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**EL61/94 ARTHUR RIVER.
ANNUAL REPORT TO 9th JUNE 2004**

Volume 1 of 1

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25th July, 2004

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1.0 Summary

- No field work was carried out in EL61/94 during the year to 9.6.04.
- Sumitomo Australia Ltd has become a 30% partner with Cominex Pty Ltd in CML7M/97 Brookside and EL35/2003 Hawkes Creek-Stephens Rivulet. There is a current proposal that this arrangement be extended to include EL61/94 Arthur River.
- Sumitomo Australia Ltd has prepared a comprehensive and confidential review of the market for thin film transistor liquid crystal displays (TFT LCD), and of the Tasmanian silica interests that it shares with Cominex.

2.0 Introduction

Cominex Pty Ltd produces high purity silica from residual deposits of quartz sand and quartz silt ('silica flour') in mining lease CML7M/97 Brookside, which is near Corinna in western Tasmania. The material is refined at Index Mineral Processors' plant at Heybridge, near Burnie, and sold as a cleaned and sized product to Sumitomo Australia Ltd for distribution to overseas manufacturers of TFT LCD glass.

Similar silica deposits occur near the Arthur River, some 60 km north west of Corinna. Cominex has interests in two exploration licences in the Arthur River district. These are EL61/94 Arthur River and EL35/2003 Hawkes Creek-Stephens Rivulet. The silica resource in the Arthur River district is less pure than the Corinna silica (Turner, 2000), but is of considerable interest as a potential blending ingredient with the high grade Corinna material. The development of a satisfactory blending operation will be dependent on the future performance of the Index processing plant, and/or on the construction of a new plant by Sumitomo.

3.0 Partnership

A close association has existed between Sumitomo Australia Ltd and Cominex Pty Ltd since the developmental stages of silica mining at Corinna. During the year to 9.6.04 Sumitomo became a 30% partner with Cominex in CML7M/97 Brookside and EL35/2003 Hawkes Creek-Stephens Rivulet Creek. Sumitomo will be a partner in future exploration and there is a current proposal that Sumitomo will earn a 30% interest in EL61/94 Arthur River by participating in a forthcoming drilling program.

4.0 Work carried out

No field work was carried out in EL61/94 during the year to 9.6.04. However, Sumitomo carried out a wide ranging review of the TFT LCD industry and of the

present situation as regards the Cominex-Sumitomo partnership's Tasmanian silica interests. Cominex co-funded this review with an amount of \$17,500. Aspects covered by the review included manufacturing, competitive raw materials, technical specifications and the current performance of the Tasmanian processing plant. The resulting report is presented as Appendix 1 and is strictly confidential.

5.0 Proposed work

The aim of the Cominex-Sumitomo partnership for the present year (to 9.6.05) is to advance the resource assessment of EL61/94 Arthur River to a stage at which an application can be made for a Retention Licence, or the tenement can be relinquished. Systematic auger drilling will be an essential part of the resource assessment and it is anticipated that a track mounted rig that is being acquired by Stacpoole Drilling will be suited to the job. The new rig is expected to arrive in the State in September.

6.0 References

Turner, N. J. 2000. EL61/94 Arthur River. Interim report to 31st May, 2000. H. D. Nolan, Cominex.

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25th July, 2004

EL61/94 Arthur River. Annual report to 9th June, 2004

Appendix 1: CONFIDENTIAL

Stuart, C. 2004. Tasmanian silica for TFT glass. Sumitomo Australia Pty Ltd.

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25 June 2004
Chris Stuart,
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Tasmanian Silica for TFT Glass

1) Market Situation

a. TFT Production

i) Overview

Thin Film Transistor (TFT) type LCD started to gain prominence in the market from around 1997 starting with small displays such as mobile phones and other hand held devices. Until around 2000, large size TFT (ie >10") were mainly for use in laptop computers. The next major segment in the market was TFT desktop computer monitors and by 2002 their production units exceeded TFT laptops for the first time. By 2003 the difference between desktop and laptop TFT production reached 10million units, and in the same year, potentially the largest TFT market segment, television began.

In terms of a year-on-year growth rate, increases of 40% or more have been recorded on a unit basis every year since 1998.

According to a Nikkei Market Access survey, 97.45 million units were produced in 2003, for a 49.9% increase compared with 2002.

Another trend is the move towards larger screen sizes for computer and TV as technology improves. Until 2002, the 15" type was the standard TFT monitor size. In 2003, products with larger screens rapidly gained popularity. The output of the 17" type increased by about 20% percent and for the first time achieved the highest portion among monitors. TFT panel makers aim to further shift their production to 19" models. As the demand for larger panel TVs is also rising, the production ratio of 19" and larger panels has significantly risen this year.

With respect to overall TFT production Samsung Electronics Co, Ltd has emerged as the No 1 producer on the global stage, according to a US market research firm, DisplaySearch. That organization also announced on June 8 that Samsung Electronics outsold LG.Philips LCD Co, Ltd in the first quarter of 2004, gaining the top position in global market share for the first time.

On an area basis, Samsung accounted for 23.5% of the market share, followed by LG.Philips with 20.8%, and by Taiwan maker AU Optronics with 13.2%.

ii) Television

TV production will probably gain position as the segment with the largest consumption of TFT area in the medium term. Worldwide production of liquid-crystal TVs skyrocketed in 2003, up 163% to 3.63 million units, according to Nikkei Market Access. The same organisation forecasts a year-on-year increase to 7.69 million units in 2004 or 4.4% of the world TV market. They further predict a level of 10.5-11.0 million units in 2005.

Display Search forecast that demand for LCD TVs is expected to surpass that for PDP TVs this year. PDP TVs will account for 3.4% of the world TV market in 2004 and 4.5% in 2005, up from a 3.2% share in 2003.

Looking at the brand rankings in terms of LCD TV production volumes, Sharp still holds a strong position, although its share is narrowing. Sharp's share is estimated at 40-45% in 2003, followed by Samsung Electronics Co, Ltd (16%), Matsushita Electric Industrial Co, Ltd (Panasonic) (8%), Sony Corp (7%) and LG Electronics Inc (6%). But production seems to be centred on 4 to 6 major players, namely Sharp, Samsung (producing for Samsung, Sony through a J/V and external customers), LG Philips (for their own brands and for external customers) and Taiwanese producers of OEM units, particularly AU Optronics (eg for BenQ, Fujitsu) and to a less extent HannStar and Chimei, both mainly for Japanese brands.

b) TFT Glass Production

Four major glassmakers, Corning, Asahi, NEG and NH Technoglass, control the market. The dominant player in the market is the Corning Group, including its Korean joint venture with Samsung, SCP (Samsung Corning Precision), with currently 5 production sites it holds in excess of 50% of the market. The other 3 players make up the balance. Technically also Corning dominates, with its so-called fusion process, it lays claim to best surface characteristics and eliminates the polishing step. Asahi's float glass technology also has some positives, such as ability to scale up to very large sizes and elimination of toxic de-bubbling agents. However earlier this year Asahi was forced to cancel supply contracts because of low yields.

All four glassmakers are scaling up both glass melting and glass finishing lines. In order keep up with the glass demand significant expansion of existing operation is planned for this year and next. Between now and the end of 2005 glass production is forecast to increase by 55-60%. Referring to the attached "TFT LCD Glass

Production Map”, the 2 sheets show the status as of end June 04 and current announcement and plans that will be implemented before the end of 2005.

Besides these immediate increases significant further investment is planned by NEG, Asahi and NH in Korea. They each have announced plans for glass finishing lines there, at least one or two of them would be expected build glassmaking facilities as the next step.

This year Corning announced investments totalling US\$780mil to expand their capacities at Shizuoka, Tainan and the creation of a new plant at Taichung, Taiwan.

Asahi’s 2004 and 2005 investments in Taiwan (2 glass making lines and 4 polishing lines) are estimated at US\$260mil.

c) Silica Suppliers

The attached 2 sheets also show details of competitors supplying silica for TFT use.

i) BaoLin/Sibelco

BaoLin became a 100% subsidiary of Sibelco in 2003. They purchase pre-spiralled and washed Cape Flattery (MSK) silica and dry-process it in Taiwan using a Hicom mill which generates about 50% over-fine material which is sold mainly as a raw material for fibreglass. Processing costs are relatively high, but raw material cost is low.

Sibelco is one of the giants of silica production worldwide and parent company of Unimin. Belgian silica is sold to Asahi presently but it is thought to be one of the reasons for Asahi’s low yield – the cost compared to quality, particularly PSD control is not good. Asahi will probably give up using this product once they have decided on an alternative (possibly Index silica).

ii) SAC

SAC also processes Cape Flattery sand, similar to Baolin. Their factory is near Pusan and most of the equipment is owned by MSK. Initially their quality (PSD control) was said to be poor, but they improved measurably complying with SCP’s requests and instructions. Processing cost is also relatively high, but raw material cost is low.

iii) Kosem

Kosem will probably become the main supplier to SCP’s Asan plant in future. They dry-process pre-spiralled and washed Rocla sand in Korea – from Western Australia. Milling and dry-classifying technology appears very good. Overfine material (approx 40%) is sold for use in porcelain production. Processing

costs are similar to BaoLin and SAC, but they are a **low-margin mentality company**.

iv) Hi Silica

Part of the Morimura group, Hi Silica grinds and sizes very pure quartz rock in Japan. The rock comes from their joint venture in India where it is mined and partially crushed. Relatively high raw material and production costs lead to this being the most expensive silica used in TFT glass. It's only used by NH.

v) US Silica

It is favoured by Corning USA, probably because it is locally available. It comes from tertiary river deposits and is chemically inferior to other silicas, and not competitive outside the USA.

d) Technical Aspects of Silica for TFT Glass

Glass formulations are closely held secrets of TFT glassmakers, and important points of silica are also not widely disclosed. However 4 main points are:

- PSD size and control
- Low colouring oxides (Cr, Fe, Mn, Sn, Ti, Ni, Cu)
- Low alkali
- Balance of Mg, Ca, Al.

PSD has two important characteristics – actual size, and consistency of size. Basically there are 2 common size fractions used, NEG and NH with high-pressure furnaces use 250-75 μ but with different requirements for the amounts in the 75-45 μ fraction. Corning and Asahi require silica in the range 100-45 μ with max 30-35% less than 45 μ . Large and small particles have different melting speeds and other negative impacts on the consistency of melting, so avoiding top and bottom end fluctuations is extremely important.

The colouring oxides impart colour to the glass and can also have a negative impact as selective leachates during the TFT etching process, as do, but even more so, alkalis (K, Na).

MgO, CaO, and Al₂O₃ in certain low levels have been reported as having a particular positive characteristic. But the details are not disclosed.

e) Corinna Resource

The Corinna resource has particular characteristics that allow it to be suitable for TFT glass:

- PSD of the raw material is largely within the size range required of finished product – minimum milling is required.
- Good melting characteristics.
- Apart from Cr and Ti, other colouring oxides are particularly low. Cr and Ti must be removed by processing.
- CaO and MgO are consistent and present at suitable levels.
- Alkali content is particularly low.

The negative points are:

- It is remote and difficult to ship in bulk therefore transport cost is high.
- To take advantage of the good particle size we need to process fines particles also. Removal of the fine particles of TiO₂ and Cr is not as easy as removing coarse particles of heavy minerals. A wet process is necessary which increases plant capital costs. Moreover the levels of TiO₂ and Cr varies significantly in the deposit so close and professional monitoring of impurity levels is required.

Details of the main commercial occurrences in the resource are listed below:

Corinna Silica Reserves – June 04

Area	Probable Reserve KT	Possible Reserve KT	Fe ₂ O ₃ , TiO ₂ , Cr (ppm)	Comments
1-2 Rockgarden & Premium Pit	40	70	<10, <40, <2.	Based on '02 Newnham data and subsequent mined tonnes.
1-2 Potters Knob	?	20	<20, <100, <5.	Limited tonnage – near geological (dolomite) border.
2 West (LN Area 4)	50	80	<20, <250, <10.	Down grade Newnham calculations due to significant tertiary gravel incursions.
West 2 West (Longworth Mackenzie Area 4/5)	100	144	<20, <450, <5.	High TiO ₂ means blending with other grades is essential. TiO ₂ usually decreases with depth.
3 Main Pit Floor (Turner Data '04)	100	300	<15, <40, <2.	
3 Main Pit Face	10	15	<20, <90, <5.	Possible extension much further, more drilling end '04.
3 East	?	?	?	One drill hole intercepted 30m silica beneath RL137. One trench approx 80m intercepted silica at RL134. More drilling end '04.
3 North	10	20	<20, <150, <3.	
5	30	48	<20, <450, <5.	High TiO ₂ means blending with other grades is essential. TiO ₂ usually decreases with depth.
6	120	300	<30, <100, <5.	50% <20 Fe ₂ O ₃ . 1980's Johnson inferred 3mil mt. Much more testing required to define precisely.
	460	1000		

f) Index Processing

There is no doubt that if we rely on Index as a processor for Corinna silica the business will collapse in the near future. Some of the problems are:

- Poor QC resulting in many foreign objects (rubber, metal, insects, rags, string, stones etc), poor product condition (which resulted in the loss of SCP business) and inconsistent product (one factor in the loss of CJKK business).
- Laboratory performance have improved considerably over the past six months since a chemist was employed, but still some techniques are modified without prior approval resulting in inaccuracies.
- There are very serious concerns with the method of producing certificates of analysis and the reliability of the test results contained therein – CJKK's concerns lead to the loss of business with them.
- Production is poorly planned and managed resulting in low yield, low production rates, high levels of unplanned downtime, virtually no in-process control, self-contamination and lack of accumulation of production techniques, lack of documented standard procedures for production, and lack of ability to fill orders.

The conclusion is that we are now evaluating setting up an alternative processing facility.

TFT LCD Glass Production Map

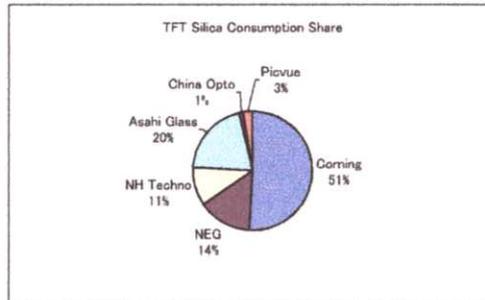
June 2004

Manufacturer	Location	Furnace	mt/month									
			SiO2 demand	Index	Bao Lin	SAC	US Silica	Hi Silica	Kosem	Sibelco	Total	
Corning	Harrodsburg, US	5	500	0	0	0	500	0	0	0	0	500
CJKK	Shizuoka ¹	6	660	0	660	0	0	0	0	0	0	660
	Tainan, Taiwan ²	1	100	0	100	0	0	0	0	0	0	100
SCP	Asan ³	13	1560	0	1320	0	0	0	200	0	0	1520
SCP	Kumi	8	660	0	200	500	0	0	0	0	0	700
NEG	Notogawa ⁴	2	365	365	0	0	0	0	0	0	0	365
	Takatsuki	3	615	615	0	0	0	0	0	0	0	615
NH Techno	Yokkaichi	5	400	0	0	0	0	400	0	0	0	400
	Singapore	3	240	0	0	0	0	240	0	0	0	240
	Taiwan ⁵	1	80	0	0	0	0	80	0	0	0	80
Asahi Glass	Tsurumi	3	900	0	900	0	0	0	0	0	0	900
	Amagasaki	1	500	0	0	0	0	0	0	500	0	500
AFT	Taiwan ⁶	1	0	0	0	0	0	0	0	0	0	0
China Opto	Taiwan ⁷	1	75	0	75	0	0	0	0	0	0	75
Picvue	Taiwan ⁸	1	180	0	180	0	0	0	0	0	0	180
Total		53	6835	980	3435	500	500	720	200	500	6835	

- Note:
- 1 2 more furnaces planned end '04, further 2 first half '05
 - 2 3 more furnaces planned end '04
 - 3 9 more furnaces planned in '04, '05
 - 4 1 large furnace planned in each of Sep '04 and Q1 '05.
 - 5 NH Techno Taiwan has plan to add 2 more furnaces by end '04
 - 6 AFT has plan to start 500mt furnace in Sep '04, and one more May '04
 - 7 China Opto has plan to add 150mt furnace in H2 '04
 - 8 Picvue status is still pre-commercial actual operation should be much lower at present.

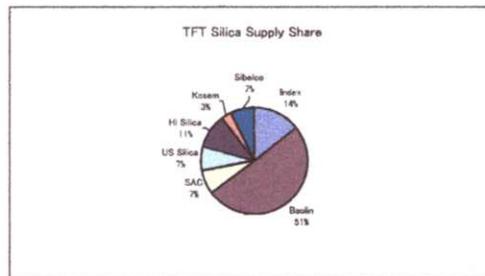
TFT Glass / Silica Consumption Share

Manufacturer	Qty	Share
Corning	3480	51%
NEG	980	14%
NH Techno	720	11%
Asahi Glass	1400	20%
China Opto	75	1%
Picvue	180	3%
Total	6835	100%



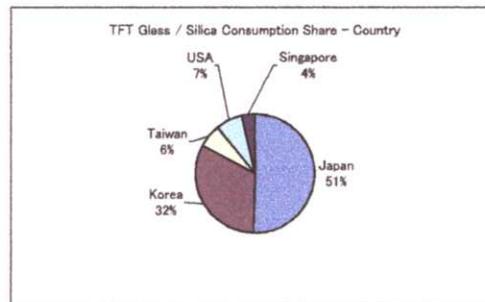
TFT Glass / Silica Supply Share

Manufacturer	Qty	Share
Index	980	14%
Baolin	3435	50%
SAC	500	7%
US Silica	500	7%
Hi Silica	720	11%
Kosem	200	3%
Sibelco	500	7%
Total	6835	100%



TFT Glass / Silica Consumption - Country

Manufacturer	Qty	Share
Japan	3440	50%
Korea	2220	32%
Taiwan	435	6%
USA	500	7%
Singapore	240	4%
Total	6835	100%

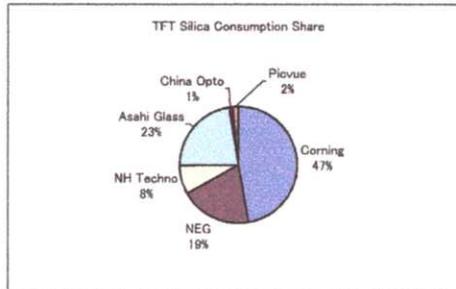


Manufacturer	Location	Furnace	mt/month								Total
			SiO2 demand	Index	Bao Lin	SAC	US Silica	Hi Silica	Kosem	Sibelco	
Corning	Harrodsburg, US	5	500	0	0	0	500	0	0	0	500
	Shizuoka ¹	10	1200	0	1200	0	0	0	0	0	1200
	Tainan, Taiwan ²	3	300	0	300	0	0	0	0	0	300
SCP	Asan ³	22	2420	0	1320	0	0	0	1100	0	2420
SCP	Kumi	8	660	0	0	660	0	0	0	0	660
NEG	Notogawa ⁴	5	1465	1465	0	0	0	0	0	0	1465
	Takatsuki	3	615	615	0	0	0	0	0	0	615
NH Techno	Yokkaichi	5	400	0	0	0	0	400	0	0	400
	Singapore	3	240	0	0	0	0	240	0	0	240
	Taiwan ⁵	3	240	0	0	0	0	240	0	0	240
Asahi Glass	Kelhin, Yokohama	3	950	0	950	0	0	0	0	0	950
	Takasago, Hyogo	1	500	500	0	0	0	0	0	0	500
	Taiwan ⁶	2	1000	500	500	0	0	0	0	0	1000
China Opto	Taiwan ⁷		75	0	75	0	0	0	0	0	75
Picvue	Taiwan ⁸	1	180	0	180	0	0	0	0	0	180
Total		74	10745	3080	4525	660	500	880	1100	0	10745

- Note:
- 1 2 more furnaces planned end '04, further 2 first half '05
 - 2 3 more furnaces planned end '04
 - 3 9 more furnaces planned in '04, '05
 - 4 1 large furnace planned in each of Sep '04 and Q1 '05.
 - 5 NH Techno Taiwan has plan to add 2 more furnaces by end '04
 - 6 AFT has plan to start 500mt furnace in Sep '04, and one more May '04
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 - 8 Picvue status is still pre-commercial actual operation should be much lower at present

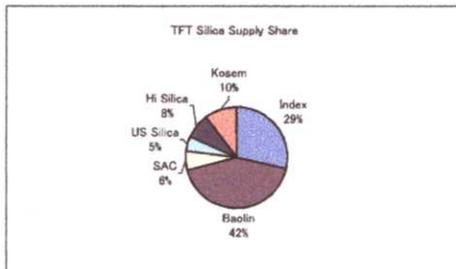
TFT Glass / Silica Consumption Share

Manufacturer	Qty	Share
Corning	5080	47%
NEG	2080	19%
NH Techno	880	8%
Asahi Glass	2450	23%
China Opto	75	1%
Picvue	180	2%
Total	10745	100%



TFT Glass / Silica Supply Share

Manufacturer	Qty	Share
Index	3080	29%
Baolin	4525	42%
SAC	660	6%
US Silica	500	5%
Hi Silica	880	8%
Kosem	1100	10%
Sibelco	0	0%
Total	10745	100%



TFT Glass / Silica Consumption - Country

Country	Qty	Share
Japan	5130	48%
Korea	3080	29%
Taiwan	1795	17%
USA	500	5%
Singapore	240	2%
Total	10745	100%

