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**EXPLORATION LICENCE NO. 61/94
ARTHUR RIVER, TASMANIA
ANNUAL REPORT 1996-1997**

EL61/94
30 JUL 1997
See folio 40

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25th July, 1997

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1.0 SUMMARY

- EL61/94 was taken up in order to explore for silica flour.
- Reconnaissance mapping has identified seven occurrences of silica flour in the licence area.
- Auger drilling and sampling of a substantial silica flour occurrence on Blackwater Spur Road No1 will be carried out in 1997-1998.
- More detailed mapping of EL61/94 will also be carried out in 1997-1998.

2.0 INTRODUCTION

H.D Nolan, operating under the name Cominex, produces silica flour from a mining operation at Corinna, near the lower Pieman River in western Tasmania. The silica flour is processed at a plant at Heybridge, in north western Tasmania, and is sold to Japanese manufacturers of lead crystal, optical systems and electronic components.

A serious downturn in market conditions for silica flour has adversely affected the mining and processing operations in the period 1994-1997. However, the outlook for 1997-1998 is much more promising with the Japanese firms of Kyuritsu and Sumitomo returning to the market and the French division of Corning entering the market. Also, the USA division of Corning has taken trial shipments of the processed silica flour and may enter the market on a long term basis.

EL61/94 contains silica deposits which appear to be of comparable quality to the Corinna deposits. Thus, they are of considerable interest as possible additional reserves for the existing mining and processing operations.

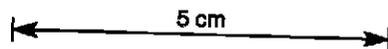
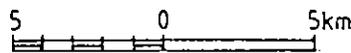
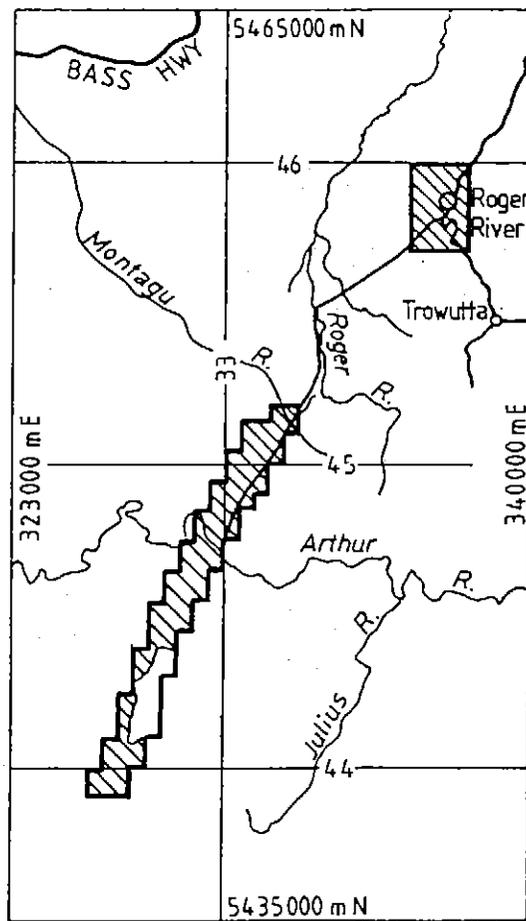
3.0 TENEMENT INFORMATION

EL61/94 was applied for in 1994 and granted for ten years from 9.6.1995. The tenement is located near the Arthur River in north western Tasmania, some 30 km SSW of Smithton.

The tenement comprises 23 km² and consists of two separate parts (Figure 1). There is a rectangular area of 6 km² at Roger River and an elongate area of 17 km² which extends SSW from where the Roger River Road crosses the Montagu River to where the Blackwater Road crosses the Blackwater Rivulet.

The part of EL61/94 that is at Roger River is mostly in farmland whereas the larger, more southerly part is mostly in State Forest.

1. Locality map showing the two parts of EL61/94.



4.0 GEOLOGY

Both parts of EL61/94 lie along the Roger River Fault, a structure of regional scale which separates mafic lavas and volcanoclastics of the Kanunnah Subgroup to the east from dolomite and limestone of the Smithton Dolomite to the west (Seymour and Calver, 1995; Calver *et al.*, 1995).

In the part of EL61/94 that is at Roger River there are hard, brecciated, siliceous rocks which are well exposed in road metal quarries beside the Roger River Road. These rocks probably represent completely silicified dolomite though primary textures are difficult to confidently identify.

In the more southerly part of EL61/94 there are exposures of Kanunnah Subgroup along the Roger River Road, Sumac Road and Blackwater Road. There are exposures of Smithton Dolomite on Blackwater Road, near the Stephens Rivulet.

The Smithton Dolomite may be equivalent to the Corinna Dolomite at Corinna (Calver, 1996). The silica flour deposits which are mined at Corinna are residual deposits developed on silicified Corinna Dolomite.

5.0 SILICA FLOUR IN EL61/94

Silica flour occurs in the southerly part of EL61/94, on spur roads west of Blackwater Road and on the Blackwater Road towards the southern end of the tenement. It is a residual material which appears to have been derived from silicified Smithton Dolomite.

Reconnaissance mapping has identified silica flour deposits in the following localities, given by their AMG coordinates:

Easting (m)	Northing (m)
326700	5440500
326750	5440400
327750	5443500
327800	5443875
328550	5444050
328250	5444900
329100	5447000

X

Along an E-W section of about 500m length on Blackwater Spur Road No1, near 329100E5447000N, there are good exposures of silica flour in road cuttings and in a shallow excavation beside the road. Though the silica flour in part of the interval contains abundant fragments of relatively hard lump silica, part of the interval comprises fairly uniform silica flour with few lumps.



2. Portion of the Sumac 1:25000 topographic map (Tasmanian Land Information Bureau) showing the section of interest on Blackwater Spur Road No1.

5 cm

6.0 CONCLUSIONS

The exposure of silica flour and related materials on Blackwater Spur Road No1 is of substantial width and warrants further investigation by augering, pitting and analysis. The remainder of the southerly part of EL61/94 requires more detailed mapping in order to identify any other substantial developments of silica flour.

7.0 PROPOSED WORK PROGRAM

Work to be carried out in 1997-1998 will comprise the following:

	Estimated cost (\$)
Mapping and surface sampling	4000
Auger drilling and sampling	9000
Sample analyses	4000
Administration	1500
Total	\$18500

8.0 ENVIRONMENTAL MATTERS

No disturbance by earthworks or cutting of vegetation was caused during the reconnaissance work described here.

No cutting of vegetation or making of tracks will be done in the 1997-1998 program. Augered material will be returned to the auger holes.

9.0 REFERENCES

- Calver, C.R. 1996. Reconnaissance isotope chemostratigraphy of Neoproterozoic carbonates in western Tasmania. *Tasmanian Geological Survey Record* 1996/10.
- Calver, C.R.; Corbett, K.D.; Everard, J.L.; Goscombe, B.A.; Pemberton, J.; Seymour, D.B.; (comp.). 1995. *Geological Atlas 1:250 000 digital series. Geology of Northwest Tasmania.* Tasmanian Geological Survey.
- Seymour, D.B. and Calver, C.R. 1995. Explanatory notes for the time-space diagram and stratotectonic elements map of Tasmania. *Tasgo NGMA project.* *Tasmanian Geological Survey Record* 1995/01.