DIGESTION								
25	METHOD		309						

[Handwritten signature]

ANALYSIS

587058

Phone (07) 455 7799

A Division of New South Wales Resources Ltd
52 Murrey Road, Welshpool, W.A. 6106

Telex AA92540

ANALYTICAL REPORT No. 6.8 88 1275

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd.
269 Wellington Street
Launceston
Tasmania 7250

ORDER No.	PROJECT
1736	2421
DATE RECEIVED	RESULTS REPORT NO.
9.6.82	

No. OF PAGES OFFERED	DATE REPORTED	No. OF COPIES	TOTAL NO. OF SAMPLES
	10.6.82	3	6

ID	SAMPLE	PRE-TREATMENT							ANALYSIS		
		WY	CHRG	WPT	NO. WASH	NOE	COND. NO. WASHING	NO. WASH	ANALYSIS	PREPARATION	METHOD
S0	SCD13 0-12				1				Au		389

As Above

REMARKS

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock Rn	fluoric acid A4	colorimetry COL
soil SO	hydro-perchloric A5	chromatography CHR
slip SP	hydro-perchloric A6	gravimetry GRAV
tailer TA	hydro-perchloric A7	after chemical separation
blank BK	hydro-perchloric A8	gravimetry GRAV
stream sediment ST	hydro-perchloric A9	gravimetry GRAV
heavy metal HM	hydro-perchloric A10	gravimetry GRAV

AUTHORISED OFFICER

058

ANALYSIS

697058

Environmental Sciences, Inc.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER NO.

PAGES

	6.8 08 1275	10.6.82	1736	1 OF 1
--	-------------	---------	------	--------

TUBE No.	Sample ID	Wt. (g)	Flow (ml)						
1	SCD 13 0-2	46.03	0.119						
2	SCD 13 2-4	51.12	0.601						
3	SCD 13 4-6	96.45	44.8						
4	SCD 13 6-8	66.26	67.9						
5	SCD 13 8-10	54.19	1.97						
6	SCD 13 10-12	68.75	4.61						
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION								
24	DIGESTION								
25	METHOD		309						

AD

ANALYSIS

897080

Phone (07) 336 7899

A Division of Macdonald Hamilton & Co. Pty. Ltd.
52 Murray Road, Westholme, S.A. 6106

Telex AA92360

ANALYTICAL REPORT No. 6.8 08 1247

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER No.	PROJECT
1733	8177
DATE RECEIVED	RESULTS REQUIRED
28.5.82	

No. of pages of report	DATE REPORTED	No. of copies	TOTAL No. of samples
	31.5.82	3	9

ELEMENT	SAMPLE	PRE-TREATMENT							ANALYSIS	SEPARATION	METHOD
		DRY	WASH	WET	ASHT	WAVE	OTHER	OTHER			
RO	Various				1				Au		309

As Above

Australian Anglo American Ltd
P.O. Box 28
FINDAL TAS 7214

REMARKS

STATE OF SAMPLES	ANALYSIS - PREPARATION				ANALYSIS - METHOD		
whole core	BC	perchloric acid	A1	cold acid	CA	atomic absorption	AAS
split core	SC	hydrochloric acid	A2	specific sulphide	SE	x-ray fluorescence	XRF
cutting	CU	nitric acid	A3	other mixed acids	MA	spectrophotometry	SPEC
rock	RO	aqueous regia	A4	oxidative attack	OX	polarimetry	POL
soil	SO	nitric-perchloric	A5	volatilisation	VO	chromatography	CHR
slip	SU	HF nitric	A6	distillation	DI	titrimetry	TIT
metal	MA	hydroperchloric	A7	precipitation	PR	gravimetry	GRAV
slag	SL	hydrofluoric	A8	precipitation	PR	gravimetry	GRAV
leach residue	LR	hydrofluoric	A9	precipitation	PR	gravimetry	GRAV
heavy mineral	HM	hydrofluoric	A10	precipitation	PR	gravimetry	GRAV

AUTHORIZED OFFICER

060

ANALABS

097061

A Division of MacDonald Nutrition & Co., Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1247

31.5.82

1733

1 OF 1

TUBE No.	SAMPLE No.	Wt. (g)	R.						
1	MSC D11 0-2	35.86	0.003						
2	MSC D11 2-4	40.09	X						
3	MSC D11 4-6	30.41	0.003						
4	MSC D11 6-8	54.99	0.112						
5	MSC D11 8-8.1	42.89	X						
6	SC D12 0-2	36.15	2.46						
7	SC D12 2-4	43.25	15.2						
8	SC D12 4-6	90.80	20.3						
9	SC D12 6-7.6	48.18	0.009						
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION								
24	DIGESTION								
25	METHOD		309						

ANALABS

697062

Phone (07) 458 7999

22 Murray Road, Marshpool, W.A. 6108

Telex AA92360

ANALYTICAL REPORT No. 6.8 08 1227

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER NO.	PROJECT
1732	8176
DATE RECEIVED	RESULTS ACQUIRED
21.5.82	

NO. OF PAGES OF RESULTS	DATE RECEIVED	NO. OF CORES	TOTAL AM. OF SAMPLES
	25.5.82	3	9

SAMPLE NO.	DESCRIPTION	PRE-TREATMENT							ANALYSIS			
		DRY	WASH	DRY	PERMANGANATE							
50	Various				1					Ru		309

As Above

REMARKS

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core	perchloric acid A1	atomic absorption AAS
split core	hydrochloric acid A2	x-ray fluorescence XRF
cutting	nitric acid A3	spectrophotometry SPEC
rock	nitric acid A4	colorimetry COL
soil	nitric acid A5	fluorimetry FLU
sludge	nitric acid A6	gravimetry GRAV
slime	nitric acid A7	titrimetry TITR
precipitate	nitric acid A8	mercurimetry MERC
precipitate	nitric acid A9	mercurimetry MERC
precipitate	nitric acid A10	mercurimetry MERC
precipitate	nitric acid A11	mercurimetry MERC
precipitate	nitric acid A12	mercurimetry MERC

AUTHORIZED OFFICER

[Signature]

062

ANALABS

897043

A Division of Macdonald, Pittman & Co. Inc. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1227

25.5.82

1732

10F

TUBE No.	SAMPLE No.	WT (g)	WT (g)						
1	SC8 0-2	X	45.06						
2	SC8 2-4	15.3	58.77						
3	SC8 4-4.3	27.9	48.83						
4	SC9 0-2	0.398	52.06						
5	SC9 2-4	10.8	49.67						
6	SC10 0-2	0.186	38.49						
7	SC10 2-4	42.2	40.55						
8	SC10 4-6	42.1	58.04						
9	SC10 6-6.2	0.110	36.02						
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION								
24	DIGESTION								
25	METHOD	309							

[Handwritten signature]

ANALABS

687084

Phone (01) 428 1199

17 Murray Road, Westpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. **6.8 08 1183**

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER NO. **1729** PROJECT
DATE RECEIVED **10.5.82** ANALYST

No. of bags analysed **12.5.82** No. of cores **3** TOTAL NO. OF SAMPLES **9**

SAMPLE NO.	SAMPLE DESCRIPTION	PRE-TREATMENT							ANALYSIS			
		DRY	WASH	TRUB	FL. VESSEL	WASH	OTHER TREATMENT	NO.	ANALYSIS METHOD	REMARKS	METHOD	
80	SC5,6,7				1				Ru			389

As Above

PO Box 20
Fingal TAS 7214

REMARKS

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CO	nitric acid A3	spectrophotometry SPEC
rock Rk	acid resin A4	colorimetry COL
tail SO	nitric-perchloric A5	radiochemistry CNR
pipe PI	hydrofluoric A6	weight TIR
cover CR	hydrofluoric-perchloric A7	gravimetric analysis GRA
blank BL	blank A8	titrimetry TIT
reference REF	reference A9	fluorescence FLU
recovery REC	recovery A10	neutron activation analysis NAA

[Signature]

084

ANALABS

697065

A Division of MacDonnell Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1183

12.5.82

1729

1 OF 1

TUBE No.	SAMPLE No.	RU	wt(g)						
1	SC 5 0-2	0.010	43.14						
2	SC 5 2-4	72.7	52.66						
3	SC 5 4-5	120.0	56.42						
4	SC 6 0-2	1.49	46.40						
5	SC 6 2-4	2.93	48.20						
6	SC 6 4-6	18.7	47.55						
7	SC 7 0-2	3.06	44.11						
8	SC 7 2-4	14.5	50.54						
9	SC 7 4-6	35.8	55.59						
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION								
24	DIGESTION								
25	METHOD	309							

Not analysed
 Present but concentration too low to measure
 Present concentration below detection limit
 Present but determined

AUTHORIZED
 SIGNATURE


065

ANALAB

607066

Phone (09) 458 7999

A division of the Bonded Harbour & Co. Pty. Ltd.
52 Murray Road, Welshpool, N.S.W. 6106

Telex AA92560

ANALYTICAL REPORT NO.

6.8 08 1172

THIS REPORT MUST BE READ IN CONNECTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER No.	PROJECT
8172	
DATE RECEIVED	RESULTS REQUIRED
5.5.82	

NO. OF PAGES OF RESULTS	DATE REPORTED	NO. OF COPIES	TOTAL NO. OF SAMPLES
	7.5.82	3	20

NO.	DESCRIPTION	PRE-TREATMENT							ANALYSIS		
		DRY	CRUSH	SPLIT	PL. (gms)	WGT.	OTHER REAGENTS	REAGENT	PREPARATION	METHOD	
50	Various				1				Fu		309

As Above

RESULTS TO RESULTS TO

REMARKS

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core	perchloric acid A1	atomic absorption AA3
split core	hydrochloric acid A2	x-ray fluorescence XRF
cutting	nitric acid A3	spectrophotometry SPC
rock	nickel sulphate A4	colorimetry CL
soil	ammonium sulphate A5	gravimetric G
slur	potassium permanganate A6	titrimetric T
slime	hydrofluoric acid A7	gravimetric G
slime	hydrofluoric acid A8	gravimetric G
slime	hydrofluoric acid A9	gravimetric G
slime	hydrofluoric acid A10	gravimetric G
slime	hydrofluoric acid A11	gravimetric G
slime	hydrofluoric acid A12	gravimetric G
slime	hydrofluoric acid A13	gravimetric G
slime	hydrofluoric acid A14	gravimetric G
slime	hydrofluoric acid A15	gravimetric G
slime	hydrofluoric acid A16	gravimetric G
slime	hydrofluoric acid A17	gravimetric G
slime	hydrofluoric acid A18	gravimetric G
slime	hydrofluoric acid A19	gravimetric G
slime	hydrofluoric acid A20	gravimetric G

AUTHORIZED OFFICER *[Signature]*

086

ANALABS

697067

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

		6.8 08 1172	7.5.82	8172	1 OF 1	
TUBE No.	SAMPLE No.	FL.	WT (g)			
1	SC 1 0-2	0.510	39.43			
2	SC 1 2-4	6.64	54.40			
3	SC 1 4-4.7	1.65	56.36			
4	SC 2 0-2	0.696	38.57			
5	SC 2 2-4	0.350	56.33			
6	SC 2 4-6	70.2	61.18			
7	SC 2 6-8	10.4	72.65			
8	SC 3 0-2	0.205	44.12			
9	SC 3 2-4	0.637	73.51			
10	SC 3 4-6	21.4	55.74			
11	SC 4 0-2	0.146	36.14			
12	SC 4 2-4	2.51	45.45			
13	SC 4 4-4.5	0.207	54.35			
14	TRC 1 0-36	1.43	69.47			
15	TRC 3 0-36	1.82	63.32			
16	TRC 5 0-29	6.68	48.36			
17	TRC 7 0-15	1.09	65.96			
18	TRC 9 0-18	0.005	59.32			
19	TRC 11 0-36	1.14	74.01			
20	TRC 12 0-36	0.454	53.62			
21						
22						
23	DETECTION					
24	DIGESTION					
25	METHOD	309				

unless otherwise specified
 present, but concentration too low to measure
 present concentration is below detection limit
 present not determined

ANALYSIS BY *[Signature]*

067

ANALABS

697068

Phone (07) 458 7999

A division of MacDonnell Hamilton & Co. Pty. Ltd.
52 Murray Road, Welshpool, W.A. 6108

Telex AA92560

ANALYTICAL REPORT No. 6.8 08 1150

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER No.	PROJECT
1723	
DATE RECEIVED	RESULTS REQUIRED
28.4.82	

No. OF PAGES OF RESULTS	DAYS REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
	30.4.82	3	12

LITHO STRAT.	SAMPLE NUMBER	PRE-TREATMENT							ANALYSIS			
		WT	TEMP	W/V	CO. NO.	W/V	TEMP OF REAGENTS	NO. OF	REAGENTS USED	PREPARATION	RESULTS	
SO	SC04 0-12				1					Au		309

As Above

REMARKS

RESULTS TO

RESULTS TO

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrofluoric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock RO	oxalic acid A4	colorimetry COL
soil SO	hydrofluoric acid A5	gravimetry GRA
slur SL	hydrofluoric acid A6	titrimetry TIT
water WA	hydrofluoric acid A7	ion chromatography ION
silica SI	hydrofluoric acid A8	ion chromatography ION
silica SI	hydrofluoric acid A9	ion chromatography ION
silica SI	hydrofluoric acid A10	ion chromatography ION
silica SI	hydrofluoric acid A11	ion chromatography ION
silica SI	hydrofluoric acid A12	ion chromatography ION

AUTHORISED OFFICER

B. J. ...

089

ANALABS

697079

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

BS

6.8 00 1326

20.7.82

1742

2 OF 2

TUBE No.	SAMPLE No.	Gr								
1	1	32								
2	2	X								
3	3	16								
4	4	17								
5	5	15								
6	6	58								
7	7	40								
8	8	11								
9	9	25								
10	10	256								
11	11	48								
12	12	36								
13	13	20								
14	14	35								
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	3								
24	DIGESTION									
25	METHOD	402								

AUTHORIZED OFFICE 

ANALABS

897071

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

REPORT TYPE

PAGE

BS	6.8 08 1326	7.7.82	1742	1	OF	1
TUBE No.	SAMPLE No.	Wt(g)	As			
1	1	20.96	0.026			
2	2	44.12	0.002			
3	3	25.86	0.012			
4	4	26.43	X			
5	5	34.87	0.003			
6	6	15.55	1.43			
7	7	20.76	4.89			
8	8	23.62	0.008			
9	9	59.37	0.389			
10	10	40.89	0.079			
11	11	53.75	0.189			
12	12	38.64	X			
13	13	45.58	0.005			
14	14	40.12	0.081			
15						
16						
17						
18						
19						
20						
21						
22						
23	DETECTION					
24	DIGESTION					
25	METHOD		309			

Results in ppm unless otherwise specified
 - element present, but concentration too low to report
 X - element concentration below detection limit
 - element not detected

ANALABS
 OFFICE

072

ANALABS

697073

Phone (09) 458 7999

A Division of MacDonell Humber's Co. Pty. Ltd.
52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No.

6.8 88 1278

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER No.	PROJECT
1738	2421
DATE RECEIVED	RESULTS REQUIRED
11.6.82	

NO. OF PAGES OF RESULTS	DATE REPORTED	NO. OF COPIES	TOTAL NO. OF SAMPLES
	17.6.82	3	58

NO.	DESCRIPTION	PRE-TREATMENT							ANALYSIS			
		DRY	WASH	ASHT	PH	HEAT	OTHER	NOISE	REF ID	PREPARATION	METHOD	
50	SS 144-201				1					Cu Pb Zn As	101 101	101 114

As Above

REMARKS

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
mining CU	nitric acid A3	spectrophotometry SPEC
rock Sp	hydrofluoric acid A4	colorimetry COL
soil SO	nitroperchloric acid A5	chromatography CHR
slime SL	hydrofluoric acid A6	gravimetry GRAV
tailings TL	hydrofluoric acid A7	atomic fluorescence XRF
slag SL	hydrofluoric acid A8	gravimetry GRAV
slag residue SR	hydrofluoric acid A9	gravimetry GRAV
slag residue SR	hydrofluoric acid A10	gravimetry GRAV

AUTHORISED OFFICER *[Signature]*

ANALABS

697074

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

TUBE No.	SAMPLE No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
SS		6.8 08 1278					17.6.82	1738	1 OF 4																	
1	144	60	735	11	150	DATA SAMPLE																				
2	145	15	75	5	15	L3344																				
3	146	15	125	9	35	↓																				
4	147	15	80	14	10																					
5	148	15	95	7	20																					
6	149	10	70	7	X	↓																				
7	150	10	75	8	30	L3350																				
8	151	10	80	7	X	↓																				
9	152	10	85	9	25																					
10	153	10	80	7	X	↓																				
11	154	30	230	8	110																					
12	155	15	115	7	95																					
13	156	20	190	7	95																					
14	157	5	50	3	15																					
15	158	5	75	2	25	↓																				
16	159	5	30	2	5	L3360																				
17	160	5	70	4	30	↓																				
18	161	10	45	9	5																					
19	162	5	65	8	20																					
20	163	5	30	4	X																					
21	164	5	35	4	15																					
22	165	5	80	11	X																					
23	166	10	85	11	20																					
24	167	10	80	13	X	↓																				
25	168	10	65	7	35	L3366																				

[Handwritten signature]

074

ANALABS

697073

ANALYTICAL DATA

SAMPLE ID: 1278

REPORT NUMBER: 6.6 08 1278

REPORT DATE: 17.6.82

CLIENT ORDER No: 1738

PAGE: 2 OF 4

TUBE No	SAVING No	20	40	60	80	DATE				
1	169	10	70	14	5	4364				
2	170	10	85	13	20	4370				
3	171	10	90	11	X					
4	172	10	85	11	20					
5	173	10	80	9	X					
6	174	10	70	9	15					
7	175	10	75	6	X					
8	176	10	80	6	X					
9	177	10	85	5	25					
10	178	10	65	5	X					
11	179	10	70	6	15					
12	180	10	70	10	X	4380				
13	181	10	100	10	30					
14	182	10	90	13	5					
15	183	10	90	12	25					
16	184	10	105	17	15					
17	185	10	85	17	X					
18	186	10	70	11	5					
19	187	10	75	10	X					
20	188	10	95	17	X					
21	189	10	95	17	5					
22	190	10	95	14	X	4390				
23	191	10	90	13	10					
24	192	10	80	12	X					
25	193	N/S	N/S	N/S	N/S	4393				

[Handwritten signature]

075

ANALABS

607076

A Division of MacDonnell & Partners Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SS	6.8 08 1278	17.6.82	1738	3 OF 4
----	-------------	---------	------	--------

TUBE No.	SAMPLE No.	PH	TS	PH	TS	REMARKS				
1	194	15	95	21	5	4394				
2	195	10	65	20	X					
3	196	10	95	21	10					
4	197	10	65	20	X					
5	198	10	60	26	5					
6	199	5	40	12	X	4394				
7	200	5	35	12	X	4400				
8	201	5	35	13	X	4401				
9										
10										
11										
12										
13										
14										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

ANALABS
 A Division of MacDonnell & Partners Pty. Ltd.
 100/102 Macquarie Street, Sydney, N.S.W. 2000
 Tel: (02) 355 1111

[Signature]

016

ANALABS

607877

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER NO.

PAGE

SS	6.8.00 1278	17.6.02	1738	4 OF 4
----	-------------	---------	------	--------

LINE No.	SAMPLE	295	735	25	100				
1	STD FS4	295	735	25	100				
2	RPT 144	60	770	12	150				
3	RPT 160	5	30	4	X				
4	STD FS4	295	755	25	80				
5	RPT 184	10	90	16	10				
6									
7									
8									
9									
10									
11									
12									
13									
14	NOTE: N/S - No Sample Submitted								
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	5	5	1	5				
24	DIGESTION	101	101	101	101				
25	METHOD	101	101	114	101				

[Handwritten signature]

ANALABS

697078

A Division of Macdonald Hamilton & Co. Pty. Ltd.
52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. 6.8 88 1192

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER No.	PROJECT
1730	8175
DATE RECEIVED	RESULTS REQUIRED
12.5.82	

No. OF PAGES OF REPORT	DATE REPORTED	No. OF COPIES	TOTAL No. OF PAGES
	18.5.82	3	17

NO.	DESCRIPTION	PRE-TREATMENT							ANALYSIS		
		NO.	CHALK	SLUR	PER	PERC	OTHER REAGENT	NO.	ANALYSIS METHOD	RESULT	
50	SS 127-43				1				Cu Pb Zn	101	101
									As	101	114

RESULTS TO

As Above

RESULTS TO

REMARKS

STATE OF SAMPLER	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core	perchloric acid A1 cold acid	atomic absorption CA
split core	hydrochloric acid A2 specific sulphide	x-ray fluorescence SS
runoff	nitric acid A3 other mixed acids	spectrophotometry Mo
rock	aqua regia A4 alkalis attack	colorimetry AA
soil	acid perchloric A5 reprecipitation	gravimetry VO
slur	HF solution A6 fusion	titrimetry IC
sludge	HF solution A7 fused powder	other analytical methods PP
liquor	HF solution A8 glass fusion	inductively coupled plasma GF

AUTHORIZED OFFICER 

078

ANALABS

697079

A Division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1192

18.5.82

1730

1 OF

2

TUBE No.	SAMPLE No.	Cl	Cr	Re	Pr	1300A BASE NO	
1	SS 127	35	100	5	15	4327	
2	SS 128	30	95	3	20	↓	
3	SS 129	15	85	4	20		
4	SS 130	20	100	4	30		4330
5	SS 131	20	105	4	25		
6	SS 132	20	110	9	15		
7	SS 133	10	95	5	15		
8	SS 134	20	105	6	20		
9	SS 135	20	115	4	20		
10	SS 136	25	100	3	20		
11	SS 137	10	170	5	15		
12	SS 138	30	90	2	20		
13	SS 139	35	75	1	25		↓
14	SS 140	30	70	2	20		4340
15	SS 141	15	90	4	20		↓
16	SS 142	10	50	2	15		↓
17	SS 143	20	100	5	25		4343
18							
19							
20							
21							
22							
23							
24							
25							

Results in this analysis are based on the specified amount and present a concentration too low to measure. Element concentration is below detection limit. Element not determined.

AUTHORIZED SIGNATURE *B. Allen*

079

697080

ANALABS

A Division of MacDonold Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1192

18.5.82

1730

2 OF 2

TUBE No.	SAMPLE No.	Cu	Zn	Pb	Pb				
1	STD FS4	320	755	21	100				
2	RPT SS 127	35	90	5	10				
3									
4									
6									
7									
8									
9									
10									
11									
12									
13									
14									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	5	5	1	5				
24	DIGESTION	101	101	101	101				
25	METHOD	101	101	114	101				

Results in ppm unless otherwise specified
 element present but concentration too low to measure
 element concentration is below detection limit
 element not determined

AUTHORISED OFFICER 

ANALABS

991881

Phone (09) 458 7999

A Division of MacDonald Hamilton & Co. Pty. Ltd.
52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. 6.8 08 1173

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

1727

6.5.82

No. OF PAGES
OF RESULTS

DATE
REPORTED

No.
OF COPIES

TOTAL NO. OF SAMPLES

11.5.82

3

26

PRE-TREATMENT

ANALYSIS

SAMPLE NO.	SAMPLE DESCRIPTION	PRE-TREATMENT				ANALYSIS				PREPARATION	METHOD	
		HT	DRY	AS	AS	AS	AS	AS	AS			
50	SS 101-126				1					Cu, Pb, Zn As	101 101	101 114

As Above

REMARKS

RESULTS

TO

RESULTS

TO

STATE OF SAMPLES

ANALYSIS - PREPARATION

ANALYSIS - METHOD

whole core	WC	perchloric acid	A1	cold acid	CA	atomic absorption	AAS
split core	SC	hydrochloric acid	B2	specific sulphide	SS	X-ray fluorescence	XRF
splitting	CU	nitric acid	A3	other mixed acids	MA	spectrophotometry	SPEC
split	CS	other acids	A4	acid digestion	AA	colorimetry	COL
split	SO	hydrofluoric acid	A5	fusion	VO	gravimetry	GRA
split	SI	hydrofluoric acid	A6	fusion	IC	titrimetry	TIT
split	SL	hydrofluoric acid	A7	fusion	IC	gravimetry	GRA
split	SM	hydrofluoric acid	A8	fusion	IC	gravimetry	GRA
split	SN	hydrofluoric acid	A9	fusion	IC	gravimetry	GRA
split	SO	hydrofluoric acid	A10	fusion	IC	gravimetry	GRA
split	SI	hydrofluoric acid	A11	fusion	IC	gravimetry	GRA
split	SL	hydrofluoric acid	A12	fusion	IC	gravimetry	GRA
split	SM	hydrofluoric acid	A13	fusion	IC	gravimetry	GRA
split	SN	hydrofluoric acid	A14	fusion	IC	gravimetry	GRA
split	SO	hydrofluoric acid	A15	fusion	IC	gravimetry	GRA
split	SI	hydrofluoric acid	A16	fusion	IC	gravimetry	GRA
split	SL	hydrofluoric acid	A17	fusion	IC	gravimetry	GRA
split	SM	hydrofluoric acid	A18	fusion	IC	gravimetry	GRA
split	SN	hydrofluoric acid	A19	fusion	IC	gravimetry	GRA
split	SO	hydrofluoric acid	A20	fusion	IC	gravimetry	GRA

AUTHORISED OFFICER

B. De

081

ANALABS

697052

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1173

11.5.82

1727

1 OF 3

TUBE No.	SAMPLE No.	Ca	Pb	Pg	Pb	DATA	
1	96 101	15	125	9	25	4301	
2	96 102	10	30	8	15	↓	
3	96 103	15	55	5	35		
4	96 104	15	65	5	15		
5	96 105	10	35	11	20		
6	96 106	20	75	10	15		
7	96 107	15	75	9	15		
8	96 108	15	65	4	25		
9	96 109	25	70	4	25		
10	96 110	15	85	10	10		4310
11	96 111	15	85	9	20		
12	96 112	15	85	9	10		
13	96 113	15	125	10	25		
14	96 114	15	100	13	25		
15	96 115	15	90	11	15		
16	96 116	25	105	9	25		
17	96 117	15	100	13	35		
18	96 118	30	100	7	25		
19	96 119	20	95	6	25		
20	96 120	25	85	8	25		4320
21	96 121	25	80	10	30		
22	96 122	30	95	10	20		
23	96 123	25	65	5	15		
24	96 124	30	155	9	55		
25	96 125	35	120	8	30		4325

element present but concentration too low to measure
 element concentration is below detection limit
 element not analysed

AUTHORISED OFFICER

082

ANALABS

697083

A Division of MacDonald, Robertson & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1173

11.5.82

1727

2 OF

3

TUBE No.	SAMPLE No.	Cl	Zn	Pb	PC	DRY TARE No.			
1	SS 125	35	95	7	10	4326			
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

Results in this column are below specified element present
 Results in this column are below specified element concentration
 Results in this column are below detection limit
 Element not determined

AUTHORIZED OFFICER

083

ANALABS

897034

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1173

11.5.82

1727

3 OF 3

TUBE No.	SAMPLE No.	Cu	Zn	Pb	Pb				
1	STD FS4	315	780	24	115				
2	RPT SS 101	10	125	9	20				
3	RPT SS 120	25	85	8	35				
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	5	5	1	5				
24	DIGESTION	101	101	101	101				
25	METHOD	101	101	114	101				

Results to four figures unless otherwise specified
 * element present but concentration too low to measure
 X element concentration at below detection limit
 — element not determined

ANALYSER


ANALABS

897085

Phone (09) 458 7999

A Division of Macdonald Hamilton & Co. Pty. Ltd.
52 Murray Road, Walshpool, W.A. 6106

Telex AA92566

ANALYTICAL REPORT No. 6.8 08 1100

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd
269 Wellington Street
Launceston
Tasmania 7250

ORDER No.	PROJECT
1719	
DATE RECEIVED	RESULTS REQUIRED
2.4.82	

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
	15.4.82	3	69

ITEM NO.	DESCRIPTION	PREPARATION								ANALYSIS		
		DRY	WASH	FILT	GRAV	SEVE	OTHER REAGENTS	NOTE	REFER TO ANALYSIS METHOD	PREPARATION	METHOD	
50	SSI-100 (Not Continuous)				1					Cu Pb Zn As	101 101	101 114

As Above

RESULTS TO

RESULTS TO

REMARKS

STATE OF SAMPLES	ANALYSIS — PREPARATION				ANALYSIS — METHOD			
WC	perchloric acid	A1	cold acid	CA	atomic absorption	AAS		
SC	hydrochloric acid	A2	specific sulphide	SS	x-ray fluorescence	XRF		
CU	nitric acid	A3	other mixed acids	MO	spectrophotometry	SPEC		
SS	fluoric acid	A4	alkaline attack	AA	colorimetry	COL		
SO	hydrofluoric acid	A5	ammonium	VO	radioisotope	OTR		
SI	hydrochloric acid	A6	ammonium	IS	ion chromatography	ICM		
SW	hydrochloric acid	A7	hydrochloric acid	PS	photoacoustic	PHSA		
SA	hydrochloric acid	A8	hydrochloric acid	CF	fluorescence	FLS		
SP	hydrochloric acid	A9	hydrochloric acid	CP	inductively coupled plasma	ICP		

AUTHORISED OFFICER *[Signature]*

085

ANALABS

697086

A Division of McDermid Research & Co., Inc.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1100

15.4.82

1719

1 OF 5

TUBE No.	SAMPLE No.	Wt.	Grav.	Mo.	Wt.	DATA	REMARKS			
1	SS 1	15	65	6	20	4201				
2	SS 2	25	70	7	25	4202				
3	SS 3	25	75	11	30					
4	SS 4	15	55	6	15					
5	SS 5	20	70	8	20					
6	SS 6	15	60	2	15					
7	SS 7	15	85	12	20					
8	SS 8	20	85	12	25					
9	SS 9	15	70	8	15					
10	SS 10	15	70	10	20	4210				
11	SS 11	20	65	10	15					
12	SS 12	15	70	9	15					
13	SS 13	20	85	11	25					
14	SS 14	10	60	5	20					
15	SS 15	15	80	9	20					
16	SS 16	10	70	10	15					
17	SS 17	10	50	6	20					
18	SS 18	35	50	X	20					
19	SS 19	15	40	5	20					
20	SS 20	20	40	4	20	4220				
21	SS 21	10	30	1	25					
22	SS 22	25	65	7	20					
23	SS 23	20	55	4	30	4223				
24	SS 31	20	45	8	30	4231				
25	SS 32	10	35	9	20	4232				

WARNING: Do not use this report for legal purposes.
 This report is for information only and does not constitute a contract.

[Handwritten signature]

086

ANALABS

007087

A Division of MacDonell Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1100

15.4.82

1719

2 OF 5

TEST No.	SAMPLE No.	As	Zn	Pb	Pb	DATA PRESENT
1	56 33	10	25	1	25	4233
2	56 34	25	50	1	25	
3	56 35	25	65	1	25	
4	56 36	20	35	6	30	
5	56 37	15	40	6	15	
6	56 38	35	70	8	25	
7	56 39	20	50	8	20	
8	56 40	25	55	13	20	
9	56 41	25	50	11	30	
10	56 42	20	45	12	20	
11	56 43	15	40	11	15	
12	56 44	25	55	9	25	
13	56 45	15	35	8	20	
14	56 46	15	40	X	25	
15	56 47	20	40	7	20	↓
16	56 48	15	35	X	5	4248
17	56 49	15	40	7	5	4249
18	56 54	35	60	10	10	4254
19	56 55	20	80	11	20	
20	56 56	30	70	7	20	
21	56 57	15	65	12	10	
22	56 58	10	45	4	5	
23	56 59	10	50	8	20	↓
24	56 60	5	20	9	5	4260
25	56 61	10	30	8	10	4261A

Results are given in the following units specified:
 1. % unless otherwise stated
 2. mg/kg unless otherwise stated
 3. mg/l unless otherwise stated
 4. mg/m³ unless otherwise stated
 5. mg/m³ unless otherwise stated
 6. mg/m³ unless otherwise stated
 7. mg/m³ unless otherwise stated
 8. mg/m³ unless otherwise stated
 9. mg/m³ unless otherwise stated
 10. mg/m³ unless otherwise stated
 11. mg/m³ unless otherwise stated
 12. mg/m³ unless otherwise stated
 13. mg/m³ unless otherwise stated
 14. mg/m³ unless otherwise stated
 15. mg/m³ unless otherwise stated
 16. mg/m³ unless otherwise stated
 17. mg/m³ unless otherwise stated
 18. mg/m³ unless otherwise stated
 19. mg/m³ unless otherwise stated
 20. mg/m³ unless otherwise stated
 21. mg/m³ unless otherwise stated
 22. mg/m³ unless otherwise stated
 23. mg/m³ unless otherwise stated
 24. mg/m³ unless otherwise stated
 25. mg/m³ unless otherwise stated

Handwritten signature or initials

087

ANALABS

051088

A Division of Macdonald Research & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX REPORT NUMBER REPORT DATE CLIENT ORDER No. PAGE

SAMPLE PREFIX		REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE					
		6.8 08 1100	15.4.82	1719	3 OF 5					
TIME	DATE	CV	Z	PS	PB	D 109 836 V2				
1	68 62	10	15	6	15	4262				
2	68 63	5	10	4	X					
3	68 64	X	15	23	10					
4	68 65	10	75	11	15					
5	68 66	20	70	8	10					
6	68 67	15	75	10	20					
7	68 68	15	70	7	10					
8	68 69	10	60	7	15					
9	68 70	15	80	7	20	4270				
10	68 71	20	70	10	20					
11	68 72	10	50	7	25					
12	68 73	15	50	10	15					
13	68 74	20	85	10	10					
14	68 75	15	65	8	15					
15	68 76	5	35	X	X					
16	68 77	15	65	3	5					
17	68 78	20	75	19	15					
18	68 79	20	80	12	15					
19	68 80	15	75	18	15	4280				
20	68 81	25	80	9	15					
21	68 82	20	80	19	5					
22	68 83	25	100	7	20					
23	68 84	40	95	3	25					
24	68 85	25	85	X	15					
25	68 86	25	80	X	20	4286				

[Handwritten signature]

088

ANALABS

007089

A Division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

6.8 08 1100

15.4.82

1719

4 OF

5

TUBE No.	SAMPLE No.	g	ml	PS	PK	DATE (DDMMYY)					
1	88 87	30	100	6	15	4287					
2	88 88	15	80	6	20	↓					
3	88 89	25	75	X	X						
4	88 90	10	50	13	5	4290					
5	88 91	10	70	8	10	4291					
6	88 92	15	135	8	10	↓					
7	88 93	10	70	6	5						
8	88 94	10	65	10	5						
9	88 95	10	75	11	15						
10	88 96	10	65	9	5						
11	88 97	15	65	5	10	↓					
12	88 98	25	75	8	5						
13	88 99	15	75	5	5	4299					
14	88 100	15	75	9	X	4300					
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

* All results are given in three significant figures.
 † All results are given in two significant figures.
 X = all results are given in one significant figure.
 - = all results are given in zero significant figures.

ANALISED

[Handwritten signature]

089

ANALABS

697090

A Division of MacDonnell-Horn & Co., Inc.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

		6.8 08 1100				15.4.82	1719	5 OF 5	
TUBE No.	ANALYSIS	Wt	Wt	Wt	Wt	0.004 - 0.008 M			
1	STD FS4	300	710	21	105				
2	RPT SS 1	20	60	7	25				
3	RPT SS 20	20	40	6	20				
4	STD FS4	310	760	22	100				
5	RPT SS 45	10	50	8	5				
6	RPT SS 71	20	65	11	10				
7	STD FS4	300	760	22	100				
8	RPT SS 92	15	100	9	10				
9									
10									
11									
12									
13									
14									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	5	5	1	5				
24	DIGESTION	101	101	101	101				
25	METHOD	101	101	114	101				

I certify that the above analysis was performed in accordance with the methods specified in the report.
 I certify that the above analysis was performed in accordance with the methods specified in the report.
 I certify that the above analysis was performed in accordance with the methods specified in the report.

ANALYST
OFFICER

[Handwritten Signature]

ANALABS

697081

A Division of MacDonnell Hamilton & Co. Pty. Ltd.

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

Phone (09) 438 7999

ANALYTICAL REPORT No. 999.0 08 1053

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Australian Anglo American Ltd.
269 Wellington Street
Launceston
TAS 7250

ORDER No.	PROJECT
1718	
DATE RECEIVED	RESULTS REQUIRED
19.3.82	

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
	26.3.82	3	63

No.	Description	PRE-TREATMENT						ANALYSIS			
		DRY	WASH	WET	PERM	SIEVE	OTHER PRE-TREATMENT	ANALYSIS	PREPARATION	METHOD	
50	Various				1			Cu Pb Zn	101	101	
								As	101	114	

As Above

REMARKS

RESULTS TO

RESULTS TO

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
Whole core	perchloric acid A1	atomic absorption AAS
Split core	hydrochloric acid A2	X-ray fluorescence XRF
Runners	nitric acid A3	specific chemistry SPEC
Rock	fusion A4	colorimetry COL
Soil	hydrofluoric acid A5	gravimetry GRAV
Sludge	fusion A6	titrimetry TITR
Slime	fusion A7	gravimetry GRAV
Slime residue	fusion A8	gravimetry GRAV
Slime residue	fusion A9	gravimetry GRAV
Slime residue	fusion A10	gravimetry GRAV

AUTHORIZED OFFICER 

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

897092

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SST 999.0 08 1053 26.3.82 1718 1 OF 4

NO.	TYPE	NO.	NO.	NO.	NO.	DATE	NO.
1	-20+40#	1	10	95	16	25	
2	-20+40#	2	10	135	17	20	
3	-20+40#	3	10	115	16	35	
4	-20+40#	4	15	100	81	20	
5	-20+40#	5	15	95	26	20	
6	-20+40#	6	5	30	11	10	
7	-20+40#	7	10	95	15	25	
8	-20+40#	8	15	125	13	25	
9	-20+40#	9	35	285	13	30	
10	-20+40#	10	15	125	14	20	4224
11	-20+40#	24	15	75	9	30	4224 4
12	-20+40#	25	15	65	10	25	↓
13	-20+40#	26	10	65	11	25	
14	-20+40#	27	10	65	10	25	
15	-20+40#	28	10	65	11	20	
16	-20+40#	29	15	75	8	20	↓
17	-20+40#	30	15	75	9	20	4230
18	-20+40#	50	10	35	6	10	4250
19	-20+40#	51	10	45	6	15	↓
20	-20+40#	52	10	35	2	15	↓
21	-20+40#	53	10	50	4	20	4253
22	-40+80#	1	15	85	21	20	4411 4201
23	-40+80#	2	10	105	13	20	4412 4202
24	-40+80#	3	20	105	60	15	4413 4203
25	-40+80#	4	20	110	41	25	4414 4204

ANALABS

887093

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER NO.

PAGE

SST	999.0 08 1053	26.3.82	1718	2 OF 4
-----	---------------	---------	------	--------

LINE	DEPTH	GRAVITY	TEMP	WIND	WAVE	WIND DIR	WAVE DIR	WAVE PERIOD	WAVE HEIGHT	WAVE LENGTH	WAVE PERIOD	WAVE HEIGHT
1	-40+80# 5	25	105	60	20	4415	4205					
2	-40+80# 6	15	40	17	10							
3	-40+80# 7	15	90	14	10							
4	-40+80# 8	10	90	11	15							
5	-40+80# 9	45	270	10	30							
6	-40+80# 10	20	105	7	20	4420	4210					
7	-40+80# 24	15	75	4	25	4434	4224					
8	-40+80# 25	15	55	3	10							
9	-40+80# 26	25	60	2	30							
10	-40+80# 27	15	55	2	15							
11	-40+80# 28	15	55	2	20							
12	-40+80# 29	20	65	4	5							
13	-40+80# 30	15	65	3	20		4230					
14	-40+80# 50	10	35	1	10		4250					
15	-40+80# 51	10	40	1	20							
16	-40+80# 52	5	35	X	10							
17	-40+80# 53	10	35	X	15	4453	4253					
18	-80# 1	10	100	10	10	4461	4201					
19	-80# 2	15	155	14	25							
20	-80# 3	25	165	35	20							
21	-80# 4	15	135	15	15							
22	-80# 5	15	145	19	15							
23	-80# 6	10	65	7	10							
24	-80# 7	15	135	10	20							
25	-80# 8	10	110	5	5	4468	4208					

ANALABS
10/1/82
B.D.

ANALABS

687084

A Division of MacDonell Analytical Co., Inc.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SST	999.0 08 1053	26.3.82	1718	3 OF 4
-----	---------------	---------	------	--------

LINE No.	SAMPLE No.	Cu	Zn	Pb	Fe	Mn	Cd	Ni
1	-80# 9	55	345	10	30	4469	4209	
2	-80# 10	20	125	9	10	4470	4210	
3	-80# 24	20	85	5	25		4224	
4	-80# 25	25	80	6	20			
5	-80# 26	20	75	4	15			
6	-80# 27	15	70	3	15			
	-80# 28	15	75	5	20	↓	↓	
8	-80# 29	25	95	5	10	4479	4229	
9	-80# 30	15	95	6	15	4480	4230	
10	-80# 50	10	55	5	15	4490	4250	
11	-80# 51	15	65	3	15	↓	4251	
12	-80# 52	10	45	1	10	↓	4252	
13	-80# 53	5	65	X	15	4493	4253	
14								
15								
17								
18								
19								
20								
21								
22								
23								
24								
25								

* Results are given as they were determined.
 † Results are given as they were determined but concentrations are too low to report.
 X = Standard concentration is below detection limit.
 — = element not determined.

[Handwritten Signature]

ANALABS

697005

A Division of Macdonald, Gordon & Co., Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SST		999.0 08 1053				26.3.82		1718		4 OF 4	
LINE	SAMPLE No.	Fe	Zn	Pb	Cd						
1	STD FS4	325	760	20	110						
2	RPT -20+40# 1	15	95	17	30						
3	RPT -20+40# 52	10	40	2	20						
4	STD FS4	315	730	23	95						
5	RPT -40+80# 52	5	35	3	10						
6	RPT -80# 50	10	50	6	15						
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23	DETECTION	5	5	1	5						
24	DIGESTION	101	101	101	101						
25	METHOD	101	101	114	101						

ANALABS


SR62 SR61 SR60 SR59 SR58 SR57 SR56 SR63 SR64 SR65 SR66 SR67 SR68 SR69 SR70 SR71 SR72 SR73 SR74 SR75 SR76 SR77 SR78 SR79 SR80 SR81 SR82 SR83 SR84 SR223 SR224 SR226 SR228 SR222 SR225 SR227

PLAN

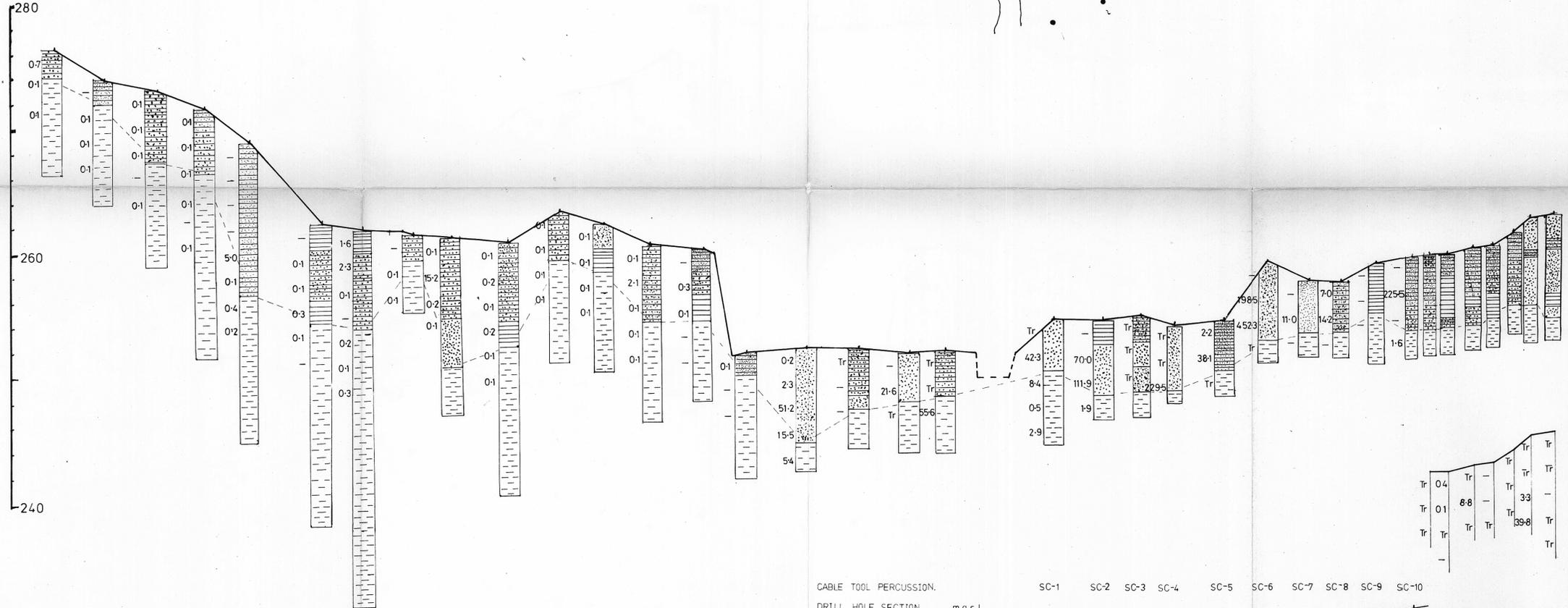
Mathinna Rd

South Esk River

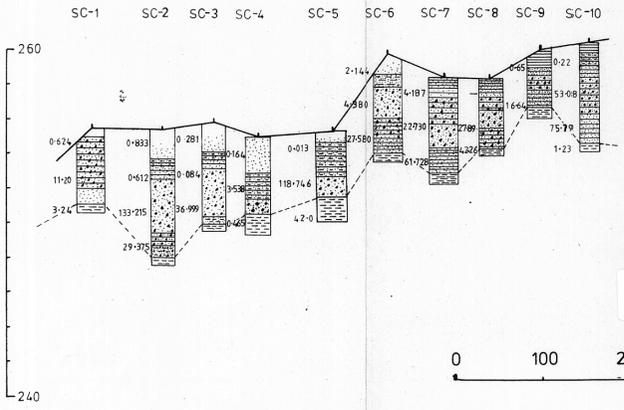
N

DRILL HOLE SECTION

m.a.s.l.



CABLE TOOL PERCUSSION DRILL HOLE SECTION. m.a.s.l.



5 cm

0 100 200 300 400 500m.

COMPARISON BETWEEN JETSTREAM REVERSE CIRCULATION AND CABLE TOOL PERCUSSION DRILL RESULTS.

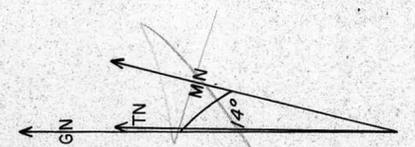
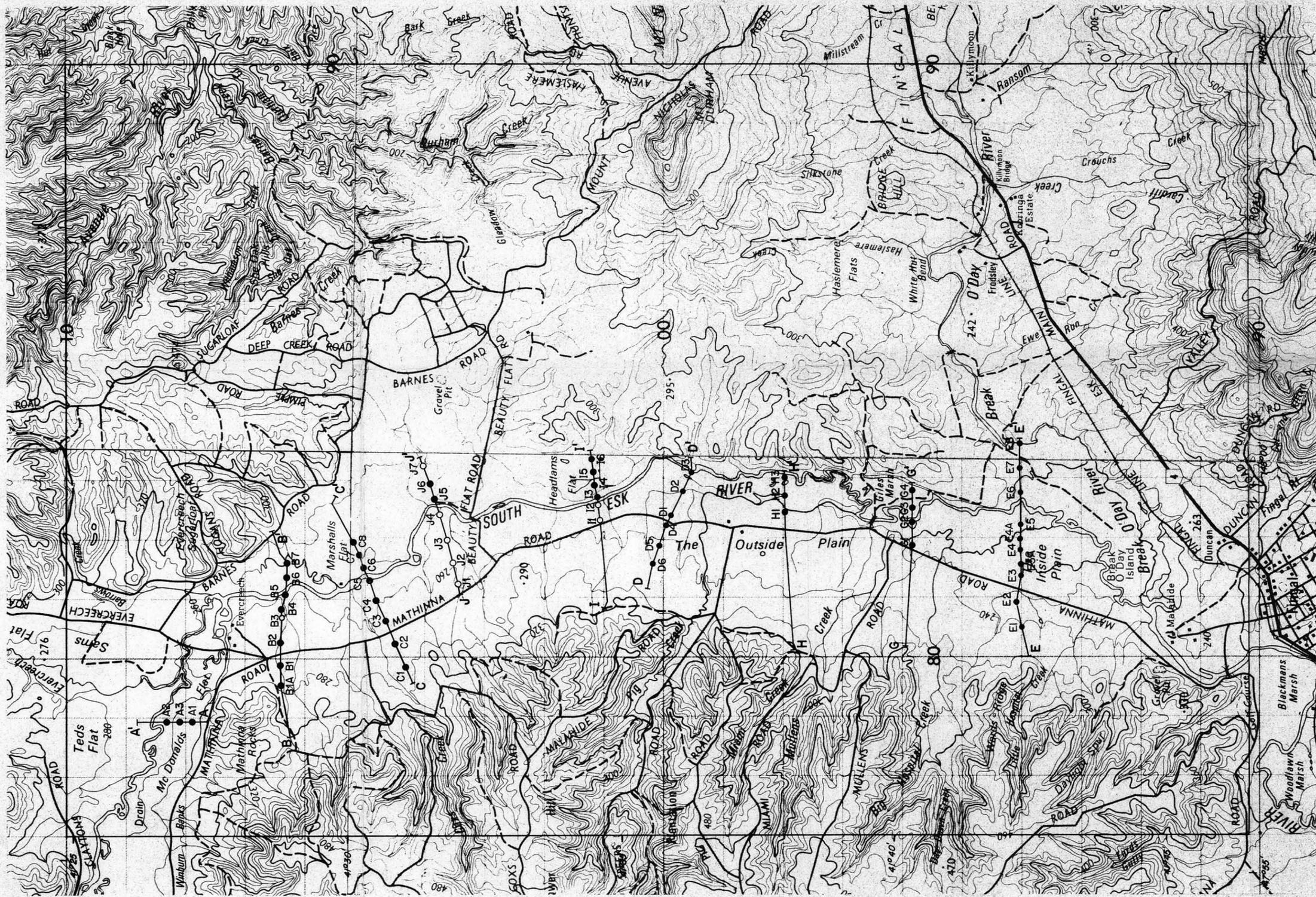
CABLE TOOL PERCUSSION DRILL.		JETSTREAM REVERSE CIRCULATION DRILL.				
HOLE FROM TO NO.	GRADE mgAu/m ³	CUMULATIVE TENOR mgAu/m ³	HOLE NO.	GRADE mgAu/m ³	CUMULATIVE TENOR mgAu/m ³	
0 4.3	SC1	6.84	6.84	SR75	25.22	25.22
0 7.3	SC2	41.60	28.71	SR76	50.50	41.13
0 5.7	SC3	13.10	23.57	SR77	TRACE	27.58
0 4.3	SC4	1.80	19.24	SR78	106.98	43.38
0 4.3	SC5	76.45	28.74	SR79	18.76	39.30
0 5.6	SC6	12.08	25.77	SR80	232.50	73.64
0 5.3	SC7	33.45	26.88	SR81	4.18	63.64
0 4.1	SC8	34.21	27.61	SR82	10.30	58.29
0 3.7	SC9	11.47	26.27	SR83	TRACE	53.46
0 5.8	SC10	44.55	28.38	SR84	78.55	56.34

KEY:

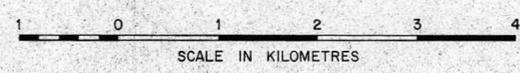
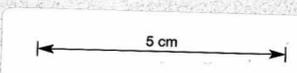
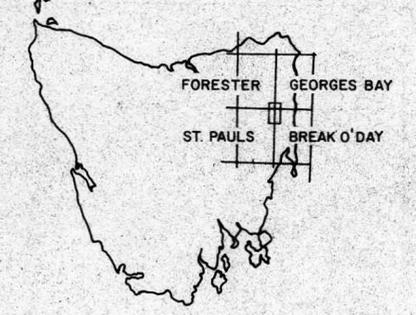
- CLAY GRADE(mg Au/m³)
- SAND Tr TRACE
- GRAVEL - ANALYSIS BELOW LIMIT OF DETECTION
- SHALE, SILTSTONE (MATHINNA GROUP) 697096
- CARBONEOUS TOPSOIL

AUSTRALIAN ANGLO AMERICAN LTD

PROJECT	SOUTH ESK	E.L. 22/80
AREA	TASMANIA	
DATA	JETSTREAM R.C. DRILL HOLES	2561
	OCT/NOV 1981	
COMPILED	T.K.S.	SCALE V 1:200 H 1:4000
DRAWN	D.J.J. 2/82	REF No TAS-9-60
AMENDED	B.E.A. 6/82	

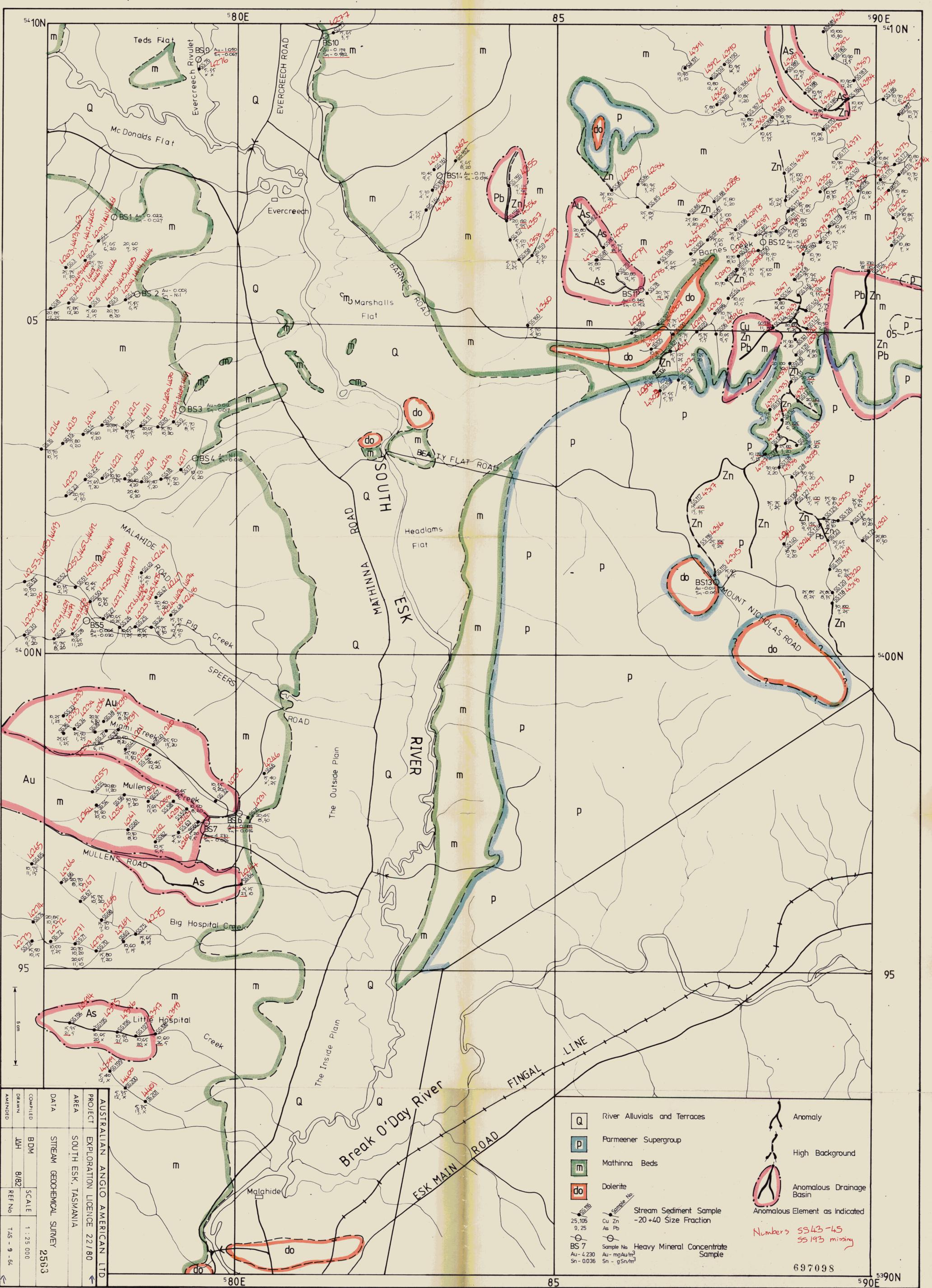


1:100 000 Sheet index.



- A1 Proposed drillhole location and number.
- B1 Completed drillhole location and number.

697097			
AUSTRALIAN ANGLO AMERICAN LTD			
PROJECT	EXPLORATION LICENCE 22/80		
AREA	SOUTH ESK, TASMANIA.		
DATA	RESEARCH & TECHNICAL SERVICES DIVISION DRILLHOLE LOCATIONS 2562		
COMPILED	S. M. Douglas	SCALE	1:50 000
DRAWN	L.L. Feb. 1981	REF No	TAS-9-9
AMENDED	July 1981		



PROJECT	AUSTRALIAN ANGLIO AMERICAN LTD		
AREA	SOUTH ESK, TASMANIA		
DATA	STREAM GEOCHEMICAL SURVEY 25633		
COMPILED	BDM	SCALE	1:25 000
DRAWN	JH	REF NO	TAS - 9 - 64
AMENDED			

	River Alluvials and Terraces		Anomaly
	Parameener Supergroup		High Background
	Mathinna Beds		Anomalous Drainage Basin
	Dolerite		Anomalous Element as Indicated
	Stream Sediment Sample		
	-20 +40 Size Fraction		
	Heavy Mineral Concentrate Sample		
	Sample No.		
	Au - 4.230		
	Sn - 0.036		
	Cu - 25.105		
	Zn - 9.25		
	As - 9.25		
	Pb - 9.25		
	BS 7		

Numbers 5543-45
55193 missing

697098