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SML 584

KANYAKA

PROGRESS REPORTS TO LICENCE SURRENDER/PARTIAL RENEWAL FOR THE PERIOD 27/5/1971 TO 26/11/1971

Submitted by Electrolytic Zinc Co. of Australasia Ltd 1971

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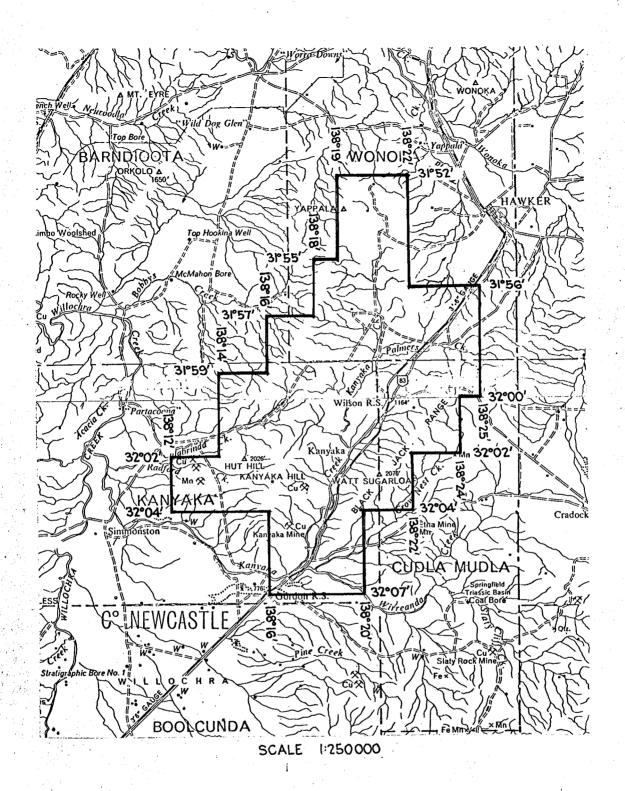
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ELECTROLYTIC ZINC 60. OF A/ASIA. LTD.

DOCKET D.M. 541/71 AREA 114 SQ MILES
1:250000 PLANS . PARACHILNA .
... ORROROO .

LOCALITY

S.M.L. No. 584

EXPIRY DATE 26.7.72

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TENEMENT: S.M.L. 584 - Kanyacka.

TENEMENT HOLDER: Electrolytic Zinc Of Australasia Ltd.

<u>REPORT:</u> No. 1 Three Monthly Period Ended 26th Aug. 1971.Pgs. 3-5 No. 2 " " 26th Nov. 1971.Pgs. 6-9

PLANS:	Sample	Locatio	ons & Num	bers (South	Stream).	1698-1
	Copper	Values	(P.P.M.)	Sheet	2.		1698-2
	Lead	11	11	11	ti .		1698-3
	Zinc	11	11	Ħ	11		1698-4
	Sample	Locatio	ns & Num	pers (North	Stream).	1698-5
	Copper	Values	(P.P.M.)	Sheet	1.	,	1698-6
	Lead	11	11.	11	†† •		1698-7
	Zinc	11	11,	11	11		1698-8

ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED EXPLORATION DEPARTMENT

Special Mining Lease No. 584

KANYAKA

Report No. 1 for three months ended 26th August, 1971

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ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED EXPLORATION DEPARTMENT

Special Mining Lease No. 584

Report No. 1 for three months ended 26th August, 1971

ABSTRACT

A stream geochemical sampling programme was commenced in the Lease.

GEOCHEMISTRY

Aerial photographs were obtained from the Lands Department and stream sheets drawn up at a scale of 1 inch to 1,700 feet.

Samples are being collected from sediments of creeks draining Lower Cambrian limestone.

Results of geochemical analyses are not yet available.

GEOLOGY

A brief geological investigation of the Lease area was made by a senior geologist.

With the permission of the claim-holders, the Kanyaka Mine was examined.

FUTURE PROGRAMME

Geochemical sampling will continue. An examination will be made of possible extensions of a rare earth anomally located by Kennecott Explorations (Australia) Pty. Ltd., in the Kanyaka Mine area.

PRESERVATION OF INFORMATION

Copies of all relevant reports and plans are kept at both our Melbourne and Adelaide offices.

PERSONNEL

Sampling is being undertaken by four field assistants under the supervision of a senior geologist.

R. A. Horn, Senior Geologist, Exploration Department.

ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED

EXPLORATION DEPARTMENT

Special Mining Lease No. 584 KANYAKA

Report No. 2 for three months ended 26th November, 1971

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D147-3	Copper values	Sheets	1	and	2
D147-4	Lead values	Sheets	1	and	2
D147-5	Zinc values	Sheets	1	and	2

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ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED EXPLORATION DEPARTMENT

Special Mining Lease No. 584

Report No. 2 for three months ended 26th November, 1971

ABSTRACT

A geochemical reconnaissance sampling programme was completed. Investigations were made of rare earth anomalies in the vicinity of Kanyaka Mine. A brief geological study was made of the southern portion of the Lease.

GEOCHEMISTRY

1. Base metals

Samples were collected at the intersections of creeks draining Lower Cambrian sediments. Several lead-zinc anomalies were located and found to be related to the Parachilna Formation at the base of the Cambrian. The intensity of these anomalies is of the order of seven times background.

A more intense anomaly was found in creeks draining a crush zone in the south-east of the Lease. Lead values were as high as 1,000 ppm.

Stream sheets, showing distribution of lead, zinc and copper, were drawn up at a scale of 1 inch to 1,700 feet.

2. Rare earths

Investigations of a rare earth anomaly, reported in the previously quarterly report (No. 1 for three months ended 26th August, 1971) failed to duplicate high lanthanum, yttrium and scandium values recorded by Kennecott (in

Johns R. K., 1969, Rep. Bk. No. 67/77, G. S. No. 4105, D.M. 1686/68, South Australia Department of Mines).

As rare earths are significant indicators of carbonatite/kimberlite rocks, further field examinations will be pursued with the intention of locating intrusions similar to the Orroroo occurrence.

GEOLOGY

A brief examination of literature and field mapping within the area of the Orroroo four-mile sheet (Binks 1968) was undertaken in an attempt to relate Kanyaka geologically with known kimberlite/carbonatite material in Special Mining Lease No. 646 at Orroroo. Work is in progress and several interesting aspects are being pursued.

CONCLUSIONS

- 1. Anomalies related to the Parachilna formation are thought to reflect dispersion of primary, possibly syngenetic, mineralisation within this formation. Although the possibility of economic mineralisation has not been eliminated, anomalies discovered do not warrant the high cost of geophysical surveying and drilling which would be required to investigate the formation further.
- 2. Anomalies related to the crush zone in the southern part of the Lease are probably related to complex tectonics. It is considered further information may be gained from detailed geological examination of this area.
- 3. Although rare earth analyses failed to duplicate previously recorded anomalies, the discovery of carbonatites and kimberlites at Orroroo strengthens the contention that similar igneous suites may be present in the southern part of the Lease.

FUTURE PROGRAMME

It is intended, with the approval of the Minister of Mines, to reduce the area of the Lease by approximately one half, and concentrate investigations in the southern portion.

The programme will consist of detailed geological investigations of both the area surrounding the claimed Kanyaka Mine and the crush zone to the east. (See "Geochemistry" above)

PRESERVATION OF INFORMATION

Copies of all relevant reports and plans are kept at Melbourne and Adelaide offices.

PERSONNEL

Company personnel consisted of one senior geologist and a field assistant operating from the Company's Flinders Base and Hawker camp. Assays and analyses were undertaken by McPhar Geophysics and AMDEL.

