

**EL25/2004    Alberton**

**Annual Report**

**2004-05**

**Prepared by JT Carswell**

**JT Carswell & Associates  
Mine Geology Consultants**

**For L Stebbings & M Dunham  
LIDDS**

**October 2005**

## Summary

Exploration Licence EL 25/2004 comprising 12 square kilometres at Alberton was granted on 8<sup>th</sup> October 2004 to Low Impact Diamond Drilling Specialists P/L (LIDDS).

The area being explored was previously held by Hercules Resources as EL 23/92 Alberton. LIDDS previously explored the area under a joint venture agreement with Hercules Resources and last reported in October 2003 (MRT reference 03\_4974).

In 2004-05 one drill hole (RUL02) was completed testing the depth extension of the Ringarooma United Prospect. This hole completed a three hole program planned and commenced in 2000-2001. RUL 01 and RUL 03 were completed in 2000-2001 (EL 23/92 Alberton Annual Report 2000-2001, MRT reference 02\_4634).

Drill hole RUL02 intersected silicified and quartz veined Mathinna siltstones and sandstones with weak sulphide mineralisation and low grade gold.

Mining plans of the Ringarooma United Mine were digitised and the location of surface openings surveyed with differential GPS.

## **Table of Contents:**

- 1.0 Introduction
- 2.0 Exploration Objectives
- 3.0 Location and Access
- 4.0 Regional Geology
- 5.0 Previous Work
- 6.0 Exploration Completed During the Reporting Period
- 7.0 Discussion and Conclusions
- 8.0 Expenditure
- 9.0 References

## List of Appendices:

- Appendix 1 Drill Log RUL02.
- Appendix 2 Surface plan Ringarooma United Mine (not included with digital report)

## **1.0 Introduction:**

Exploration Licence EL 25/2004 comprising 12 square kilometres at Alberton was granted on 8<sup>th</sup> October 2004 to Low Impact Diamond Drilling Specialists P/L (LIDDS).

The area being explored was previously held by Hercules Resources as EL 23/92 Alberton. LIDDS previously explored the area under a joint venture agreement with Hercules Resources and last reported in October 2003 (MRT reference 03\_4974).

In 2004-05 one drill hole (RUL02) was completed testing the depth extension of the Ringarooma United Prospect. This hole completed a three hole program planned and commenced in 2000-2001. RUL 01 and RUL 03 were completed in 2000-2001 (EL 23/92 Alberton Annual Report 2000-2001, MRT reference 02\_4634).

Drill hole RUL02 intersected silicified and quartz veined siltstones and sandstones of the Mathinna Beds with weak sulphide mineralisation and low grade gold. The hole intersected a number of barren quartz filled shear zones similar to the host structure in the Ringarooma United Mine. There is minor alteration, but no clear evidence of folding.

Mining plans of the Ringarooma United Mine were digitised and the location of surface openings surveyed with differential GPS. There is an apparent error in the original mine surveying.

## **2.0 Exploration Philosophy and Objectives**

The philosophy and objectives of the exploration undertaken by LIDDS is directed to the definition of a substantial hard rock gold resource that would be amenable to narrow vein, underground mining.

Exploration is targeted at down dip extensions of the Ringarooma United Mine ore structures, Premier, Rosalind and Gumsucker.

### **3.0 Location and Access**

Exploration License EL 25/2004 is located near the rural township of Alberton, situated in the north-eastern region of Tasmania.

The license is situated within both rural and state forest areas and is serviced by an excellent network of sealed and all weather graded roads and fire trails.

Topographic relief varies from gently undulating pasture areas to steep hills and ridges with deeply incised valleys developed in the central area of the license. Vegetation in non-farmed areas is dominated by wet-sclerophyll forest.

## 4.0 Regional Geology

The exploration licence area is within the linear Mangana-Alberton-Warrentinna-Lyndhurst goldfield.

This goldfield occurs within the probably Silurian to Devonian part of the Mathinna Beds of northeast Tasmania. These rocks consist of an apparently monotonous sequence of interbedded, fine to medium grained, commonly graded quart-rich sandstone beds and pelites. These rocks are intruded by I and S type granitoids ranging in age from Late Devonian to Early Carboniferous. The younger granitoids contain fluorite, topaz, and apatite, and are extensively mineralised in tin and tungsten. These rocks are overlain unconformably by possibly Carboniferous and the Permo-Triassic sedimentary rocks of the Parmeener Supergroup, which contain sills of Jurassic dolerite. Subsequent Tertiary volcanism has produced isolated but extensive basaltic lava flows, some of which in the Alberton-New River region interdigitate with sediments of inferred Tertiary age. All rock units are overlain unconformably and mainly in valleys by Pleistocene-Recent sedimentary deposits. (Taheri, MRT Report 1993/34)

Gold occurs in quartz veins of possibly different generations. The veins trend in two main directions, northwest and southwest, with the later dominating the Alberton field.(Taheri, MRT 1993/34).

The age of the gold is uncertain; however it is probable that gold mineralisation was concurrent with folding and cleavage development prior to emplacement of the Devonian granites.

## **5.0 Previous Work.**

Auriferous quartz veins were discovered in the Alberton gold field prior to 1883 (Thureau, 1883). Over one hundred gold bearing lodes were subsequently discovered and mined between 1883 and 1939.

Recent exploration of the Ringarooma United Mine was first undertaken by Newcrest Mining Limited under EL 23/92. An exploration program in 1992-1993, part of work on a large tenement, included 1:25,000 scale geological mapping, image processing and interpretation of aeromagnetic data, drainage sampling and detailed geochemical sampling.

The tenement was explored by Mancala under a joint venture arrangement in 1993-1994. Mancala re-established access to the Long Tunnel and completed 255 metres of drilling from underground sites with poor results.

During 2000-2001 (Denwar, 2001) two diamond drill holes (RUL01 and RUL03) totalling 433.6 metres were completed by Low Impact Diamond Drillers (LIDDS) in a joint venture with Hercules Resources Pty. Ltd (Mancala had changed its name to Hercules resources in 1998). A 0.8 metre interval in RUL01 assayed 85.9 grams per tonne gold with coarse visible gold. A 0.4 metre interval in hole RUL03 returned an assay of 14.8g/t gold.

## **6.0 Exploration Completed in the Reporting Period**

### **Drilling**

During 2004-05 one drill hole RUL02 was completed to complete the three hole program planned and commenced in 2000-2001.

Drilling commenced on 6<sup>th</sup> June 2005 and was completed at a depth of 223.7 metres. The drill log is appended. (appendix 1)

The hole intersected interbedded silicified locally brecciated and strained sandstone and siltstones with weak to locally strong quartz veining, and very weak sulphide mineralisation associated with high strain zones. Bedding disruption and BCA variability is common but there is no clear evidence of folding. The lithologies represent typical Mathinna Beds. Apart from silicification and minor carbonate alteration there is little evidence of proximity to granites.

Twelve half core samples were fire assayed for gold with all samples assaying less than 0.1 grams per tonne.

No attempt has yet been made to correlate the zones of quartz veining with lode structures in the Ringarooma United Mine. Such a compilation may well demonstrate that RUL01, RUL 02 and RUL 03 were collared to close to the hangingwall of the Premier lode to achieve an intersection of the Premier lode below the old workings

The results of the drilling indicate that the gold mineralisation at the Ringarooma United Mine is irregular and confined to short strike length lodes. The results are consistent with the mining history and the Mancala underground drill program.

### **Data Compilation**

Historic detailed mine surveys were digitised with the eventual aim of compiling all mine data to a standard format. Surface features including drill collars and mine openings were surveyed using differential GPS.

The mine workings and selected surface features were plotted at 2500 scale and are provided with this report as an appendix (appendix 2).

There is an apparent error of about 16m between the Rosalind Adit and the Premier Adit which may be an error in the original mine survey datum. There is an error of about 24m but at the Long Tunnel Adit in the opposite direction to the Rosalind and Premier Adits but the Long Tunnel Adit has been modified recently by exploration work undertaken by Mancala

Further work is required to resolve the errors and to present the mining history and the results of recent drilling on section.

## **7.0 Conclusions and Recommendations**

Drill hole RUL02 was completed in the reporting period and was the third of a three-hole program planned to test for extensions of the Premier, Gumsucker and Rosalind Lodes beneath the old mine workings. RUL02 failed to intersect significant gold mineralisation.

The drill results are consistent with recent drilling and the mining history, which indicated that the gold bearing lodes had a short strike length.

It is recommended that data compilation be completed and that detailed spatial models of the ore structures be developed before planning future drilling.

The gold bearing structures are yet to be tested adequately below the old mine workings.

## 8.0 Expenditure:

<b>Low Impact Diamond Drilling Specialists</b>								
		Qrt ending 31/3/5	Qtr ending 30/6/5	Qtr ending 30/9/5	Qtr ending 31/12/5			
MRT Visit	Rock drill	08/07/04 2,000						
	Assays	21/07/04 145						
	Meals and Acc Hobart M&L	19/07/04 300						
	M&L Wages	18/19/9/4 1,200						
Site Visit	MD, LS, JC	20/21/9/4 3,088						
	Assays	10/11/04 547						
Site Visit	Wages	02/01/05 1,700						
	Travel	02/01/05 866						
	Rock Chip Assays	23/03/05 30						
Drilling	Drilling (inc mobilisation)		6/6/5-30/6/5 24,000	30/6/5-8/7/5 9,381				
	Adminstration		6/6/5-30/6/5 1600		30/11/05 800			
	Geological Superv.		6/6/5-30/6/5 4000		2,500			
	Surveying (surf and downhole)				825			
	Data processing				600			
	Assaying				1,250			
Data Compilation / Reporting								
	Survey					16/10/05 450		
	Digitising					16/10/05 726		
	Geology (logging /reporting)					31/12/05 5500		
<b>Quarterly Total</b>			<b>9,329</b>	<b>29,600</b>	<b>15,356</b>		<b>7,476</b>	
<b>Cumulative</b>			<b>9,329</b>	<b>38,929</b>	<b>54,285</b>		<b>61,761</b>	

## **9.0 References:**

Ackerman, T.E., 1998b. Annual report for EL: 23/92 Alberton. September 1997 to September 1998 Unpublished report for Mancala Propriety Limited

Denwer, K.P., 2001. Annual Report for EL 23/92- Alberton for the period 2000-2001. Unpublished report for Low Impact Diamond Drilling Specialists(LIDDS)

Denwer, K.P., 2002. Annual Report for EL 23/92- Alberton for the period 2001-2002. Unpublished report for Low Impact Diamond Drilling Specialists(LIDDS)

Denwer, K.P., 2003. Annual Report for EL 23/92- Alberton for the period 2002-2003. Unpublished report for Low Impact Diamond Drilling Specialists(LIDDS)

Griffith, A.,M 1999. Annual report for EL 23/92 Alberton, 1998-1999. Unpublished report for Low Impact Diamond Drilling Specialists

## Appendix 1

### Drill Log RUL002 Low Impact Diamond Drilling Specialists

#### Summary

Interbedded silicified locally brecciated and strained sandstone and siltstones. Weak to locally strong quartz veining. Very weak sulphide mineralisation associated with high strain zones. Bedding disruption and BCA variability common but no clear evidence of folding. Typical Mathinna Beds. Apart from silicification and minor carbonate alteration there is little evidence of proximity to granites.

#### Collar Surveys

#### Down Hole Surveys

Date	Depth	Azimuth (mag)	Azimuth (true)	Dip
12/6/5	20	110		63
12/6/5	50	110		63
13/6/5	80	109		63
17/6/5	110	108		63
18/6/5	140	108		63
19/6/5	170	107.50		63
23/6/5	222 (EOH)	109		63

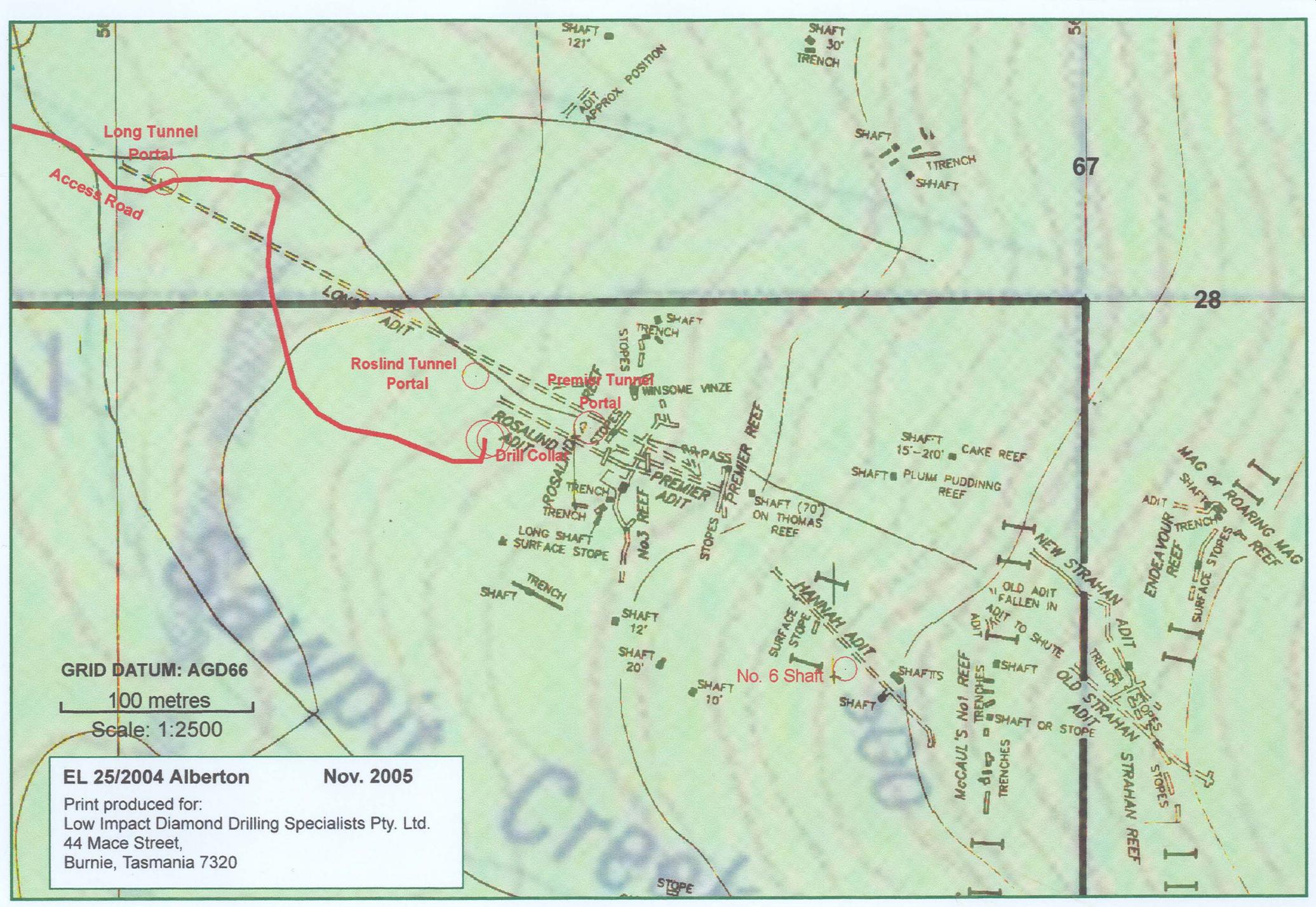
#### Assays

Sample No.	Au Assay ppm
494169	0.125
494170	0.015
494171	<0.001
494172	0.010
494173	0.021
494174	<0.001
494175	<0.001
494176	0.010
494177	0.063
494178	0.069
494179	0.028
494180	<0.001

## Detailed Log RUL002

Depth	Description	Core Recoveries (from-to, cm core;)
0-15.3	Buff weathered fine grained sandstone. Minor (<5%) multiphase quartz minor carbonate veining – minor siltstone units at 60 degrees to CA.	0-2.2,80;2.2-4.0,146;4.0-4.8,64;4.8-5.7,73;5.7-7.9,220;7.9-10.0,210;10.0-11.6,150;11.6-12.9,117;12.9-14.2,113;14.2-17.2,284;
15.3-37.8	Interbedded sandstone – dark grey siltstone/shale BCA 60 – minor disseminated sulphides. Multiphase quartz veining < 10%. Fracture zone 27.5-31.5. Breccia 27.0-27.2 disrupting interbeds. Base of oxidation 24.2	17.2-18.3,98; 18.3-20.7,254;20.7-23.4, 257; 23.4-24.6, 112; 24.6-26.7, 205; 26.7-27.7, 100; 27.7-29.2, 150; 29.2-30.2, 80; 30.2-30.8, 65; 30.8-32.7, 185; 32.7-34.0, 140; 34.0-35.7, 148; 35.7-37.7, 200;
37.8-42.5	Silicified, brecciated and veined sandstone. High strain zone – minor (<1%) sulphides. Sample 494169 38.7-39.7 BCA 50	37.7-38.7,100; 38.7-41.4, 268; 41.4-43.7,200;
42.5-59.6	Weakly bedded siltstone/finme sandstone. Weak irregular quartz veining and brecciation. Some spotting of dark carbonaceous siltstone. BCA 65-70. Incipient boudinage of sandstone at 45.3	43.7-44.7,100; 47.7-50.7,287; 50.7-53.7,285; 53.7-54.8,106; 54.8-56.2,140; 56.2-57.7,150; 57.7-58.4,70; 58.4-59.2,70; 59.2-60.0,60;
59.6-74.3	Silicified/brecciated sandstone minor siltstone. BCA 50. Less than 1% sulphides some associated with veining. Sample 494170 60.4-60.7 intense silicification. 494171 64.7-64.8 brecciation. 494172 65.3-65.45 intense silicification. 494173 68.7-68.8 sil and brecciation. Fracture zone 71.4-73.4. Fault/core loss 71.2-72.1 Base of oxidation 60.0	60.0-60.8, 105; 60.8-61.6, 56; 61.6-62.7, 104; 62.7-64.6, 185; 64.6-65.7, 102; 65.7-66.7, 120; 66.7-67.7, 95; 67.7-68.7, 100; 68.7-70.2, 140; 70.2-71.2, 98; 71.2-72.1, 26; 72.1-73.4, 124; 73.4-74.7, 125;
74.3-80.7	Dark grey sheared carbonaceous siltstone – veined – ‘intercalated’ breccia and massive sandstone. BCA 90-70. Kink at 80.6	74.7-77.7, 285; 77.7-80.7, 300;
80.7- 127.0	Grey sandstone and veined massive sandstone. Moderate to strongly sheared and brecciated. BCA variable 50-80. Minor sandstones with carbonates and second and third phase quartz veining. Sample 494174 84.7-84.8 silicification/brecciation/veining 494175 99.8-99.9 secondary sulphides on joint planes 494176 117.2-117.3 brecciation/veining	80.7-83.6, 275; 83.6- 85.0, 140; 85.0-86.7, 150; 86.7-84.7(?),120; 84.7-86.7, 200; 86.7-89.7, 300; 89.7-92.7, 300; 92.7-95.7, 300; 95.7-98.0, 220; 98.0-101.1, 310; 101.1-104.2, 310; 104.2-104.5, 25; 104.5-106.5, 185; 106.5-109.1, 250; 109.1-112.1, 300; 112.1-155.2, 310; 115.2-118, 280; 118-119.7, 140;119.7-120.5, 80; 120.5-122.7, 220; 122.7-125.7, 300;

127.0-128.5	Buck quartz/brecciation weak carbonate. Sample 494177 secondary sulphides on joint planes	125.7-128.7, 300;
128.5-211.2	Massive sandstone. Minor variable quartz veining. Minor variable dark grey fine sandstone BCA 60. Possible facing at 187.6 down hole.	128.7-131.7, 300; 131.7-134.7, 300; 134.7-137.7, 300; 137.7-139.6, 180; 139.6-140.7, 110; 140.7-143.7, 300; 143.7-146.7, 300; 146.7-149.7, 300; 149.7-152.7, 300; 152.7-158.7(?), 300; 158.7-161.7, 300; 161.7-164.7, 300; 164.7-167.7, 300; 167.7-170.7, 300; 170.7-173.7, 300; 173.7-176.7, 300; 176.7-179.7, 300; 179.7-182.7, 300; 182.7-185.7, 300; 185.7-187.6, 190; 187.6-188.7, 110; 188.7-191.0, 180; 191.0-191.7, 170; 191.7-194.7, 300, 194.7-197.7, 300; 197.7-200.7, 300; 200.7-203.3, 260; 203.3-206.4, 310; 206.4-209.5, 310; 209.5-211.8, 210;
211.2-211.6	Brecciated and veined sandstone minor sulphides. Sample 494178 211.4-211.7	211.7-212.7, 90;
211.6-222.7 (EOH)	Sandstone/siltstone quartz veining. Intense silicification minor sulphides. Sample 494179 217.9-218.0 intense silicification. 494180 221.7-221.8 Breccia/sil/minor sulphides. Little evidence of hydrothermal alteration. Carbonate content and quartz veining increase down hole.	212.7-215.7, 300; 215.7-218.7, 300; 218.7-221.7, 300; 221.7-222.7, 90.



GRID DATUM: AGD66

100 metres

Scale: 1:2500

EL 25/2004 Alberton

Nov. 2005

Print produced for:  
 Low Impact Diamond Drilling Specialists Pty. Ltd.  
 44 Mace Street,  
 Burnie, Tasmania 7320