PROSPECTING AUTHORITY 2579

ILLOGWA QUADRANGLE, N.T.

MONTHLY REPORT

JULY, 1971

DILLINGHAM MINING COMPANY OF AUSTRALIA
A.C. LEWIS HOUSE - 7th FLOOR
159 KENT STREET, SYDNEY, N.S.W. 2000

PRELIMINARY

Dillingham Mining Company of Australia, in an agreement with the Authority Holders Messrs. Hughes, Sisley, Forbes and Clayton, commenced field exploration activities in PA 2579 on 20th July, 1971.

RECONNAISSANCE PROGRAMME

Initial examination efforts in the Authority comprised a magnetic and radiometric survey. Commencing on 23rd July and finishing on 2nd August, the work covered the entire authority in four basic air flight grid patterns totalling over 1500 line-miles.

Results of the survey failed to produce any significant radiometric response, but, several large magnetic anomalies were located in the vicinity of the Illogwa Shear Zone.

Work during the forth coming month is intended to involve ground checking of discovered magnetic anomalies, commencement of a regional rockchip-stream sediment geochemical survey and examination of known mines and prospects.

LOGISTIC DETAILS

Personnel:	1 Geologist
	1 Geophysical Technician
	1 Aircraft Pilot
	1 Cook
Equipment:	1 four-wheel drive vehicle and camp trailer
	2 trail-type motor cycles
	1 PA 32 Cherokee Six Aircraft

Recd. 22.10.71
2pm

PROSPECTING AUTHORITY 2579

ILLOGWA QUADRANGLE, N.T.

MONTHLY REPORT

AUGUST, 1971

DILLINGHAM MINING COMPANY OF AUSTRALIA
A.C. LEWIS HOUSE - 7th FLOOR
159 KENT STREET, SYDNEY, N.S.W. 2000

PRELIMINARY

Work in PA 2579 is being carried out by Dillingham Mining Company of Australia as per an agreement with the Authority holders Messrs. Hughes, Sisley, Forbes and Clayton.

EXAMINATION ACTIVITIES

Examination efforts during the current report period have involved:

1) ground follow-up investigations of magnetic anomalies detected during a recent airborne geophysical survey,
2) initiation of a regional rockchip/stream sediment geochemical sample survey, and
3) inspection of known mines and prospects plus other areas of geologic interest within the Authority.

Reconnaissance geologic mapping, on a limited scale, has been carried out in the vicinity of the Illogwa Shear Zone. The structure, referred to by earlier workers as involving deformation associated with the Arltunga nappe complex, has been mapped as a broad anticlinal fold comprising stretched, or boudinaged quartz sandstone units of the Precambrian Heavitree Quartzite.

The axial trace of the fold supports a significant magnetic anomaly, the top of which is believed to be within 800 feet of the surface.

A total of 198 geochemical samples were taken from outcrops and stream drainages. Results have not as yet been received.

LOGISTIC DETAILS

Personnel:	2 Geologists
	1 Geophysics technician
	1 Aircraft pilot
	2 Prospecting assistants
	1 Cook
Equipment:	2 Four-wheel drive vehicles with trailers
	5 Trail-type motor cycles
	1 PA 32 Cherokee Six Aircraft

Recd. 2pm
22-10-71

PROSPECTING AUTHORITY 2579

ILLOGWA QUADRANGLE, N.T.

MONTHLY REPORT

SEPTEMBER 1971

DILLINGHAM MINING COMPANY OF AUSTRALIA
A.C. LEWIS HOUSE - 7th FLOOR
159 KENT STREET, SYDNEY, N.S.W. 2000

PRELIMINARY

Examination of this Authority is being carried out by Dillingham Mining Company as per an agreement with the Authority holders.

EXAMINATION ACTIVITIES

Work during the current report period has been restricted to compilation and study of field data obtained during the previous two months.

Geology: Results of reconnaissance geologic mapping have been transferred to 1/100,000 scale plans along with geochemical and geophysical survey data. Purpose of the compilation is to aid study and evaluation of areas of interest and to assist in recommending follow-up investigations.

Geochemistry: Results of geochemical sampling, including description of rockchip samples, are provided in Appendix A.

Geophysics: Final analysis of airborne scintillometry data have failed to identify the presence of any important radiometric feature within the Authority.
Magnetmeter results, however, continue to show the axial portion of the folded Illogwa Shear Zone as supporting a prominent positive magnetic anomaly.

Proposed work: A recommendation has been submitted to continue exploration work in the Authority. Primary objectives will be to test magnetic anomalies and carry out more detailed geochemical sampling and geologic mapping in the vicinity of copper prospects.

LOGISTIC DETAILS

Work on this Authority has employed a geologist and various technical personnel in drafting, geochemistry, geophysics and legal fields.

SUMMARY OF GEOCHEMICAL SAMPLING & ANALYSIS

No	TYPE	STANDARD TOTAL 80 MESH							HEAVY MEDIA 80 MESH								DESCRIPTION	LOCATION	SPECIAL WORK
		Cu	Pb	Zn	Co	Ni	Ag	As	Cu	Pb	Zn								
201	S	22	12	28	12		0.5	160										PA 2579	
202	S	18	14	38	14		0.6	x											
203	S	14	14	28	12		0.5	x											
204	S	12	12	40	10		0.6	5											
205	S	14	14	32	10		0.6	5											
206	S	12	14	36	12		0.6	5											
207	S	28	14	48	16		0.6	x											
208	S	18	16	48	12		0.7	x											
209	S	14	14	32	12		0.5	x											
210	S	14	14	24	10		0.5	x											
211	S	32	16	48	16		0.7	x											
212	S	16	14	28	10		0.4	x											
213	S	26	14	42	14		0.6	x											
214	S	18	14	28	12		0.5	x											
215	S	20	16	34	12		0.5	x											
216	S	14	16	34	12		0.6	x											
217	S	16	16	42	14		0.6	x											
218	S	12	16	42	12		0.6	x											
219	S	18	14	50	12		0.6	x											
220	S	10	12	40	10		0.5	x											
221	S	12	14	44	12		0.5	5											
222	S	18	16	48	16		0.6	x											
223	S	12	16	48	12		0.5	x											
224	S	14	16	40	12		0.5	5											
225	S	16	16	48	14		0.6												
226	S	10	14	34	8		0.4												
227	S	18	18	46	16		0.5												
228	S	14	16	38	16		0.5												
229	S	22	18	46	18		0.6												
230	S	18	18	50	16		0.5												
231	S	22	20	50	20		0.7												
232	S	20	16	58	18		0.7												
233	S	22	20	56	20		0.7												
234	S	16	16	44	16		0.5												

APPENDIX A

SUMMARY OF GEOCHEMICAL DATA

SUMMARY OF GEOCHEMICAL SAMPLING & ANALYSIS

No	TYPE	STANDARD TOTAL 80 MESH								HEAVY MEDIA 80 MESH								DESCRIPTION	LOCATION	SPECIAL WORK
		Cu	Pb	Zn	Co	Ni	Ag			Cu	Pb	Zn								
235	S	22	14	42	14		0.8												PA 2579	
236	S	18	16	42	12		0.7													
237	S	12	12	36	10		0.6													
238	S	14	18	40	10		0.7													
239	S	12	18	32	10		0.6													
240	S	18	18	42	12		0.6													
241	S	14	14	38	10		0.5													
242	S	12	18	28	10		0.4													
243	S	12	16	30	10		0.5													
244	S	14	14	34	8		0.5													
245	S	12	14	28	8		0.5													
246	S	20	14	38	12		0.5													
247	S	16	16	30	12		0.5													
248	S	12	16	26	8		0.4													
249	S	10	16	26	6		0.4													
250	S	10	18	24	8		0.4													
251	S	16	18	36	8		0.5													
252	S	14	18	42	10		0.6													
253	S	24	24	90	22		0.9													
254	S	26	18	54	14		0.6													
255	S	24	20	50	12		0.6													
256	S	38	22	66	14		0.8													
257	S	46	22	78	22		0.9													
258	S	72	30	94	26		0.1													
259	S	46	24	86	22		0.9													
260	S	46	24	78	20		0.9													
251	S	24	18	52	12		0.5													
262	S	30	22	60	16		0.8													
263	S	38	20	68	18		0.8													
264	S	30	22	66	16		0.7													
265	S	40	20	66	18		0.8													
266	S	32	18	90	26		0.8													
267	S	26	12	70	20		0.6													
268	S	28	14	72	22															
269	S	16	16	52	14															

SUMMARY OF GEOCHEMICAL SAMPLING & ANALYSIS

A. Tandon

No	TYPE	STANDARD TOTAL 80 MESH								HEAVY MEDIA 80 MESH								DESCRIPTION	LOCATION	SPECIAL WORK
		Cu	Pb	Zn	Co					Cu	Pb	Zn								
270	S	16	14	54	14														PA 2579	
271	S	10	12	28	10															
272	S	12	12	32	12															
273	S	16	12	46	16															
274	S	12	8	56	12															
275	S	14	12	44	16															
276	S	16	18	46	14															
277	S	26	20	62	18															
278	S	18	28	42	12															
279	S	12	14	26	8															
280	S	14	18	42	14															
281	S	20	18	44	12															
282	S	14	18	46	14															
283	S	10	14	28	10															
284	S	22	20	46	14															
285	S	12	16	44	14															
286	S	22	18	38	14															
287	S	16	20	46	14															
288	S	20	20	50	18															
289	S	18	22	50	18															
290	S	16	18	48	16															
291	S	14	18	36	18															
292	S	26	20	42	20															
293	S	22	16	42	16															
294	S	14	14	26	12															
295	S	20	22	44	14															
296	S	16	20	36	18															
297	S	12	26	32	10															
298	S	12	16	30	10															
299	S	18	18	32	14															
300	S	12	16	28	12															
501	S	28	18	48	16															
502	S	24	20	48	16															
503	S	22	16	38	16															
504	S	32	18	36	14															

SUMMARY OF GEOCHEMICAL SAMPLING & ANALYSIS

No	TYPE	STANDARD TOTAL 80 MESH								HEAVY MEDIA 80 MESH								DESCRIPTION	LOCATION	SPECIAL WORK
		Cu	Pb	Zn	Co	Ni	Cr	Au	Sn	Bi	Sr	Ce	U	Hg	Mo	Ag	Mn			
505	S	32	28	46	14														PA 2579	
506	S	20	18	46	18															
507	S	28	18	62	20															
508	S	22	18	54	14															
509	S	20	22	44	16															
510	S	52	24	52	18															
511	S	32	20	58	22															
512	S	48	28	82	26															
218	R	60	26	30	14	24									8			Chl, Bio, Gar, schist with V.Q - oxi.		
219	R	190	58	66	24	42									1			Hornblende Gneiss.		
220	R	640	22	32	18	130									1			Amphibolite or Pyroxinite?		
221	R	84	22	60	18	16									2			Bio-Granodiorite, Light green staining - 221R & 223 R specially Composed & Selected green stuffs		
222	R	22	20	10	4	6									3					
223	R	2000	38	26	6	10									1					
224	R	66	16	30	4	10									8			Amphibolite ?		
225	R	210	32	110	26	52									1			Last Hope Mi Mine - pegmatite. fault zone		
226	R	56	290	78	98	90									7			Ferrugenous V.Q in Last Hope		
227	R	66	28	16	4	6									0.75			Qtz, bio, Gar, schist - peg - fault?		
228	R	16	30	24	16	130									1					
229	R	260	56	210	70	220									1					
230	R	>1%	24	56	16	34	50	0.12	x	10	15	1	2	x	1			Gar Amp. Bio, Qtz schist + Malachite 40%		
231	R	8400	36	78	22	44	60	0.24	14	20	10	2	1	x	2			Peg - Malachite stained - 30%		
232	R	34	38	18	4	4	x	x	x	15	25	2	5	x	0.75			Peg with greenish tinge - Nickel Bloom?		
233	R	28	50	130	60	54	10	x	10	15	25	3	1	x	1			Bank Rock from the drainage.		
234	R	-	-	-	-	-	—	—	—	—	—	—	—	—	—			Another Schist sample from same?		
235	R	>1%	22	20	6	10	40	1.1	14	10	20	2	14	0.005	7			Chl. Schist + V.Q Malachite & Azurite] 50%		
236	R	>1%	780	660	20	50	70	x	14	10	10	5	2	0.045	3			-do- Chl. Schist predominate.		
201	L	10	14	30	10													Soil Samples from Qtz Hill Air Strip. The area is Magnetic Low.		
202	L	10	14	34	10															
203	L	12	12	30	12															
204	L	14	22	30	12															
205	L	14	24	38	14															
206	L	14	20	40	12															
217	R	400	18	36	38	110				10	10	1				1.8	350			

SUMMARY OF GEOCHEMICAL SAMPLING & ANALYSIS

PA 2579

No	TYPE	STANDARD TOTAL 80 MESH								HEAVY MEDIA 80 MESH								DESCRIPTION	LOCATION	SPECIAL WORK
		Cu	Pb	Zn	Co	Ni	Ag	As	Mo	Cu	Pb	Zn								
201	R	4	16	26	4	4	.2	-	2									Qtz-Feld. gneiss, large metax crysts	PA 2579'	
202	R	4	32	16	4	2	.1	-	1									Qtz-Feld pegmatite		
203	R	10	32	24	2	4	.1	5	.75									Qtz-Feld "		
204	R	12	18	28	14	50	.4	-	1									Qtz-hornblende gneiss		
205	R	14	22	88	24	36	1.0	-	1									Garnet-micw schist		
206	R	78	22	58	38	60	.8	-	2									Diabase (meta) sill, 6' wide		
207	R	52	14	20	60	370	.5	-	.75									Diabase (?) Mafic rich		
208	R	14	20	48	30	46	.7	10	2									Diabase (?) " 50% amphibole		
209	R	4	16	12	6	8	.6	-	2									Diabase		
210	R	88	22	28	26	150	1.0	-	2									Diabase		
211	R	4	14	38	22	20	.7	-	1									Amphibolite segregation		
212	R	14	16	76	16	14	.7	-	3									Biotite gneiss = large felds. xtls.		
213	R	12	24	26	8	10	.3	-	2									Quartz/silicified o/c 8-10' wide, 60°/NW		
214	R	14	28	10	6	8	.3	-	1									"		
215	R	10	22	14	6	8	.2	-	2									"		
216	R	8	18	12	6	8	.5	-	1									"		
301	S	26	22	56	20															
302	S	14	22	46	22															
303	S	16	16	50	16															
304	S	16	20	56	20															
305	S	16	20	48	18															
306	S	22	22	52	18															
307	S	26	18	38	16															
308	S	30	18	54	16													50-60% pink garnet, 30% amphibole		
309	S	26	20	48	18															
310	S	30	16	52	20															
311	S	24	20	50	18													Tole Creek. Local rk. o/c is mica-fel.-qtz gneiss		
312	S	46	20	68	24															
313	S	28	16	52	16															
314	S	32	16	42	18															

SUMMARY OF GEOCHEMICAL SAMPLING & ANALYSIS

No	TYPE	STANDARD TOTAL 80 MESH								[illegible]								DESCRIPTION			LOCATION	SPECIAL WORK
		Cu	Pb	Zn	Co	Ni	Ag	Mn	As	Mo	Bi	Cd	Sr	W	Sb	Au	Sn	U	Cr			
8	S	16	26	48	12		0.7		5												PA 2579	
10	S	16	24	44	10		0.6		8													
1.	R	6	20	46		20	0.5	200	x	2	5	1	20	x	x	0.04	10	3	70	Pegmatite @ Last Chance Mine		
2	R	20	10	16		36	0.3	330	x	0.5	5	1	20	x	x	x	6	1	290	Hb rock w̄ peg. Lone Pine Mine		
3	R	4	14	8		4	0.1	60	5	0.75	5	2	5	x	x	x	4	1	30	Pegmatite, Huckella Dome		
4	R	12	20	90		40	1.4	4500	10	2	5	2	10	10	x	x	2	5	60	Heavytree Qtzite.		
5	R	6	14	18		6	0.2	190	x	0.5	10	1	35	x	x	0.10	4	4	40	p€ granite		
6	R	92	26	42		10	0.5	650	x	1	x	1	55	x	x	0.04	10	4	40	"		
7	R	14	20	20		6	0.2	260	x	0.5	5	1	45	x	x	x	6	3	20	"		
9	R	12	26	18		10	0.2	230	x	1	5	1	25	x	x	0.04	10	4	30	p€ schist w̄ magnetite		
11	R	10	10	10	6	6	0.3	120		0.5	5	1	5	x	x					p€ granite		
12	R	36	18	76	22	24	0.9	1050		7	10	2	85	x	x					p€ schist w̄ qtz. from vein		
16	R	6	8	6	4	6	0.2	130		1	5	1	x	x	x					Qtz vein w̄ tourmaline		
18	R	2300	22	52	430	1000	7.0	450		28	20	3	10	x	x					Qtz vein w̄ malachite and pyrite		
20	R	10	30	40	14	18	0.8	950		2	10	2	50	x	x					Qtz vein w̄ tourmaline		
22	R	16	24	38	16	20	0.6	1000		2	10	1	55	x	x					Quartzite, altered		
23	R	22	14	14	8	8	0.3	300		0.75	15	1	5	x	x					p€ schist		
24	R	24	26	32	14	24	0.6	400		1	10	1	90	x	x					p€ granite, altered		
25	R	4	12	12	6	4	0.2	310		0.75	10	1	5	x	x					" " near qtz. veins		
27	R	8	14	28	6	6	0.3	400		1	5	1	10	x	x					p€ schist w̄ much magnetite		
28	R	12	16	14	6	8	0.2	230		1	10	1	10	x	x					p€ granite, fractured		
30	R	18	16	8	4	4	0.1	240		4	10	1	5	x	x					p€ granite w̄ tourmaline		
13	S	22	18	36	14	x	0.6															
14	S	14	16	26	12	x	0.4															
15	S	16	14	30	20	x	0.8															
17	S	26	30	42	16	x	0.8															
19	S	14	14	26	12	x	0.3															
21	S	22	20	52	14	x	0.8															
26	S	16	16	78	12	x	0.5															
29	S	48	16	32	14	x	0.7															

PROSPECTING AUTHORITY 2579
ILLOGWA QUADRANGLE, N.T.

MONTHLY REPORT
OCTOBER, 1971

Dillingham Mining Company of Australia
A.C. Lewis House - 7th Floor
159 Kent Street, Sydney, N.S.W., 2000

PRELIMINARY

Dillingham Mining Company of Australia has, in agreement with the Authority holders, been involved with a reconnaissance examination of P.A. 2579 since mid-July, 1971. The work has involved airborne geophysical surveys and ground follow-up examinations employing professional geologic and geophysical personnel.

EXAMINATION ACTIVITIES

Work during the current report period has been limited to prospect examinations in the area east and immediately south of Huckitta Dome. Some ground follow-up investigations were also carried out over areas supporting low-priority magnetic anomalies identified during an earlier airborne geophysical survey.

Property Examinations

Generally, prospects and abandoned mines in the area investigated are of two types, shallow open-cuts for the most part involved with mica extraction and underground workings in pursuit of pegmatite emplacements and various iron-oxide stained fractures. Country rock in the vicinity of all workings comprised gneissic and schistose members of the Archean Arunta Complex.

Although detailed studies were made of the workings and their immediate surroundings, including sampling, geologic mapping and radiometric measurements, results failed to indicate the presence of a viable mining operation of any dimension.

Ground Magnetic Surveys

The majority of this work involved single scout traverses across previously spotted magnetic features located in the south-eastern

portion of the Authority. The investigations employed a McPhar M700 fluxgate-type magnetometer operated by a geologist and experienced field assistants. Results of this work are currently being processed.

PROPOSED ACTIVITIES

Activities during the forthcoming month are planned to involve a continuation of ground magnetic scout traversing in the Illogwa Shear Zone area and establishment of a ground marked grid layout to control a more detailed future magnetic survey.

LOGISTIC DETAILS

Work during the current month has employed a graduate geologist and field assistant. A minor amount of normal back-up was also provided by other members of the Company.

FFG/ss

PROSPECTING AUTHORITY 2579

ILLOGWA QUADRANGLE, N.T.

MONTHLY REPORT

NOVEMBER, 1971

Dillingham Mining Company of Australia
A.C. Lewis House - 7th Floor
159 Kent Street, Sydney, N.S.W., 2000

PRELIMINARY

Previous airborne and reconnaissance ground exploration of PA 2579 carried out by Dillingham Mining Company has culminated in the location of a uniquely attractive magnetic anomaly situated along the axial plane of the Illogwa Shear Zone in the south-central portion of the Authority. As a result of this discovery, Dillingham Mining has exercised its option with the Authority holders to continue its exploration for an indefinite period.

EXAMINATION ACTIVITIES

Activities during the current report period have been restricted to the southern portion of the Authority in the vicinity of the Illogwa Shear Zone. Work carried out has been involved with the establishment of a ground survey grid to control a forthcoming detailed magnetic survey.

Illogwa Anomaly

The Illogwa aeromagnetic anomaly has the largest susceptibility contrast of any of the magnetic features identified during the recently completed airborne survey. In brief, the overall anomalous area (Figure 1) is characterised by:

1) semi-annular distribution of minor but distinct magnetic highs distributed about a central main indication of 15,000 gammas;

2) location which coincides with the axial plane of a well-defined, north-plunging folded (anticlinal) shear zone; and

3) presence of anomalous amounts of copper, nickel and cobalt in rock plus scattered occurrences of small copper-gold-bearing stock works.

Based on the aeromagnetic data and first approximation interpretation methods, the peak anomaly is a 7000 gamma magnetic high with depth to the top of the feature not greater than 760 ft. Its strike length is a little over 1,700 ft. and it appears to dip steeply (60-70°) south.

Magnetic Grid Survey

Actual work in the area during November has involved the establishment of a ground grid to control a forthcoming magnetic survey. The grid's base line is approximately 25,500 ft. in length through the centre of the main magnetic indication and bears N25°E. Survey lines, established at right angles to the base, are 7,400 ft. in length and bear N65°W. Magnetometer readings are to be taken at 50 ft. intervals along the survey lines.

LOGISTIC DETAILS

Work during the report period involved a Survey Technician and field assistant. Other back-up assistance involving the Project Manager and various other personnel were periodically employed.

FFG/ss

PROSPECTING AUTHORITY 2579
ILLOGWA QUADRANGLE, N.T.

MONTHLY REPORT
DECEMBER, 1971

Dillingham Mining Company of Australia
A.C. Lewis House - 7th Floor
159 Kent Street, Sydney, N.S.W., 2000

PRELIMINARY

Exploration activities being conducted by Dillingham Mining Company of Australia in PA 2579 were temporarily terminated on December 15 due to high summer temperatures and an unusual amount of heavy rain. Work is expected to be resumed in April or earlier, weather permitting.

The actual search area of the Authority as originally defined in the Dillingham-Forbes et al Agreement was reduced from 736 square miles to 482 square miles on December 31, 1971, in accordance with Clause 4.3 of the Agreement (Figure 1).

EXAMINATION ACTIVITIES

Work during the current report period has been involved with a ground magnetic survey and geochemical rock-chip sampling in the vicinity of the Illogwa Shear Zone.

Ground Magnetic Survey

Magnetic survey work employed a McPhar M700, vertical field, flux gate type magnetometer. Details are as follows:

Line-miles traversed	15.4 miles
Lines traversed	11
Magnetic recordings	1,628

Although only 20% of the anomalous area has been covered to date, a preliminary review of the survey data thus far has confirmed earlier airborne reconnaissance work.

The best magnetic response so far has shown up on Lines 5000N and 5500N where intervals of 1,000 ft. and 900 ft. respectively have recorded an average of 8000 gammas over the background level.

The anomalous area is underlain by Lower Proterozoic quartz-feldspar-chlorite-tourmaline schists with interbedded amphibolite lenses. Large irregular massive and linear quartz emplacements are widespread.

PROPOSED ACTIVITIES

Resumption of field activities has been tentatively set for about April, 1972. Climatic conditions at present are extremely adverse to productive field work.

Completion of the ground magnetic survey is expected to involve some 40 additional traverse lines, or roughly 56 line-miles, and about two weeks involving a three-man crew.

LOGISTIC DETAILS

Personnel involved with PA 2579 exploration during the current month included two geologists, four prospecting assistants, a pilot and a cook. Transport employed three four-wheel drive vehicles, five trail-type motor cycles and a Fletcher (STOL-type) aircraft.

FFG/ss

2579

APPLICANT M.O. HUGHES, C.J. SISLEY, G.K. FORBES, H.S. CLAYTON
AREA 831. SQUARE MILES.
AREA GRANTED 736 SM.

RENT $831-00
ADV $12-00
$843-00.
9/7.49254
(3-11-64)

EL 620 621 Gazetted. 17-6-70 (NO 24)
APPROVED 2.6.70
PERIOD TWELVE (12) MONTHS 1-6-71
LOCATION WHITE QUARTZ HILL.
MINERALS COPPER
GOLDFIELD ARUNTA
DESCRIPTION

ALL THAT piece or parcel of land in the Northern Territory of Australia containing an area of 736 square miles more or less, the boundaries of which are described as follows -

Commencing at the intersection of latitude 23 degrees 10 minutes 00 seconds with longitude 135 degrees 00 minutes 00 seconds thence proceeding to the intersection of latitude 23 degrees 10 minutes 00 seconds with longitude 135 degrees 30 minutes 00 seconds thence proceeding to the intersection of latitude 23 degrees 30 minutes 00 seconds with longitude 135 degrees 30 minutes 00 seconds thence proceeding to the intersection of latitude 23 degrees 30 minutes 00 seconds with longitude 135 degrees 00 minutes 00 seconds thence to the point of commencement excluding therefrom all reserves, except reserves as defined by section 38Q of the Mining Ordinance 1939-1969, all mining tenements held or applied for and all rail and road reserves.

Application for Renewal recd 21-4-71 ($736-00
Period Twelve (12) Months To 1/6/72 9/602054
Approved 25/5/71 Gazetted 2/6/71 NO.22 (21-4-71)

135°15'

ILLOGWA SHEAR ZONE

Puh

P€a

639

621

624

471

470

455

454

23°30'

EXPLANATION

Puh	Heavitree Quartzite. Silicified sandstone strongly boudinaged in shear zone area	PRECAMBRIAN
P€a	Arunta Complex. Gneissic and schistose rocks.	
	Geologic Contact	
F	Fault	
30	Dip and strike of foliation	
471	Airborne survey line showing fudical number	
10 / 9	Magnetic contours x 10^3 (Total vertical field measured in gammas)	

LOCALITY SKETCH

This area falls on 1:250,000 Illogwa Creek sheet SF 53-15

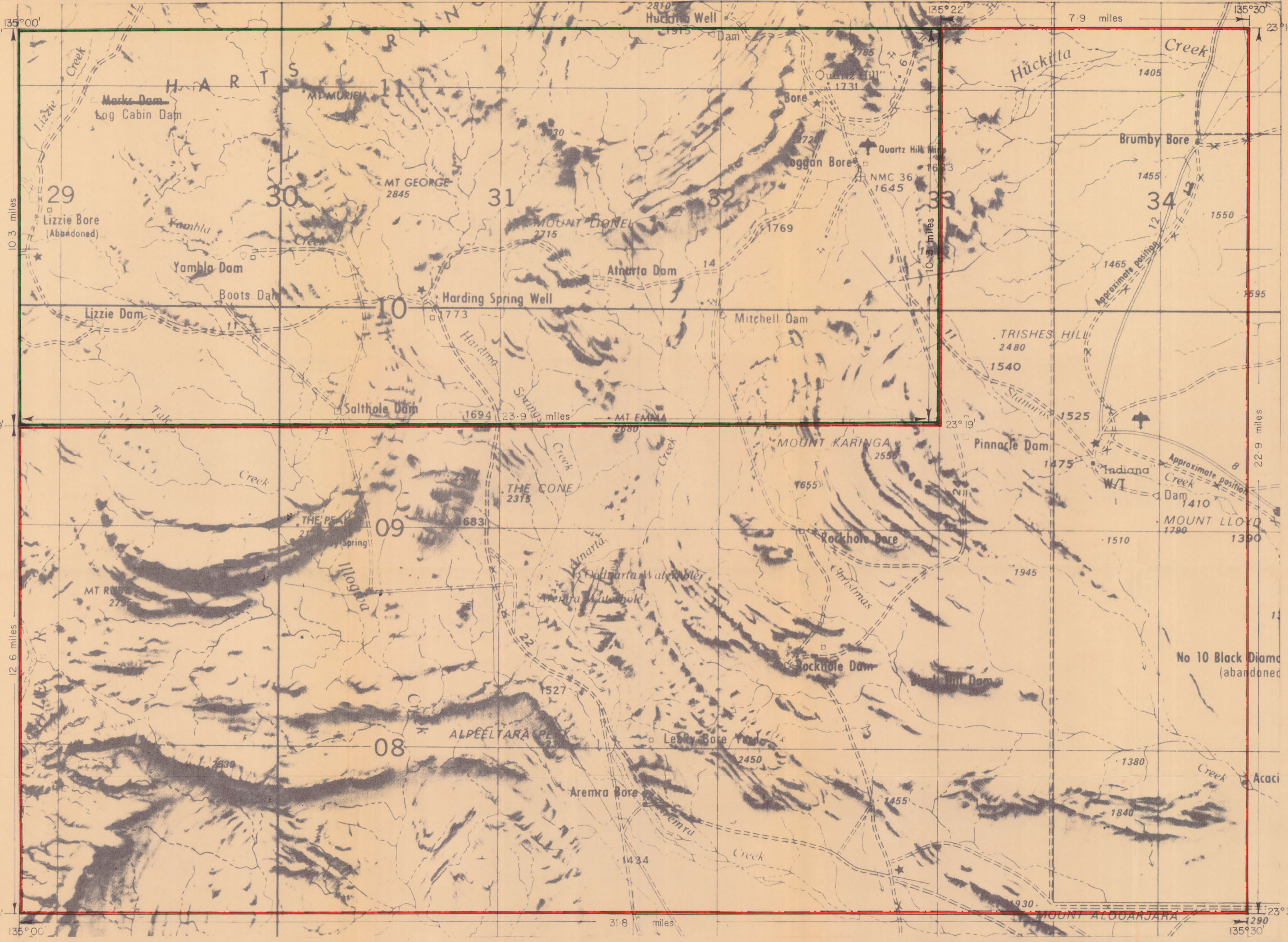
DILLINGHAM MINING COMPANY OF AUSTRALIA

SKETCH PLAN OF THE GEOLOGIC SETTING COVERING THE ILLOGWA SHEAR ZONE

To accompany PA 2579 November 1971 Monthly Report.

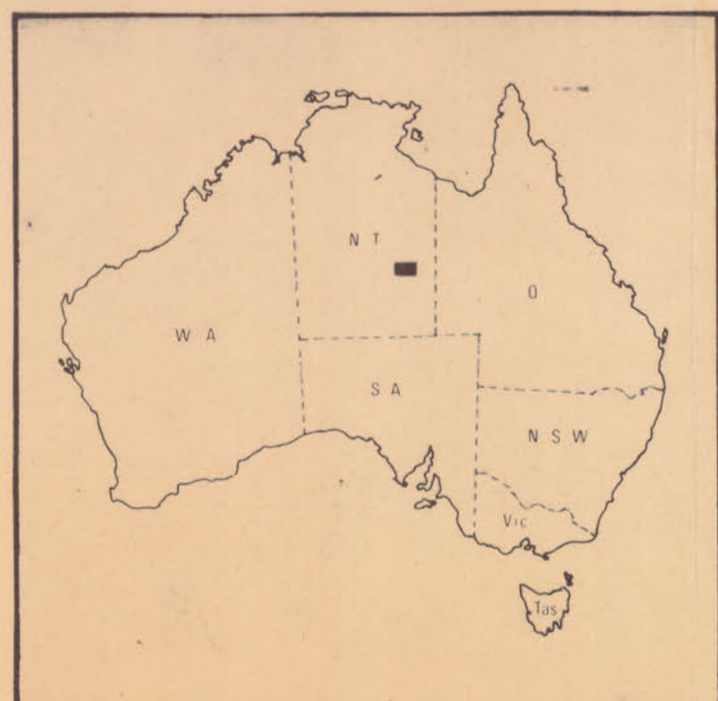
FIGURE 1.

MILES BAR SCALE 1 0 1 2 3 4


135°00'
23°10'
HARTS RANGE
Huckitta Well
Dam
135°22'
135°30'
7·9 miles
Marks Dam
Log Cabin Dam
Lizzie Creek
MT MURIEL
Quartz Hill 1731
Bore
Quartz Hill Mine
Coggan Bore
NMC 36 1645
Huckitta Creek
1405
Brumby Bore
1455
1550
29
30
31
32
33
34
MT GEORGE 2845
MOUNT LIONEL 2715
1769
Lizzie Bore (Abandoned)
10·3 miles
Yambla Creek
Yambla Dam
Boots Dam
Atnarta Dam
14
1465
Approximate position
1595
Lizzie Dam
10
Harding Spring Well
773
Mitchell Dam
TRISHES HILL 2480
1540
Harding
Salthole Dam
1694
23·9 miles
MT EMMA 2080
Spring Creek
23°19'
1525
Pinnacle Dam
MOUNT KARINGA 2550
Creek
THE CONE 2315
1655
1475
Indiana W/T
Indiana Creek Dam
1410
Approximate position
22·9 miles
THE PEAK
Spring
09
683
MOUNT LLOYD 1790
1390
1510
Rockhole Bore
Illogwa
Oolaarta Waterhole
Christmas
1945
MT RUBY
22
Rockhole Dam
No 10 Black Diamo
(abandoned
12·6 miles
1527
Creek
ALPEELTARA PEAK
Leeky Bore Yard
08
2450
1380
Creek
Acaci
Aremra Bore
1455
1840
Aremra Creek
1434
1930
MOUNT ALOOARJARA
1290
23°30'
135°00'
31·8 miles
135°30'

Relinquished Area : 254 sq. miles

Retained Area : 482 sq. miles (approx.)



DILLINGHAM MINING COMPANY OF AUSTRALIA

PROSPECTING AUTHORITY 2579
ILLOGWA QUADRANGLE, N.T.
(Approx. 482 sq. miles)

Magnetic Declination : 5°00' Easterly

MILES — BAR SCALE — MILES 0 1 2 3 4 5 6 7

ORIGINATOR F.F. GREENE DRAFTED S.L.G. DATE Jan. 1972

TO ACCOMPANY December 1971 Monthly Report

OFFICE SYDNEY REF/FILE No 6.3.2.3. SERIAL No 1.