Open File Envelope No. 8740

EL 1763

YARRAMBA

FIRST PARTIAL RELINQUISHMENT REPORT FOR THE PERIOD 16/3/92 TO 15/9/93

Submitted by

Placer Exploration Ltd
1993

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PRIMARY INDUSTRIES AND RESOURCES SA

ENVELOPE 8740

TENEMENT: EL 1763, Yarramba

TENEMENT HOLDER: Placer Exploration Ltd

CONTENTS

END OF CONTENTS

SEPARATELY HELD DATA

DRILLHOLE SAMPLES (held by MESA Core Library):

For up to date information on available drillhole samples, contact the Supervisor, SADME Core Library and quote the Exploration Licence and drillhole number/s you wish to query.

REPORT ON RELINQUISHED PORTION

OF YARRAMBA - EXPLORATION LICENCE 1763

Chris Anderson
District Manager - Western Region

Placer Exploration Limited
63 King William Street
Kent Town SA 5067

Ref:CGA:st/YAR00066

23 December 1993

INTRODUCTION

A partial relinquishment of the northern and eastern portions of EL 1763 (Fig. 1) was effected in December 1993 and reports for historical exploration to mid-1991 were placed on open-file. (SADME Env. 3330) This report summarises exploration activity on the relinquished portion of EL 1763 for the period June 1991 to December 1993.

EXPLORATION AREAS

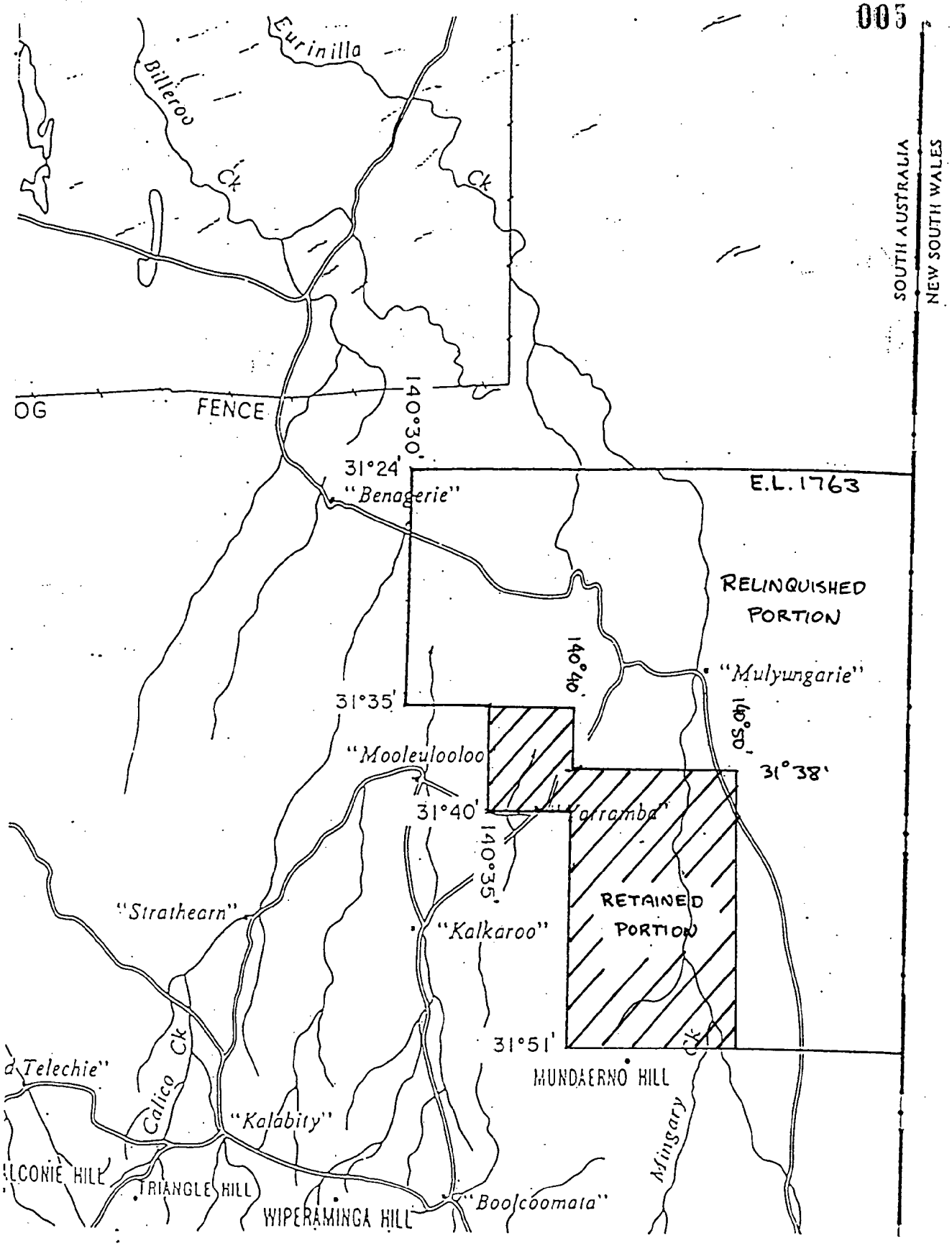
During the report period, exploration programmes in EL 1763 have been managed by Placer Exploration, for the Olary Joint Venture partners MIM Exploration and Sedimentary Holdings. Work conducted by Placer has been directed towards exploring the "Bimba Formation" within the Proterozoic metasedimentary sequence, and has consisted predominantly of rotary drill testing of the target stratigraphic position inferred from aeromagnetic data.

Within the relinquished portion of EL 1763 work was conducted in two grid areas during this report period (Fig. 2):

Cartspring Dam:	Ground magnetics (6.5 kms) and one (1) diamond drillhole (TD 456 metres).
Security Dam:	Ground magnetics (2.5 kms) induced polarisation rotary drilling (4 holes, TD 244 metres).

No further work was warranted in either of these areas based on results to-date, although the "Bimba Formation" may not have been adequately tested in each case.

Technical data for Cartspring Dam and Security Dam are included in Appendices A and B respectively.

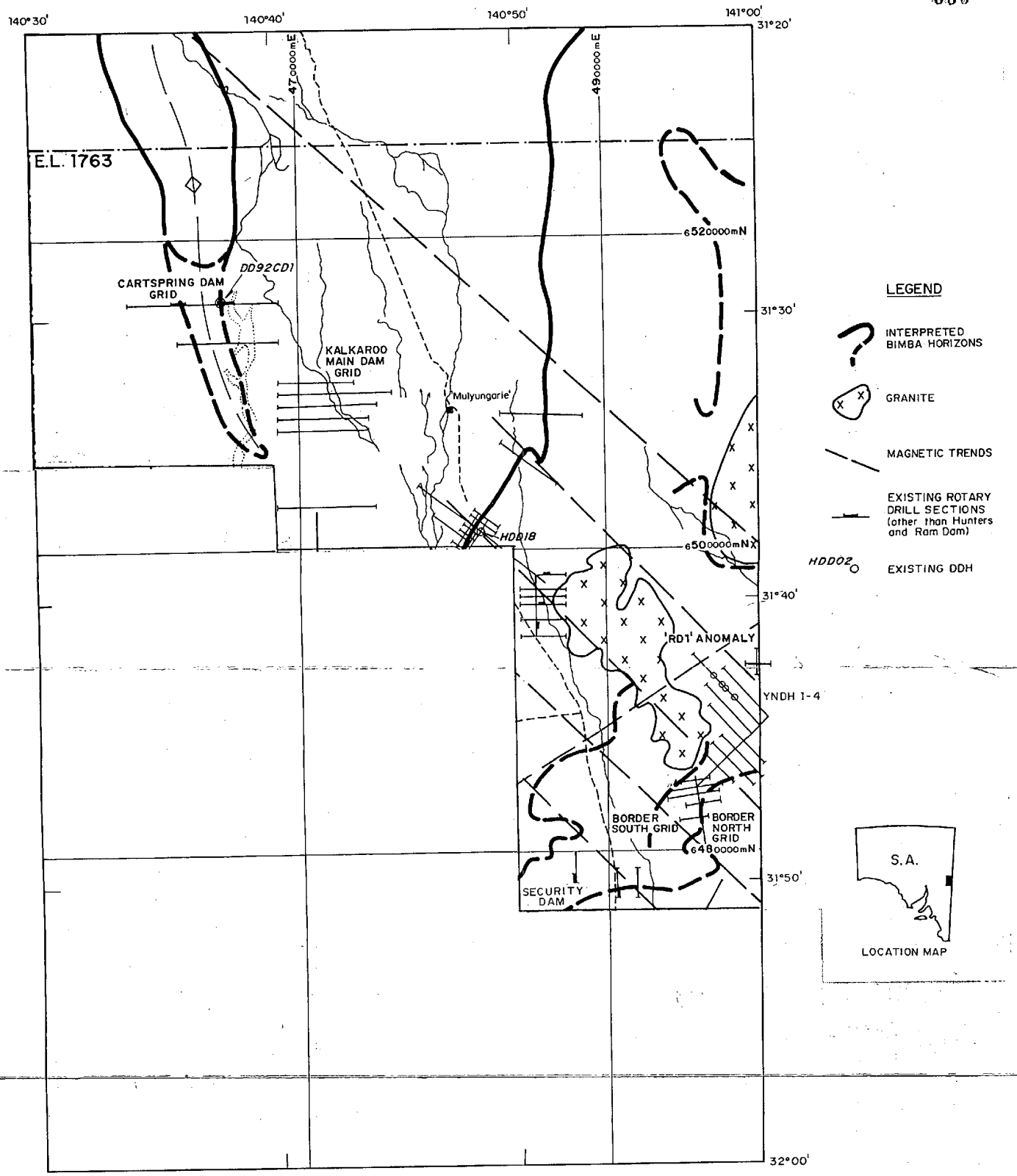


SCALE 1:500,000

KILOMETRES 10 0 10 20 30 40 50 KILOMETRES

FIGURE 1

NOTE: There is no warranty that the boundary of this Exploration Licence is correct in relation to other features on the map. The boundary is to be ascertained by reference to the Australian Geodetic Datum.



PLACER EXPLORATION LTD.

YARRAMBA EL 1763
(PARTIAL RELINQUISHMENT)

LOCATION OF ESTABLISHED GRIDS AND DRILL HOLES

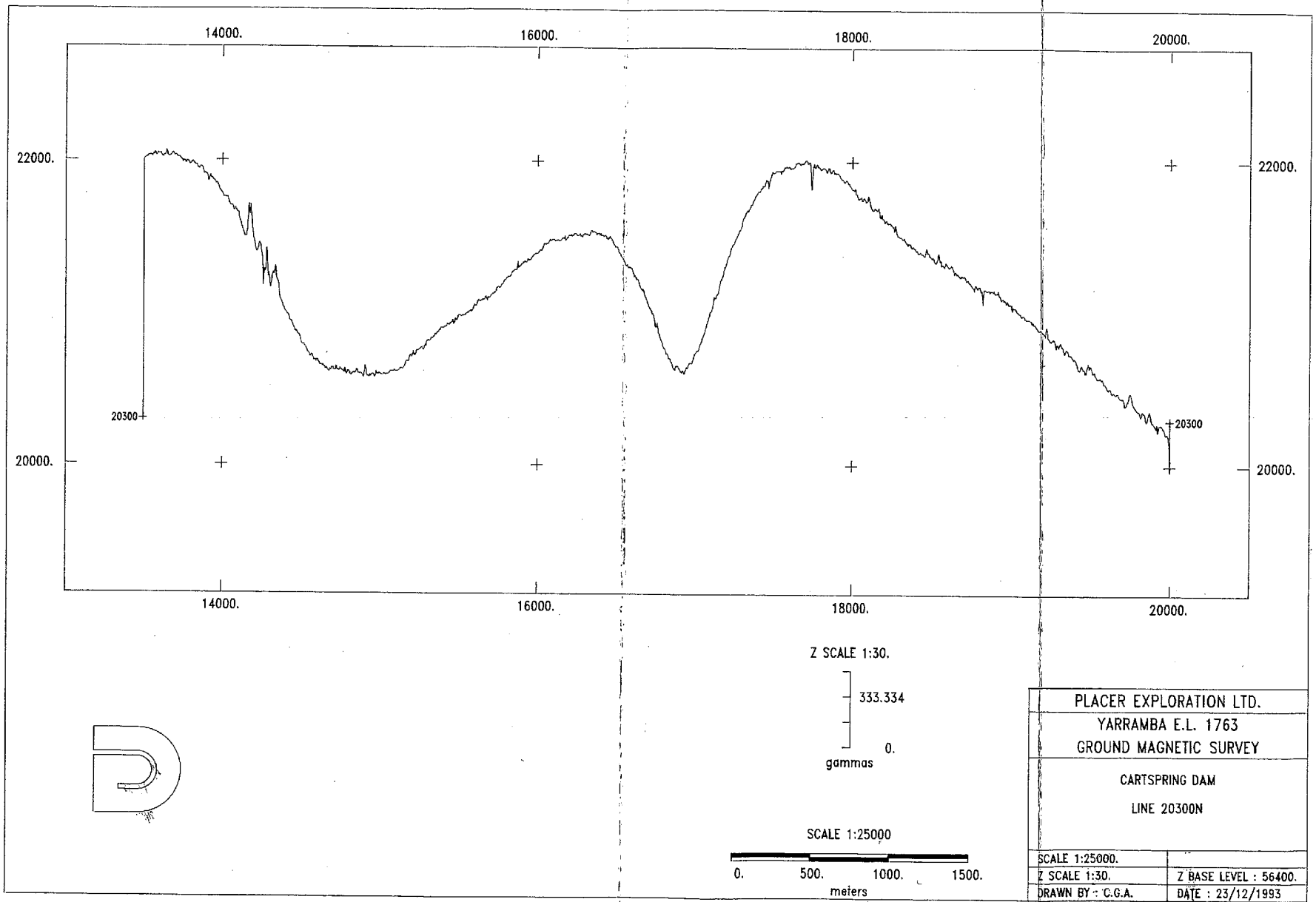
Author: C.G.A.	Drawn: W.C.A.
Scale: 1:250 000	Date: DECEMBER 1993
Plan No. 281-108A	Figure 2

APPENDIX A

EXPLORATION DATA - CARTSPRING DAM

GROUND MAGNETICS (LINE 20 300W)

DIAMOND DRILLING (LINE 22 800N)



Z SCALE 1:30.

333.334

0.

gammas

SCALE 1:25000

0. 500. 1000. 1500.

meters

PLACER EXPLORATION LTD.

YARRAMBA E.L. 1763

GROUND MAGNETIC SURVEY

CARTSPRING DAM

LINE 20300N

SCALE 1:25000.	
Z SCALE 1:30.	Z BASE LEVEL : 56400.
DRAWN BY : C.G.A.	DATE : 23/12/1993

The Cartsprings Dam area is located 19km north of Yarramba Homestead within Yarramba EL 1763 (Fig. 3). Previous ground magnetics (line 22 800N) had defined a broad, high amplitude magnetic anomaly. Another 6.5km line (20 300N) was surveyed at 5m spacing 2.5km to the south to further define the anomaly.

A drillhole was designed to test the anomaly on the original line, based on a model for the magnetic anomaly reflecting a broad antiform in the albitite-magnetite bearing sequence beneath the Bimba Formation.

5.1 Diamond Drillhole DD92CD1

Diamond drillhole DD92CD1 was collared at 16 400E, 22 800N at 70° dip to 260° magnetic (Fig. 19). The hole was rotary precollared through clay and weathered rock to 49m, HQ core to 68.5 and NQ core to 456m. The hole intersected sub-horizontal graphitic shale with disseminated to massive bands of pyrite and traces of sphalerite and chalcopyrite. A 30cm band of pyrrhotite-rich albitite with a trace of chalcopyrite was intersected at the bottom of the hole.

The source of the magnetic anomaly was not intersected. The only magnetic material was the albitite band at the bottom of the hole with a magnetic susceptibility of 2.8 x 10^{-2} SI.

Selected sulfide-rich intervals were assayed. Anomalous base metals up to 16ppm Ag, 660ppm Cu, 340ppm Pb and 0.29% Zn were recorded from scattered intervals. Minor Au (0.12ppm) and Cu (650ppm) was reported from the albitite. Drill logs and assay results are included in Appendix V.

The magnetic anomaly at this locality is thought to be prospective for Cu-Au mineralisation. The depth of the anomaly however, is considered prohibitive.

16000E 16100E 16200E 16300E 16400E

PLAN PROJECTION

22800N

DD 92 CD1

SURFACE

SECTION 22800N
BEARING 261° MAG

Clay/weathered rock

49m

Grey to black graphitic banded shale with disseminated to massive bands of pyrite Trace of sphalerite and chalcopyrite. Minor quartz veins. Bedding sub-horizontal.

100m

200m

300m

400m

Shear zone

Limit of oxidation

228m

246m Gradual decrease in carbon content

Shear zone

368m

Gradual increase pyrrhotite content

Shear zone

SURVEY DATA

DEPTH(m)	AZIMUTH°	DIP°
0	260	70
57	258	71·5
114	258	71
162	256	72
216	256	72
270	259	71·5
330	261	70·8
456	263	70

PLACER EXPLORATION LTD.

YARAMBA – E.L. 1763

DIAMOND DRILL HOLE
DD 92 CD1
SECTION 22800N

Author: W. HOSKINS	Drawn: W. ANDERSON
Date: OCTOBER 1992	Scale: 1:2000
Plan No. 281-109	FIGURE

DIAMOND DRILLHOLE DD92CD1:
LOGS, ASSAY RESULTS & PETROLOGICAL REPORT

DRILL DATA SHEET

DIAMOND DRILLHOLE: DD92CD1

PROJECT: CARTSPRING DAM
YARRAMBA EL 1763

DATE: JULY 1992

CO-ORDINATES: 22 800N 16 400E

ROTARY 0-49M, HQ 49-68.5, NQ 68.5-456M
49M OF 4" STEEL CASING LEFT IN HOLE

DOWNHOLE SURVEYS:

Depth (m)	Azimuth° (mag.)	Dip°
0	260	70
57	258	71.5
114	258	71
162	256	72
216	256	72
270	259	71.5
330	261	70.8
456	263	70

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn
0	49			PRECOLLAR - CLAY AND WEATHERED ROCK					
49	50			Grey to black graphitic banded shale	0				
50	52			with disseminated to massive bands	0				
52	54			of pyrite with a trace of	5				
54	56			sphalerite and chalcopyrite. Grey	10				
56	58			muscovite along the edges of	10				
58	60			pyrite bands. Minor quartz	15				
60	62			veining. Some sections with very	10				
62	64		HQ.	fine white phenocrysts altered	10				
64	66		↑	to sericite. Bedding	10				
66	68		68.5	↓ 65° to core axis	10				
68	70	138176	↓	68 - 68.16 m SAMPLE INTERVAL	10	2	380	65	74
70	72		NQ		10				
72	74				10				
74	76				10				
76	78				10				
78	80			↓	10				

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn				
80	82			AS ABOVE	10								
82	84				10								
84	86				10								
86	88				10								
88	90				10								
90	92				10								
92	94				10								
94	96				10								
96	98				15								
98	100				15								
100	102				15								
102	104				20								
104	106				20								
106	108	138177		107.64 - 107.72 m SAMPLE INTERVAL	50	<1	125	70	130				
108	110				15								
110	112				10								
112	114				25								

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS x10⁻⁵ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn
114	116			AS ABOVE	25				
116	118	138178		117.77 - 117.84	40	<1	150	70	165
118	120	138179		118.8 - 118.91 SAMPLE INTERVAL	80	<1	170	45	140
120	122	138180		121.73 - 121.87 "	35	<1	92	45	110
122	124				25				
124	126	138181		125.5 - 125.56m "	110	1	145	45	290
126	128	138182		125.9 - 125.99 "	30	1	135	60	125
128	130	138183		126.9 - 126.99 "	35	16	240	105	150
130	132	138184		127.2 - 127.29 "	20	2	270	80	190
132	134	138185		128.6 - 128.75 "	10	<1	72	55	82
134	136	138186		131.0 - 131.2 "	25	1	170	45	105
136	138	138187		131.97 - 132.15 "	15	1	200	40	78
138	140	138188		139.1 - 139.16 "	15	<1	180	30	340
140	142				15				
142	144				15				
144	146	138189		145 - 145.15 "	65	<1	6	60	580
146	148	138190		145.5 - 145.64 "	90	3	380	210	1040

D15

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	W	Pb	Zn
148	150			AS ABOVE	20				
150	152	138191		150.1 – 150.48 SAMPLE INTERVAL	30	1	330	30	96
152	154	138192		150.65 – 150.95 "	15	1	430	45	950
154	156	138193		155.3 – 155.44 "	110	2	530	35	50
156	158				10				
158	160	138194		158.65 – 158.8 "	10	<1	120	70	125
160	162				15				
162	164			164.5 – 165.2 SHEAR ZONE	15				
164	166				25				
166	168				15				
168	170				20				
170	172	138195		171.5 – 171.65 SAMPLE INTERVAL	200	3	600	95	320
172	174	138196		173.1 – 173.19 "	500	1	250	60	320
174	176				130				
176	178				45				
178	180				20				
180	182	138197		181.3 – 181.4 "	5	<1	185	45	105

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn.				
182	184			· AS ABOVE	15								
184	186				20								
186	188				20								
188	190				40								
190	192				35								
192	194	138198		193-193.21 SAMPLE INTERVAL	150	<1	135	20	90				
194	196				20								
196	198				20								
198	200				35								
200	202	138199		200.3 - 200.4 "	10	<1	165	35	220				
202	204	138200		202.56 - 202.79 "	110	1	330	40	84				
204	206				110								
206	208	148251		207. to 207.17 "	50	1	190	105	165				
208	210	148252		208 to 208.24 "	40	<1	52	55	130				
210	212	148253		211.4 to 211.86 "	15	2	250	65	120				
212	214				140								
214	216				45								

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn
216	218	148254		217.4 - 217.6 SAMPLE INTERVAL AS ABOVE	160	<1	72	25	66
218	220	148255		219.3 - 219.41 "	50	1	230	45	74
220	222	148256		222.7 - 223.01 "	85	<1	44	20	60
222	224	148257		223.65 - 223.75 "	30	<1	160	35	135
224	226	148258		224.8 - 225.16 "	55	1	270	35	76
226	228		228	Limit of oxidation	55				
228	230	148259		228 - 228.26 "	25	3	370	80	175
230	232				60				
232	234				20				
234	236				220				
236	238				60				
238	240	148260		238.6 - 238.73 "	30	2	310	55	150
240	242	148261		239.97 - 240.13 "	10	1	66	40	100
242	244	148262		243.66 - 243.81 "	20	2	410	55	240
244	246				45				
246	248				35				
248	250	148263		249.37 - 249.46 "	220	1	175	40	1860

018

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn
250	252	148264		251.7 - 251.77 SAMPLE INTERVAL AS ABOVE	120	3	330	55	2900
252	254				50				
254	256	148265		255 - 255.18 "	15	<1	160	35	1550
256	258	148266		256.66 - 256.79 "	10	<1	11	20	170
258	260				40				
260	262	148267		261.83 - 262.03 "	265	<1	250	30	200
262	264	148268		263.75 - 263.99 "	30	<1	310	30	175
264	266				35				
266	268				65				
268	270	148269		269.33 - 269.4 "	90	2	480	55	250
270	272				50				
272	274				82				
274	276				50				
276	278				15				
278	280	148270		278.93 - 279.5 "	15	2	72	60	50
280	282				15				
282	284	148271		283.4 - 283.8 "	40	<1	9	5	80

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn
284	286	148272		284.18 - 284.48 SAMPLE INTERVAL AS ABOVE	10	<1	24	5	56
286	288				40				
288	290	148273		288.7 - 289.7 "	40	<1	500	35	150
290	292	148274		291.17 - 291.32 "	10	<1	84	20	145
292	294			GRADUAL INCREASE	10				
294	296	148275		294.87 - 295.97 " IN SIZE OF SMALL WHITE PHENOCRYSTS.	25	<1	115	20	72
296	298				15				
298	300				20				
300	302				80				
302	304				55				
304	306	148276		304.35 - 304.42 "	40	<1	110	30	48
306	308				150				
308	310				20				
310	312				110				
312	314				250				
314	316				250				
316	318	148277		316.07 - 316.18 "	350	<1	165	30	94

020

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION		MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn
318	320			AS ABOVE		300				
320	322					90				
322	324					115				
324	326					65				
326	328					115				
328	330					150				
330	332					200				
332	334	148278		333.63 - 334.01 SAMPLE INTERVAL		350	<1	130	25	70
334	336					50				
336	338					55				
338	340					210				
340	342					25				
342	344	148279		342.12 - 342.22 "		15	<1	7	10	28
344	346	148280		344.69 - 344.84 "		20	2	480	340	2850
346	348	148281		347.8 - 347.9 "	PET SAMPLE	45	<1	410	130	1000
348	350	148282		348.56 - 348.91 "	143798 AT 350.36.	30	<1	260	35	80
350	352	148283		350.36 - 350.46 "		125	<1	300	145	1260

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn
352	354	148284		350.63 - 350.72 SAMPLE INTERVAL AS ABOVE	245	<1	17	30	52
354	356	148285		351.13 - 351.2 "	325	<1	200	55	340
356	358	148286		352.93 - 353.04 "	30	1	550	55	160
358	360	148287		354.33 - 354.43 "	80	<1	70	10	100
360	362	148288		355.26 - 355.36 " SHEAR ZONE 361.5 - 364	40	<1	660	40	220
362	364	148289		356.77 - 356.84 "	25	<1	105	30	105
364	366	148290		358.66 - 358.77 "	25	<1	22	10	76
366	368	148291	368	359.77 - 359.92 " INCREASE IN	25	<1	220	35	195
368	370	148292		368.35 - 368.53 " PYRRHOTITE CONTENT	225	<1	46	10	40
370	372	148293		370.64 - 370.80 "	140	<1	15	15	55
372	374	148294		373.55 - 373.73 "	90	<1	6	10	125
374	376				235				"
376	378	148295		377.13 - 377.43 "	100	<1	60	15	98
378	380				70				
380	382				40				
382	384				60				
384	386				45				

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	Cu	Pb	Zn				
386	388			AS ABOVE	10								
388	390				310								
390	392				45								
392	394	148296		392.6 - 392.89 SAMPLE INTERVAL	100	<1	200	20	280				
394	396				225								
396	398				700								
398	400	148297		398.14 - 398.31 "	120	<1	260	25	125				
400	402	148298		400.26 - 400.64 "	1125	<1	260	15	100				
402	404	148299		401.8 - 402.1 "	45	<1	540	25	300				
404	406	148300		404 - 404.11 "	140	<1	280	20	175				
406	408	148301		404.94 - 405.06 "	20	<1	350	15	130				
408	410	148302		408.6 - 408.76 "	575	<1	500	25	185				
410	412				40								
412	414				360								
414	416				150								
416	418				200								
418	420				350								

DRILL LOG AND SAMPLE LEDGER HOLE DD92CD1

DEPTH m		SAMPLE NUMBER	DEPTH m	ROCK DESCRIPTION	MAG SUS ×10⁻³ SI	ASSAY RESULTS (PPM) Ag	W	Pb	Zn	Ba	As		
420	422			A= ABOVE	50								
422	424				140								
424	426				825								
426	428				60								
428	430				320								
430	432			SHEAR ZONE 431.8 TO 433	15								
432	434	148303		433 - 433.5. SAMPLE INTERVAL	25	<1	190	75	520				
434	436				40								
436	438				35								
438	440				225								
440	442				15								
442	444	148304		443.3 - 443.44 "	15	<1	52	15	160				
444	446	148305		443.8 - 443.97 "	20	<1	310	50	320				
446	448	148306		444.95 - 445.24 "	395	<1	42	130	195				
448	450				250								
450	452				65								
452	454	148307		454.3 - 454.61 " - pyrrhotite rich (5%) albitite	20	<1	650	10	175	85	0.12		

amdel
ANALYTICAL SERVICES

025

Amdel Laboratories Limited
Brown Street, Thebarton, 5031
Telephone: (08) 416 5300 Facsimile: (08) 234 0321

DD92CD1

Mr Bill Hoskins
Placer Exploration Limited
63 King William Street
KENT TOWN
SA 5067

FINAL ANALYSIS REPORT

Your Order No: 6827 Our Job Number : 2AD2506

Samples received : 01-SEP-1992 Results reported : 09-SEP-1992
No. of samples : 82
Report comprises a cover sheet and pages 1 to 7

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source.

Note:
If you have any enquiries please contact Miss Anne Reed quoting the above job number.

Approved Signatory:

for John Waters
Laboratory Manager - Adelaide

MM Mr Bill Hoskins NSW

Report Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficent Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

amdel

ANALYTICAL REPORT

Job: 2AD2506
O/N: 6827

Sample	Ag	As	Bi	Cd	Co	Cr	Cu
138176	2	25	5	<2	155	170	380
138177	<1	9	<5	<2	34	18	125
138178	<1	9	10	<2	40	19	150
138179	<1	<3	<5	<2	44	13	170
138180	<1	9	5	<2	30	17	92
138181	1	9	10	<2	34	17	145
138182	1	40	10	<2	30	16	135
138183	16	12	60	<2	62	10	240
138184	2	24	10	<2	74	9	270
138185	<1	5	5	<2	28	28	72
138186	1	10	5	<2	46	110	170
138187	1	32	5	<2	66	82	200
138188	<1	8	5	<2	44	13	180
138189	<1	6	<5	<2	6	16	6
138190	3	890	5	<2	210	5	380
138191	1	15	<5	<2	105	2	330
138192	1	13	<5	<2	155	105	430
138193	2	12	<5	<2	150	<2	530
138194	<1	8	<5	<2	40	10	120
138195	3	14	10	<2	190	<2	600
138196	1	6	5	<2	110	4	250
138197	<1	14	<5	<2	64	6	185
138198	<1	5	<5	<2	30	58	135
138199	<1	4	5	<2	42	60	165
138200	1	17	<5	<2	105	240	330
148251	1	22	5	<2	56	42	190
148252	<1	18	5	<2	25	88	52
148253	2	14	5	<2	70	58	250
148254	<1	7	<5	<2	22	40	72
148255	1	1380	5	<2	145	8	230
148256	<1	8	<5	<2	14	26	44
148257	<1	26	5	<2	40	10	160
148258	1	38	5	<2	74	165	270
148259	3	22	10	<2	92	60	370
148260	2	22	5	<2	70	<2	310
148261	1	38	10	<2	32	10	66
148262	2	30	10	<2	100	<2	410
148263	1	19	5	14	52	11	175
148264	3	5	5	25	68	12	330
148265	<1	16	5	15	40	145	160
148266	<1	<3	<5	<2	5	19	11
148267	<1	<3	<5	<2	74	6	250
148268	<1	4	5	<2	62	62	310
148269	2	17	5	<2	92	7	480
148270	2	8	<5	<2	42	35	72
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DL	1	3	5	2	2	2	2
Scheme	IC1E	IC1E	IC1E	IC1E	IC1E	IC1E	IC1E

amdel

ANALYTICAL REPORT

Job: 2AD2506
O/N: 6827

Sample	Ag	As	Bi	Cd	Co	Cr	Cu
148271	<1	<3	<5	<2	5	19	9
148272	<1	<3	<5	<2	7	30	24
148273	<1	54	<5	<2	120	28	500
148274	<1	7	<5	<2	18	98	84
148275	<1	4	<5	<2	36	30	115
148276	<1	48	<5	<2	42	9	110
148277	<1	15	<5	<2	48	15	165
148278	<1	14	<5	<2	50	135	130
148279	<1	15	<5	<2	6	11	7
148280	2	38	5	<2	98	7	480
148281	<1	4	5	<2	55	12	410
148282	<1	58	<5	<2	50	42	260
148283	<1	20	<5	<2	56	16	300
148284	<1	22	<5	<2	18	16	17
148285	<1	72	<5	<2	52	17	200
148286	1	22	<5	<2	115	8	550
148287	<1	<3	<5	<2	16	15	70
148288	<1	4	<5	<2	135	8	660
148289	<1	4	<5	<2	54	17	105
148290	<1	<3	<5	<2	5	22	22
148291	<1	5	<5	<2	105	11	220
148292	<1	<3	<5	<2	17	16	46
148293	<1	<3	<5	<2	7	17	15
148294	<1	<3	<5	<2	8	24	6
148295	<1	5	<5	<2	24	72	60
148296	<1	52	<5	<2	50	88	200
148297	<1	<3	<5	<2	32	26	260
148298	<1	<3	<5	<2	58	52	260
148299	<1	240	10	<2	145	100	540
148300	<1	8	5	<2	56	14	280
148301	<1	<3	<5	<2	66	13	350
148302	<1	7	<5	<2	110	12	500
148303	<1	52	<5	<2	46	135	190
148304	<1	<3	<5	<2	10	24	52
148305	<1	195	5	<2	84	8	310
148306	<1	11	<5	<2	13	92	42
148307	<1	4	<5	<2	120	88	650
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DL	1	3	5	2	2	2	2
Scheme	IC1E	IC1E	IC1E	IC1E	IC1E	IC1E	IC1E

amdel

ANALYTICAL REPORT

Job: 2AD2506
O/N: 6827

Sample	Fe	Mn	Mo	Ni	Pb	P	V
138176	19.0	930	3	92	65	100	19
138177	6.75	1080	<2	96	50	1160	30
138178	8.90	670	4	98	70	1260	24
138179	8.55	650	<2	68	45	410	18
138180	6.50	930	5	85	45	1150	32
138181	7.60	900	5	66	45	1500	30
138182	7.20	770	8	58	60	1340	28
138183	10.3	710	3	165	105	870	32
138184	13.2	920	6	170	80	1000	28
138185	7.40	540	<2	42	55	330	26
138186	7.20	750	3	35	45	220	22
138187	9.15	490	<2	48	40	280	22
138188	10.4	1600	<2	66	30	390	28
138189	5.50	1820	5	20	60	1140	28
138190	18.0	2300	13	300	210	2850	28
138191	13.6	490	<2	110	30	115	15
138192	20.9	1780	<2	210	45	250	19
138193	21.0	300	<2	185	35	70	18
138194	8.10	620	<2	45	70	550	19
138195	26.1	1020	<2	250	95	65	17
138196	18.3	1600	<2	135	60	230	20
138197	13.0	2000	<2	140	45	320	18
138198	6.70	990	<2	30	20	210	22
138199	8.20	780	2	68	35	540	24
138200	13.8	350	3	90	40	105	17
148251	11.3	600	6	74	105	580	30
148252	11.0	960	3	14	55	400	28
148253	12.8	430	<2	105	65	210	18
148254	5.45	570	<2	32	25	460	24
148255	11.1	450	4	85	45	310	20
148256	3.82	480	4	22	20	470	22
148257	8.20	520	2	60	35	490	19
148258	13.4	470	3	65	35	210	19
148259	16.5	740	<2	135	80	230	28
148260	13.4	350	<2	64	55	180	13
148261	7.65	470	<2	34	40	600	22
148262	19.2	640	3	195	55	85	20
148263	11.8	680	2	92	40	320	25
148264	15.4	1160	3	170	55	570	32
148265	10.0	810	4	65	35	1000	34
148266	2.60	550	3	24	20	520	32
148267	12.4	290	<2	105	30	410	20
148268	10.4	320	2	92	30	390	30
148269	16.9	700	<2	180	55	610	24
148270	11.4	750	<2	58	60	280	36
Units	%	ppm	ppm	ppm	ppm	ppm	ppm
DL	0.01	5	2	2	5	5	2
Scheme	IC1E	IC1E	IC1E	IC1E	IC1E	IC1E	IC1E

Zn

amdel

Job: 2AD2506
O/N: 6827

ANALYTICAL REPORT

Sample	Fe	Mn	Mo	Ni	Pb	P	V
148271	4.08	750	<2	9	5	360	25
148272	4.64	500	<2	14	5	400	26
148273	20.3	520	<2	190	35	230	24
148274	5.10	600	5	42	20	750	32
148275	7.00	490	4	70	20	580	26
148276	9.40	860	<2	56	30	310	22
148277	6.90	700	3	84	30	1400	35
148278	8.25	790	2	34	25	200	17
148279	3.06	350	<2	6	10	230	22
148280	12.4	990	<2	195	340	195	20
148281	7.30	710	3	155	130	640	26
148282	7.75	1580	3	82	35	450	34
148283	7.00	650	6	190	145	1160	40
148284	5.85	750	7	34	30	1460	38
148285	6.40	640	4	105	55	1220	32
148286	12.9	550	<2	165	55	250	17
148287	4.28	510	<2	24	10	340	13
148288	16.1	670	<2	230	40	490	19
148289	9.70	720	5	94	30	1150	32
148290	4.28	790	3	12	10	480	25
148291	15.1	680	<2	195	35	210	19
148292	4.02	600	6	32	10	510	15
148293	2.88	630	<2	9	15	510	15
148294	5.70	1200	<2	14	10	240	17
148295	4.42	690	<2	34	15	860	18
148296	7.50	510	5	115	20	800	30
148297	7.10	790	6	62	25	1400	32
148298	9.95	530	<2	110	15	185	19
148299	17.8	730	3	220	25	430	28
148300	9.10	750	<2	100	20	380	18
148301	9.70	820	<2	105	15	520	17
148302	14.4	1120	<2	115	25	720	22
148303	7.25	990	2	48	75	220	18
148304	4.88	790	4	12	15	480	24
148305	9.65	790	13	82	50	440	30
148306	5.45	1020	6	22	130	290	45
148307	16.0	1100	<2	100	10	120	22
Units	%	ppm	ppm	ppm	ppm	ppm	ppm
DL	0.01	5	2	2	5	5	2
Scheme	IC1E	IC1E	IC1E	IC1E	IC1E	IC1E	IC1E

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Job: 2AD2506
O/N: 6827

ANALYTICAL REPORT

Sample	Zn
138176	74
138177	130
138178	165
138179	140
138180	110
138181	290
138182	125
138183	150
138184	190
138185	82
138186	105
138187	78
138188	340
138189	580
138190	1040
138191	96
138192	950
138193	50
138194	125
138195	320
138196	320
138197	105
138198	90
138199	220
138200	84
148251	165
148252	130
148253	120
148254	66
148255	74
148256	60
148257	135
148258	76
148259	175
148260	150
148261	100
148262	240
148263	1860
148264	2900
148265	1550
148266	170
148267	200
148268	175
148269	250
148270	50
Units	ppm
DL	2
Scheme	IC1E

Job: 2AD2506
O/N: 6827

ANALYTICAL REPORT

Sample	Zn
148271	80
148272	56
148273	150
148274	145
148275	72
148276	48
148277	94
148278	70
148279	28
148280	2850
148281	1000
148282	80
148283	1260
148284	52
148285	340
148286	160
148287	100
148288	220
148289	105
148290	76
148291	195
148292	40
148293	55
148294	125
148295	98
148296	280
148297	125
148298	100
148299	300
148300	175
148301	130
148302	185
148303	520
148304	160
148305	320
148306	195
148307	175
Units	ppm
DL	2
Scheme	IC1E

amdel

Job: 2AD2506
O/N: 6827

ANALYTICAL REPORT

Sample	Au Avg	Au	Au Rp1	Au SS1	Ba
148307	0.12	0.10	0.14	--	85
Units	ppm	ppm	ppm	ppm	ppm
DL	0.01	0.01	0.01	0.01	10
Scheme	FA1	FA1	FA1	FA1	XRF1
138190	<0.01				
148255	0.05				
148299	0.03				
148305	0.03				
	ppm				
	FA1				

143798
DD92 CD1, 350.36m

Laminated 'black shale', with very small white elongate porphyroblasts altered to sericite, also crystals of sphene/rutile, all oriented along a cleavage at right angles to the laminations. Wide vein, conformable to the layering, with muscovite margins and a core of quartz pyrite, rarer chlorite, sphalerite, trace chalcopyrite.

The host rock in this sample is a strongly laminated carbonaceous shale with a fine scale layering on a scale of 0.2 to 2mm. Alternate layers are relatively rich in carbonaceous material or in sericite, with a poorly defined cleavage oriented almost at right angles to the layering. Accessory very small metacrysts of chlorite occur along the layering.

Small lenses 0.1mm wide to 0.5mm long are commonly aligned along the cleavage, scattered at irregular intervals to form about 7% of the rock. These are the white crystals referred to in your covering note; they consist of compact, decussate, extremely fine sericite, apparently after microporphyroblasts (but of indeterminate previous identity). Small elongate lozenge shaped crystals/prisms (2-3%) have a similar size and distribution, and appear to be titaniferous (?altered sphene or rutile).

A vein about 15mm wide, has margins rich in muscovite which is commonly oriented, at right angles to the vein i.e. parallel to the cross-cutting cleavage. A core within this vein consists of granular quartz mosaic, incorporating irregularly granular, quite coarse pyrite ($\pm$ rarer marcasite and foliae of pyrite); with very minor very irregular grains of sphalerite and trace chalcopyrite.

APPENDIX B

EXPLORATION DATA - SECURITY DAM

INDUCED POLARISATION SURVEY - LINE SD1

GROUND MAGNETICS - LINE SD3

ROTARY DRILLING - LINE SD3

INDUCED POLARISATION SURVEY - LINE SD1

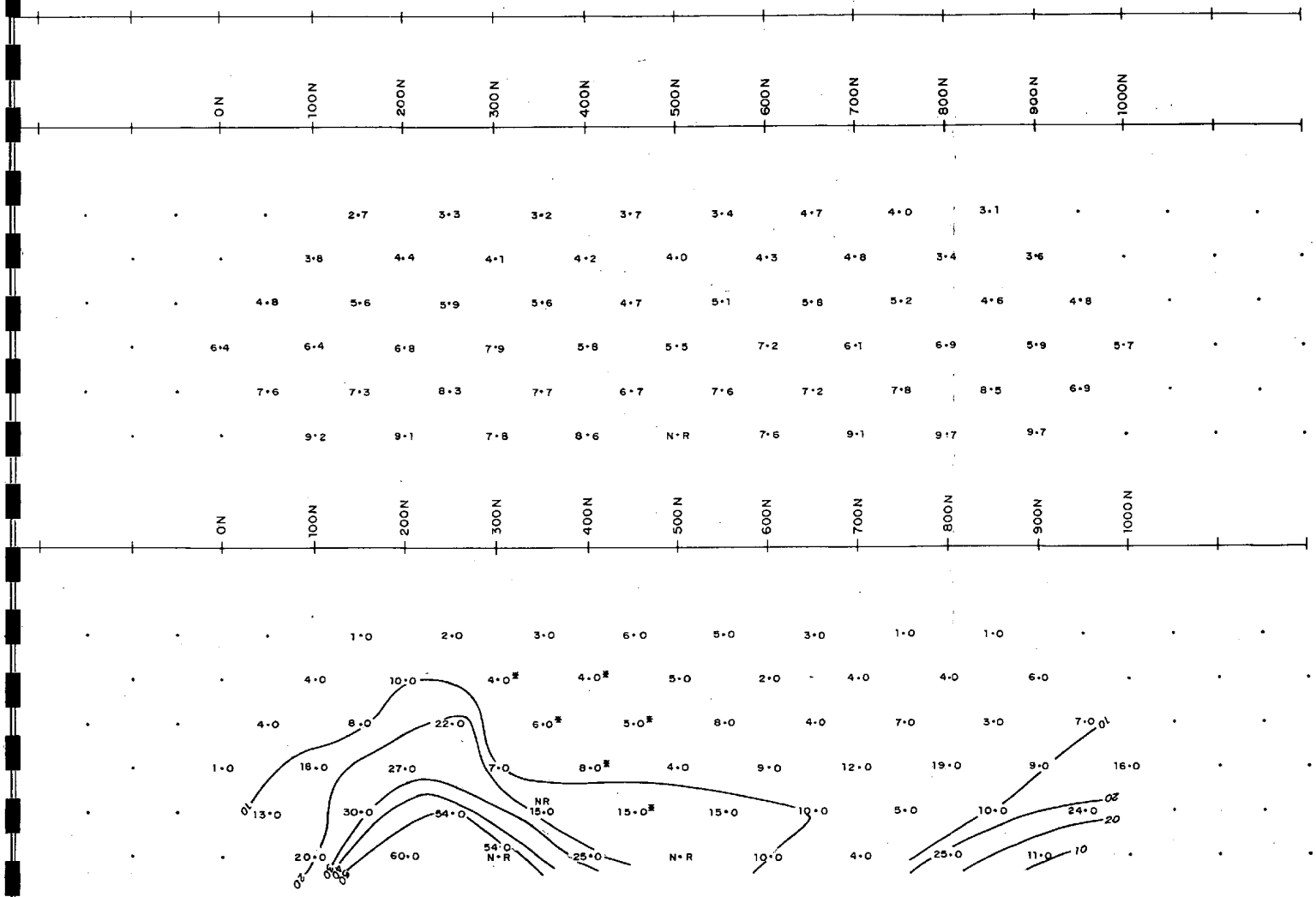
SEARCH EXPLORATION SERVICES OF ADELAIDE WERE CONTRACTED FOR THE IP SURVEY. A ZONGE GGT-10 TRANSMITTER AND ZONGE GDP 16 RECEIVER WERE USED FOR THE SURVEY

LINE SD1: ON-1000N

TX SET UP AT 500N

100M DIPOLES - 7 ELECTRODE SPREAD TO N = 6

CHARGEABILITY ANOMALY APPEARS AT 200N TO 250N



DIPOLE - DIPOLE I.P. SURVEY

Contractor		: Search Expl. S.
I.P. Unit	Tx	: Zonge GGT-10
	Rx	: Zonge GDP-16
Freq. or Int. Period		: 0·125 Hz 2 sec
Dipole size		: 100m
Scale		:
PROPERTY		:
PROSPECT		: Security Dam
LINE N°		: SD1
SET-UP N°.		:
DATE		: 17-18/5/91

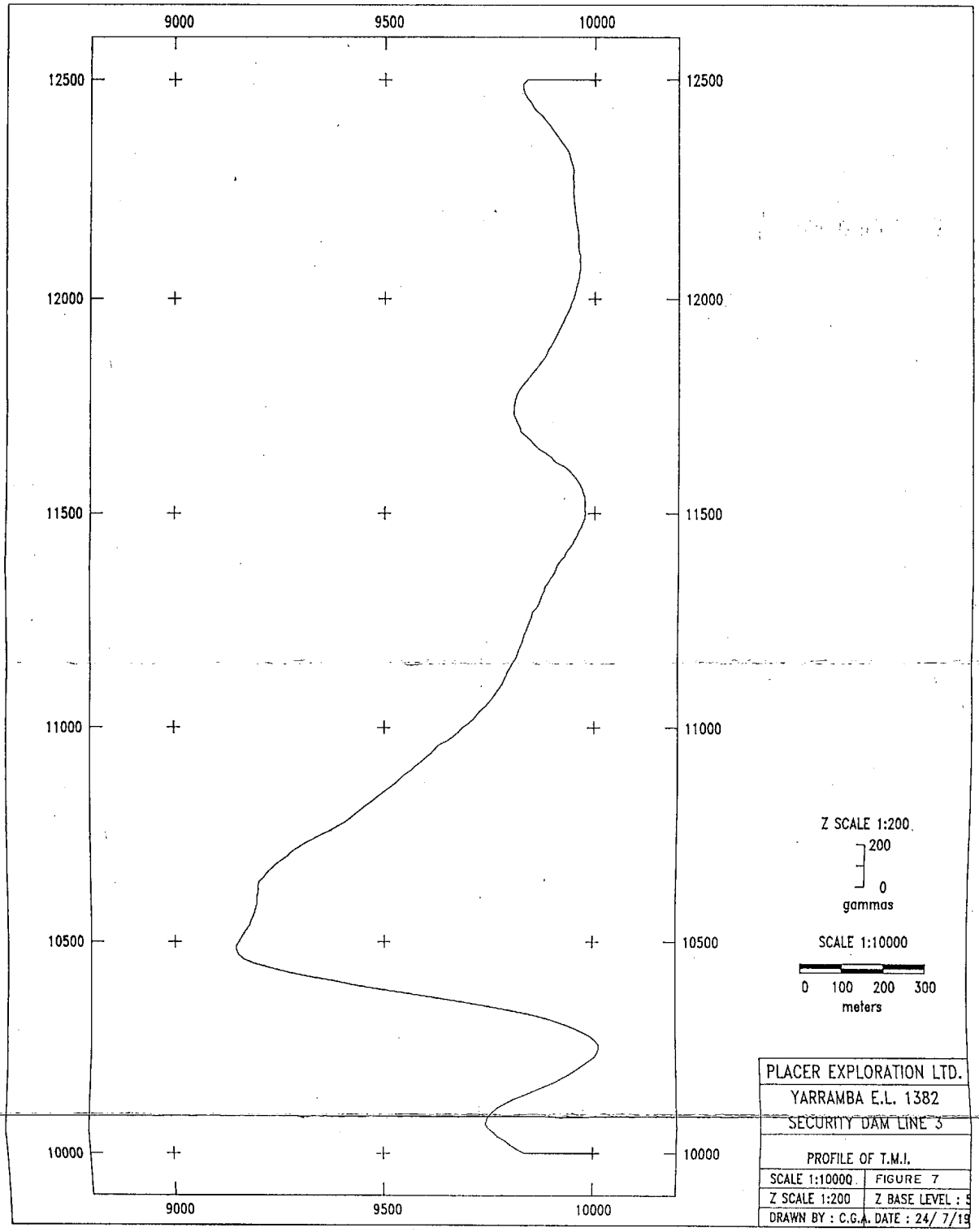
PLACER EXPLORATION LTD

YARRAMBA – E.L. 1382

SECURITY DAM LINE SD1
I.P. & RESISTIVITY SURVEY

Scale	1:5000	Figure N°. 15
Author	N.C.	
Date	DECEMBER 1991	Plan No. 281-105
Drawn by	P.W.K. / W.C.A.	

GROUND MAGNETICS - LINE SD3



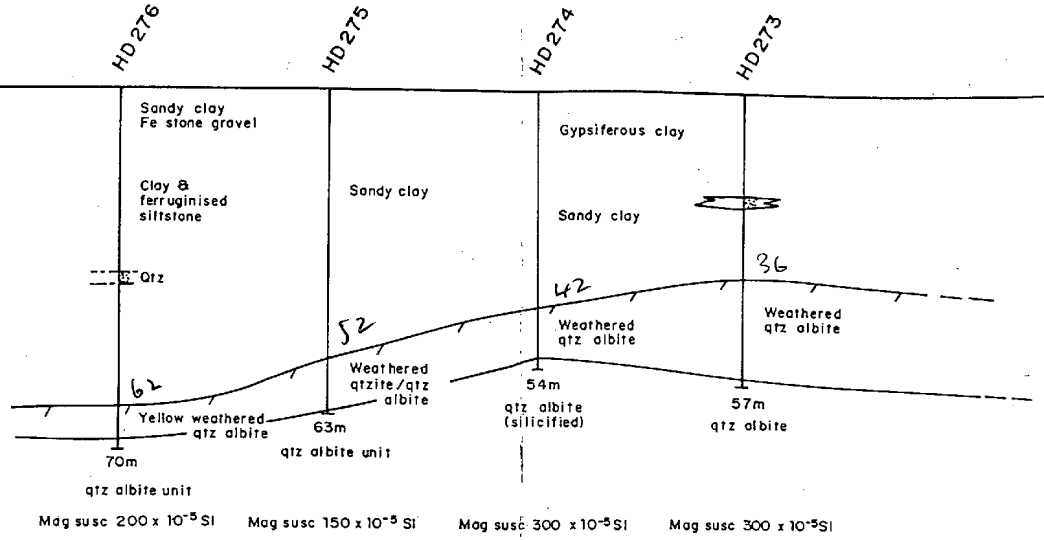
PLACER EXPLORATION LTD.	
YARRAMBA E.L. 1382	
SECURITY DAM LINE 3	
PROFILE OF T.M.I.	
SCALE 1:10000	FIGURE 7
Z SCALE 1:200	Z BASE LEVEL : 5
DRAWN BY : C.G.A.	DATE : 24/ 7/19

Plan No. 281 - 098

ROTARY DRILLING - LINE SD3

- Holes HD273 to HD276
- Total meterage - 244m (4 holes)
- Average depth - 61m
- Bedrock lithology - quartz - albite-rock (probable Upper Albite)
- No significant results

10200N 10300N 10400N 10500N



	Bottom 66-68m		Bottom 60-62m		Bottom 50-52m		Bottom 54-56m	
Cu	5	4	20	17	52	22	24	24
Pb	6	5	8	5	8	4	10	10
Zn	7	4	7	5	16	11	13	15
Fe	2·85%	2·65%	7·25%	7·45%	11·6%	11·1%	13·2%	13·1%
Mn	24	22	28	26	26	20	38	35
Ag	–	–	–	–	–	–	–	–
Mo	5	5	7	6	6	5	6	4
Au	–	0·01	0·02	6	0·01	0·02	–	0·02

5

PLACER EXPLORATION LTD.

YARRAMBA – E.L. 1382

SECURITY DAM LINE SD3
ROTARY DRILLING CROSS SECTION

Author : N.C.	Drawn : W.C.A.
Scale : 1:1000	Date : JULY 1991
Plan No. 281-104	FIGURE

PLACER EXPLORATION LIMITED – DRILL LOG

HOLE No. HD 273

042 PAGE 1 OF 1

PROJECT: YARRAMBA JV. DATE STARTED: 30/6/91 TYPE OF DRILL: RAB

AREA: CURUMONA GRID: SD3 HOLE SIZE:

LOCATION: SECURITY DAM COORDINATES: 10400 N CONTRACTOR: THOMPSON

STARTED: 12:15 pm ELEVATION: VERTICAL DRILLER: GRIZZ

COMPLETED: 2:00 pm DEPTH: 57m LOGGED BY: N. CAMPBELL

Metres	DESCRIPTION		SAMPLE No.	Assay Length	ASSAYS (ppm) Cu	Pb	Zn	Fe	Mn	Ag
0 ↓ 4	Brown argillaceous clay + sand. Festoon fine gravel									
4 ↓ 8	Green clay + sand, gritty. Festoon gravel.								Mo	Au
8 ↓ 22	Brown sandy clay + green clay. 16-18m white silicified siltstone + brown clay. Fine qtz sand + Festoon 20-22m									
22 ↓ 34	Light grey + khaki yellow gritty clay grading to grey + red clay from 30m									
34 ↓ 36	Light grey clay + red brown sandy weathered siltstone									
36 ↓ 38	Light grey sandstone, white + cream silicified siltstone (almost chalcedony) Lightly ferruginised.									
38 ↓ 44	Cream + yellow silicified siltstone Red brown ferruginised shale (banded) 42-44m slightly brecciated? silicified red brown to yellow brown siltstone heavily ferruginised									
44 ↓ 50	Red brown + yellow brown ferruginised siltstone broken qtz. 46-50m yellow + white siltstone + clay Non Magnetic									
50 ↓ 56	Yellow brown + white weathered igneous? with black + grey finely disseminated mineral throughout chips. broken qtz. Weakly magnetic (SUSC 70 × 10^{-5} SIU)	basement semi oxidised	136036 54-56m		24	10	15	13.1%	35	<1
									Mo	Au
									4	0.02
56 ↓ 57 EOH CSR/0035	Yellow brown + light green banded f.g. qtz igneous rock containing yellow clays/qtz + very fg yellow clay. black mineral in bands + disseminated. very fine grained white/light grey + brittle bands red brown magnetic Weakly magnetic (SUSC 300 × 10^{-5} SIU)	↓ Fresh – Albite unit? sediments? magnetic	136037		24	10	13	13.2%	38	<1
									Mo	Au
									6	<0.01

PLACER EXPLORATION LIMITED – **DRILL LOG** HD 274. PAGE 1 OF 1

PROJECT: YARRAMBA JV. DATE STARTED: 30/6/91 TYPE OF DRILL: R.A.B.

AREA: CORNAMONA SD3 HOLE SIZE: 043

LOCATION: SECURITY DAM COORDINATES: 10360N CONTRACTOR: THOMPSON

STARTED: 2:10 pm ELEVATION: VERTICAL DRILLER: GRIZZ

COMPLETED: 3:20 pm DEPTH: 54m LOGGED BY: N. CAMPBELL

Metres	DESCRIPTION		SAMPLE No.	Assay Length	ASSAYS (ppm) Cu	Pb	Zn	Fe	Mn	Ag
0 ↓ 20	Brown argillaceous clay + sand. Fine Festoon grit.								Mo	Au
20 ↓ 42	Light grey clay + khaki yellow quartz clay + grey + yellow brown + red brown mottled sandstone, ferruginised in part.									
42 ↓ 52	Red brown + yellow brown ferruginised siltstone. broken qtz. Weakly magnetic (Susc 60×10^{-5} SIU)		136038 50-52m		22	4	11	11.1%	20 Mo 5	<1 Au 0.02
52 ↓ 54 EOH	Yellow brown quartzite? or igneous (bond.) composed of fine grained qtz. yellow feldspar. Wash mineral (limonite?). yellow glass. chips of specular hematite (contamination?) Weakly magnetic (Susc 300×10^{-5} SIU)	Albite unit	136039		52	8	16	11.6%	26 Mo 6	<1 Au 0.01

ROLLER BIT (½ hr)

CSR/0035

PLACER EXPLORATION LIMITED – **DRILL LOG**

HOLE No. HD 275

PAGE 1 OF 1

PROJECT: YARRAMBA J.V.
AREA: CURNAMONA
LOCATION: SECURITY DAM
STARTED: 3:30 pm
COMPLETED: 4:15 pm

DATE STARTED: 30/6/91
COORDINATES: SD3 10320 N
ELEVATION: VERTICAL
DEPTH: 63 m

TYPE OF DRILL: RAB (RC4)
HOLE SIZE: 044
CONTRACTOR: THOMPSON
DRILLER: GRIZZ
LOGGED BY: N. CAMPBELL

Metres	DESCRIPTION		SAMPLE No.	Assay Length	ASSAYS (ppm) Cu	Pb	Zn	Fe	Mn	Ag
0 ↓ 20	· Brown sandy clay · gypsiferous clay to 10m								Mo	Au
20 ↓ 52	· Yellow sandy clay oxidising to light brown red brown sandy clay at 28m → 34m · White + red sandy clay 34 → 52m									
52 ↓ 60	· Yellow sandy clay (qtz, feldspar biotite, ilmenite Fg. weathered sandstone) · yellow & black speckled sandstone white & brown claystone									
60 ↓ 62	· Semi oxidised red & yellow black speckled qtzite heavily Fe mineralised patches · hematite Festone. (Mag Susc 40 × 10⁻⁵ SIU)		136040		17	5	5	7.45%	26 Mo 6	<1 Au <0.01
62 ↓ 63 ECH	· Red pink, black speckled hard igneous? rock. Fe mineralised patches, hematite Festone. · Magnetite + ilmenite very fine grained feldspar + glass → microgranophyric? textured white? (Mag Susc 150 × 10⁻⁵ SIU)	Albite unit	136041		20	8	7	7.25%	28 Mo 7	<1 Au 0.02

CSR/0035

PLACER EXPLORATION LIMITED – **DRILL LOG**

HOLE No. HD 276

PAGE 1 OF 1

PROJECT: YARRAMBA J.V. | DATE STARTED: 30/6/91 | TYPE OF DRILL: RAB (Rig 4)

AREA: CORNAMONA | SD 3 | HOLE SIZE: U45

LOCATION: SECURITY DAM | COORDINATES: 10280N | CONTRACTOR: THOMPSON

STARTED: 4:25 pm | ELEVATION: VERTICAL | DRILLER: GRIZZ

COMPLETED: 5:45 pm | DEPTH: 70m | LOGGED BY: N. CAMPBELL

Metres	DESCRIPTION		SAMPLE No.	Assay Length	ASSAYS (ppm) Cu	Pb	Zn	Fe	Mn	Ag
0	· Brown sandy clay									
↓	· Cryptocrystalline Fe 14m									
20	· Fe stone gravel								Mo	Au
20	· Yellow sandy clay & Fe stone (ferruginised) gravel 6 24m									
↓	· Green + yellow waxy quartz clay									
38	· White veined sandy clay & manganese + hematite gravel									
	· Qtz bound & ferruginised breccias 36–38m									
38	· Red + pink clay									
	· Pale brown clay 48m → 56m									
↓	· Cream clay 56m	fault / shear								
62	grey clay									
62	· Purple black speckled clay									
	· Brown qtz (vein qtz.) 62–64m									
↓	· Yellow banded sandstone		136042 (66–68m)		4	5	4	2.65%	22	<1
68									Mo	Au
									5	0.01
68	· Fresh pale yellow brown speckled fine grained igneous fragments – contains yellow glass + ½ x fine grained yellow lath like crystals.									
↓	· fine grained black fine grained mineral – clay.		136043		5	6	7	2.85%	24	<1
70 EOH	· Weakly magnetic 200×10^{-5}	Albite Unit							Mo	Au
	Black mineral (black/dark brown) moderately hard & brittle, breaks red/brown + fragments weakly magnetic probably ilmenite / hematite weathered down magnetite.								5	<0.01
	· trace very fine garnet + hornblende.									

CSR/0035