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EL 2326

PANDAPPA HILL

**ANNUAL AND PROGRESS REPORTS FOR THE PERIOD
1/5/97 TO 30/4/2001**

Submitted by

Havilah Resources NL
2001

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**PRIMARY INDUSTRIES
AND RESOURCES SA**

Havilah Resources NL

ANNUAL REPORT FOR EL 2326,

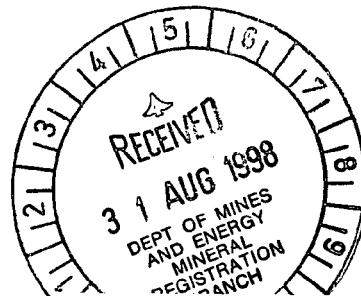
PANDAPPA HILL

Compiled by Dr. Chris Giles

Exploration Manager

Havilah Resources NL

July 1998



Mines & Energy SA

R98/00482

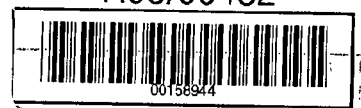


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Figure 1. Location map for EL 2326

Table 1. Gold assay results for selected vein quartz samples from EL 2326

1. INTRODUCTION

Exploration Licence 2326, Pandappa Hill, covers an area of 2326 square kilometres in the northeastern part of the Burra 1:250,000 sheet area (Figure 1). It may be conveniently accessed by numerous secondary roads and from the Barrier Highway, which runs along the western and northern side of the tenement. The physiography is marked by north-south trending strike ridges comprised of more resistant rocks and intervening flat valleys, typical of the southern Flinders Ranges.

The area was secured because of the widespread indications of gold mineralisation, which it was desired to put in the context new geological interpretations arising from recent mapping and release of SAEI geophysical data.

2. GEOLOGICAL SETTING

The tenement is largely underlain by Neoproterozoic sedimentary rocks of the Adelaide Geosyncline, which have been deformed into a series of elongate dome and basin shallowly plunging folds. A largely complete stratigraphic sequence, including members of the Burra Group in the anticlinal cores, ranging upwards through the Umberatana Group to the youngest Wilpena Group quartzites, is preserved in the regional fold structures. In the east of the EL area, near the abandoned Bendigo homestead, there are small exposures of Delamerian igneous intrusive rocks including dolerite and syenite.

Recent re-mapping of the Burra 1:250,000 sheet has revised the previous apparently simple geological picture (eg Dare, 1995 ; Preiss, 1996 ; W. Cowley, pers. comm.). One of the most important observations is that thrusting, in addition to folding, most likely causes a complex repetition of units within the sequence, with possibly important implications for mineralisation.

Minor gold occurrences are widespread within EL 2326, where they are mostly, although not exclusively, associated with more psammatic layers within the tillitic units of the Umberatana Group. Such an association is commonly noted for the Nackara arc segment of the Adelaide Geosyncline and is considered to be an important exploration guide in the region (Morris and Horn, 1989).

3. PREVIOUS EXPLORATION WORK

Apart from the historic prospector activity, the first well documented exploration in the region available on open file is that of Pacminex in the 1975-78 period, who completed an extensive Cu, Pb and Zn stream sediment survey over much of the current EL area. Their follow up was mostly concentrated in the Twighams area immediately south of EL 2326.

CSR re-explored the area in 1984-85, with a bias towards gold. Their chief technique was the then newly developed BLEG sampling method. They took some 91 five kilogram samples and 27 one hundred gram magnetic fraction concentrate samples from drainages in the area. Only three significant anomalies were returned, which had their source in known gold mineralised areas at Waite Hill and the Ulooloo - Twighams area.

Newmont, and later Conquest Mines in joint venture, carried out similar BLEG drainage sampling, but mostly concentrated on the area in the vicinity of the Ulooloo Goldfield.

SCHEDULE A

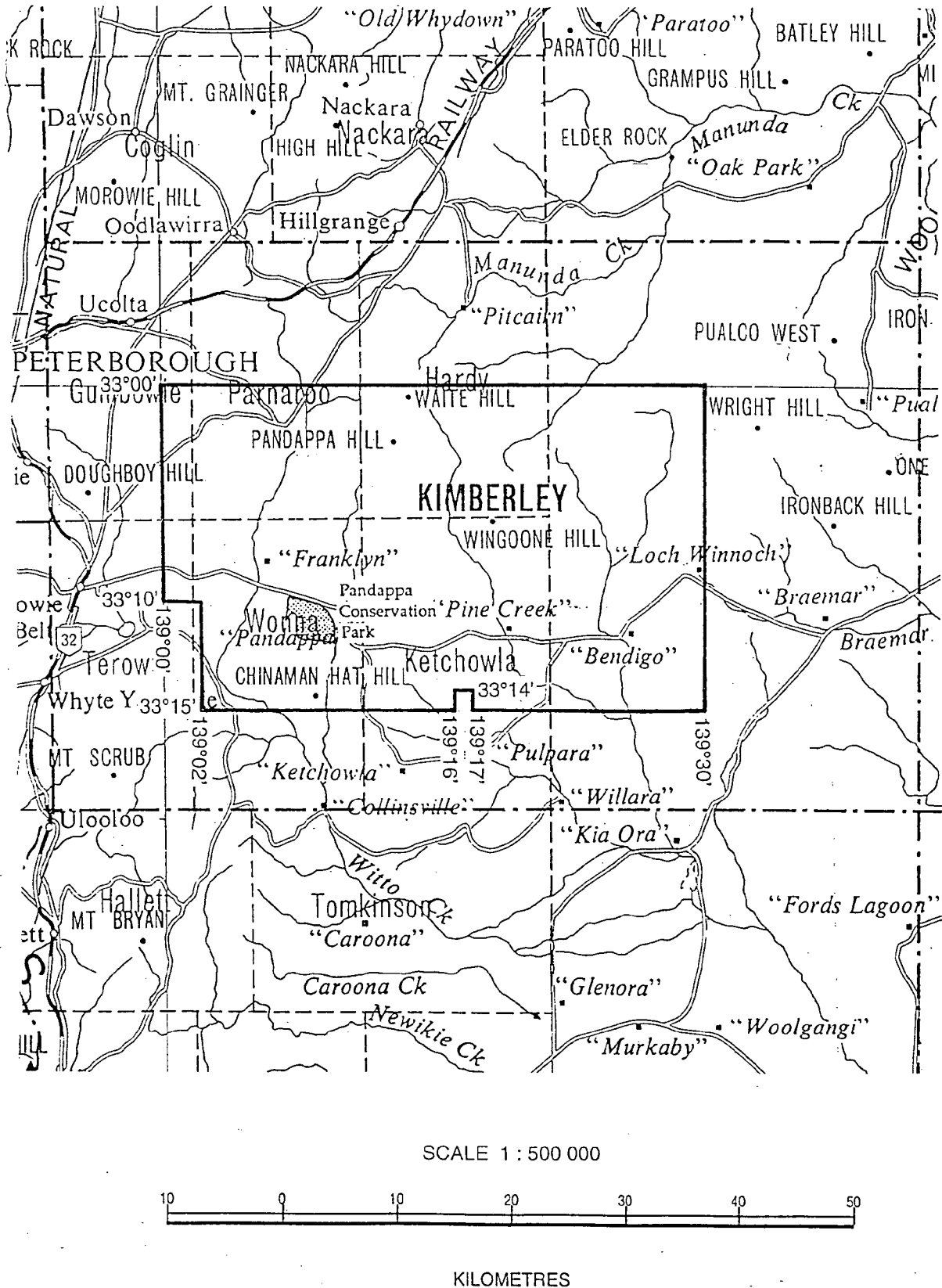


Figure 1 General location map for EL 2326

NOTE: There is no warranty that the boundary of this Exploration Licence is correct in relation to the other features on the map. The boundary is to be ascertained by reference to the Australian Geodetic Datum.

In late 1986, Nobelex Limited sampled and drilled Hennig's prospect which lies near the northern boundary of EL 2326. The low grade results returned from sampling of the workings, was duplicated in the drillhole results with a best intersection of 2 metres of 1.8 grams per tonne gold. As far as can be ascertained from the open file records, Nobelex's drilling programme is the only serious attempt at drill-testing gold mineralisation on the EL area to this time.

4. CURRENT EXPLORATION WORK

In view of the widespread occurrences of minor gold mineralisation within EL 2326, Havilah Resources primary exploration objective was to locate areas where there was the possibility of significant enhancement of gold caused by particularly favourable structural / lithological settings. As a result, the work to date has involved:

- A. Carrying out a thorough search of all open file information relating to previous exploration activity in the region (see summary above).
- B. Acquisition and interpretation of SAEI aeromagnetic and radiometric data, and integrating this data with the known geology of the area.
- C. Air-photo controlled geological reconnaissance mapping and rock chip sampling.

The latter work is continuing and has not yet been compiled at the date of this report. Several favourable structural settings have been investigated, which show quite extensive quartz-sulphide stockwork veining in quartzite units or shear structures. However rock chip sampling results for gold have invariably been extremely disappointing. Assay results for a representative selection of prospective vein quartz samples from several localities are presented in Table 1, with the highest value being only 0.3 ppm. To date, no prospects have been located that give indications of economic levels gold.

5. FUTURE EXPLORATION WORK

The basic geological prospecting and reconnaissance work initiated during the current reporting period will be continued in the future until all potentially prospective settings as identified on air photographs and from available geological and geophysical data have been satisfactorily investigated. In view of the relatively good exposures in the area, it is believed that this is still the most cost-effective approach for the initial first-pass assessment. The sole objective of all future field work, as in the past, will be to locate gold targets that warrant drilling follow up.

6. REFERENCES

Dare, D.L. 1995. The anatomy of a fold and thrust terrain in the northern Mount Lofty Ranges, South Australia. An appraisal of the structural evolution and the implications for gold and basemetal mineralisation in the region of the Ulooloo Gold Reserve. *University of Adelaide. Honours thesis.*

Morris, B.J. and Horn, C.M. 1989. Review of gold mineralisation in the Nackara Arc. South Australia Department of Mines and Energy. *Report Book, 89/16.*

Preiss, W.V. 1996. New members of the Waukaringa Siltstone. *MESA Journal*, 1, pp 40-45.

Unpublished company reports on open file in the MESA records library

1974-76 EL 158	Pacminex Pty Ltd	MESA envelope 2489
1976-78 EL 270	Pacminex Pty Ltd	MESA envelope 2904
1984-85 EL 1299	CSR Limited	MESA envelope 5967
1987-88 EL 1344	Newmont Holdings / Conquest	MESA envelope 6756
1986-88 EL 1349	Nobelex	MESA envelope 6792

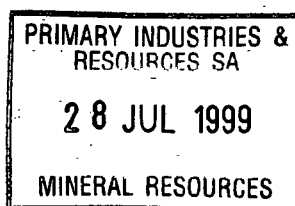
SAMPLE NUMBER	LONGITUDE	LATITUDE	Au (ppm)	COMMENTS
16220	139° 08' 11"	33° 17' 49"	0.03	Silicified and quartz-veined dolomite
16221	139° 07' 15"	33° 16' 32"	<0.02	Quartz-carbonate veined, chloritised tillite
16222	139° 01' 17"	33° 07' 32"	<0.02	Quartz-pyrite ladder veins in faulted tillite
16223	139° 08' 03"	33° 10' 05"	0.04	Quartz pyrite ladder veins in massive quartzite member of tillite unit.
16224	139° 06' 59"	33° 10' 30"	0.30	As for 16223, shallow diggings nearby
16226	139° 28' 30"	33° 07' 32"	0.04	As for 16223, adjacent to ironstone unit.
16227	139° 28' 38"	33° 07' 41"	0.05	Vein quartz material from dump of shaft adjacent to sheared massive ironstone and quartzite contact.
16228	139° 28' 38"	33° 07' 41"	0.03	Vein quartz from mine dump. Hosted by ironstone.
16229	139° 25' 52"	33° 09' 26"	0.04	Quartz-limonite ladder veins hosted by quartzite unit on south side massive ironstone unit.
16230	139° 25' 52"	33° 09' 26"	0.04	White vein quartz from shaft dump, adjacent to massive ironstone unit.
16231	139° 26' 11"	33° 11' 54"	0.03	Vein quartz material from drill chips.
16232	139° 26' 45"	33° 12' 31"	0.07	Quartz-limonite vein material hosted by syenite.

TABLE 1. GOLD ASSAY RESULTS FOR SELECTED VEIN QUARTZ SAMPLES FROM EL 2326

**ANNUAL AND PARTIAL RELINQUISHMENT
REPORT FOR EL 2326,
PANDAPPA HILL**

Compiled by
Havilah Resources NL

July 1999



PIRSA

R99/00300



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- Figure 1.** Location map for EL 2326
- Figure 2.** Relinquished and retained portion of EL 2326
- Table 1.** Gold assay results for selected rock chip samples from EL 2326

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- C. Air-photo controlled geological reconnaissance mapping and rock chip sampling.

During the current period the reconnaissance air photograph controlled mapping and sampling continued. Further favourable structural settings identified by air photo interpretation were investigated; some showed quite extensive quartz-sulphide stockwork veining in quartzite units or shear structures. As in the previous period, rock chip sampling returned disappointingly low gold values in spite of promising lithologies. Assay results for a representative selection of prospective vein quartz samples from several localities are presented in Table 1, with the highest value being only 0.15 ppm. To date, no prospects have been located that give indications of economic levels gold. Moreover, the basic geological mapping on the Orroroo 1:250,000 geological map was found to be generally accurate with respect to the distribution of prospective psammitic lithologies.

5. FUTURE EXPLORATION WORK

As the result of the current reconnaissance work, the greater part of EL 2326 was judged to be of low prospectivity for gold mineralisation. Consequently, at the time of renewal of EL 2326, the majority of the area was relinquished (Figure 2). The area around Bendigo Homestead was retained, owing to the indications of mineralisation adjacent to the contact of the Bendigo Granite. In the next period it is planned to carry out soil sampling in covered areas, with the objective of locating targets for shallow follow up drilling.

6. REFERENCES

Dare, D.L. 1995. The anatomy of a fold and thrust terrain in the northern Mount Lofty Ranges, South Australia. An appraisal of the structural evolution and the implications for gold and basemetal mineralisation in the region of the Uooloo Gold Reserve. *University of Adelaide. Honours thesis.*

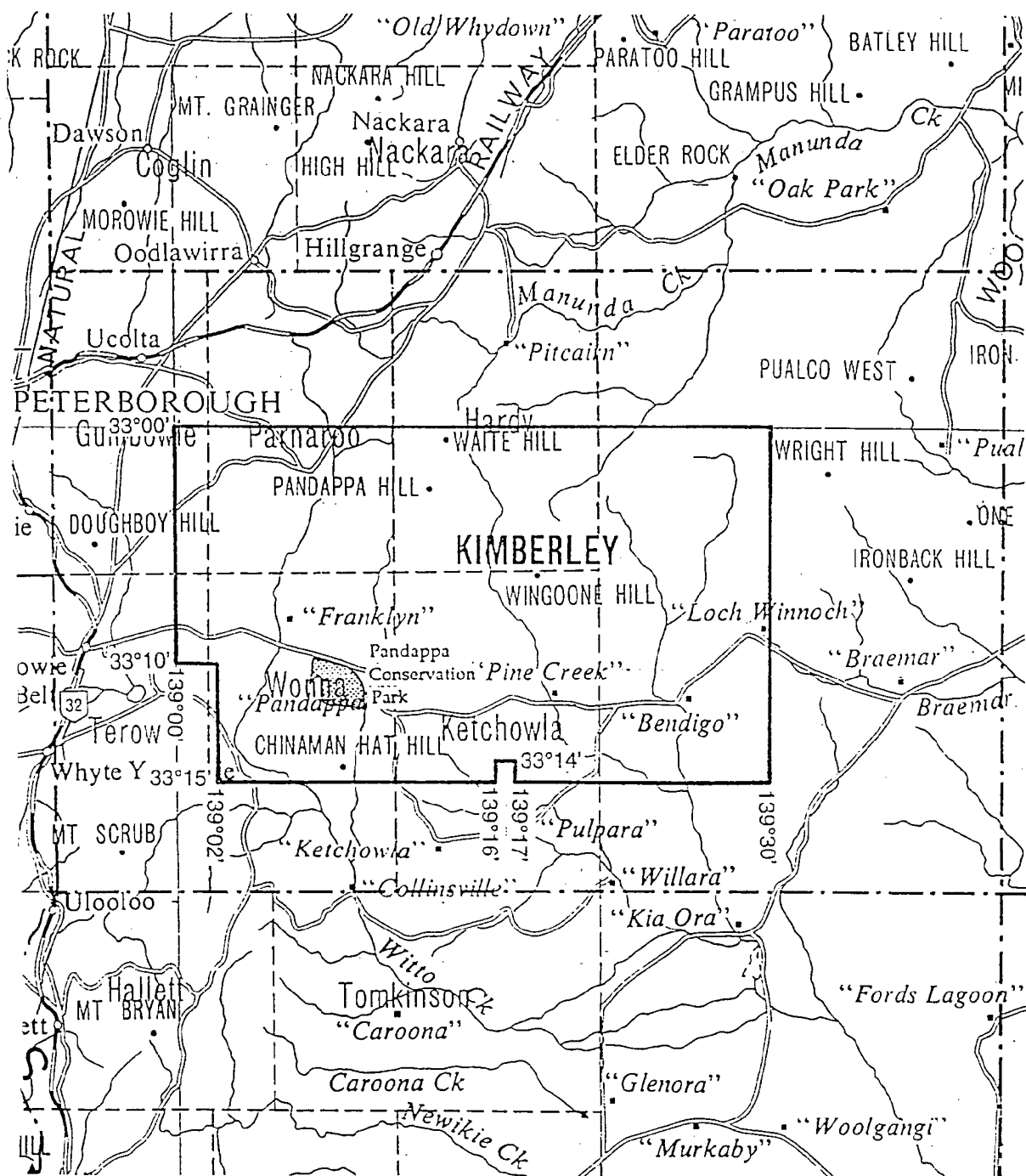
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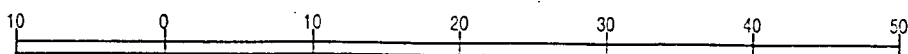
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SCHEDULE A



SCALE 1 : 500 000



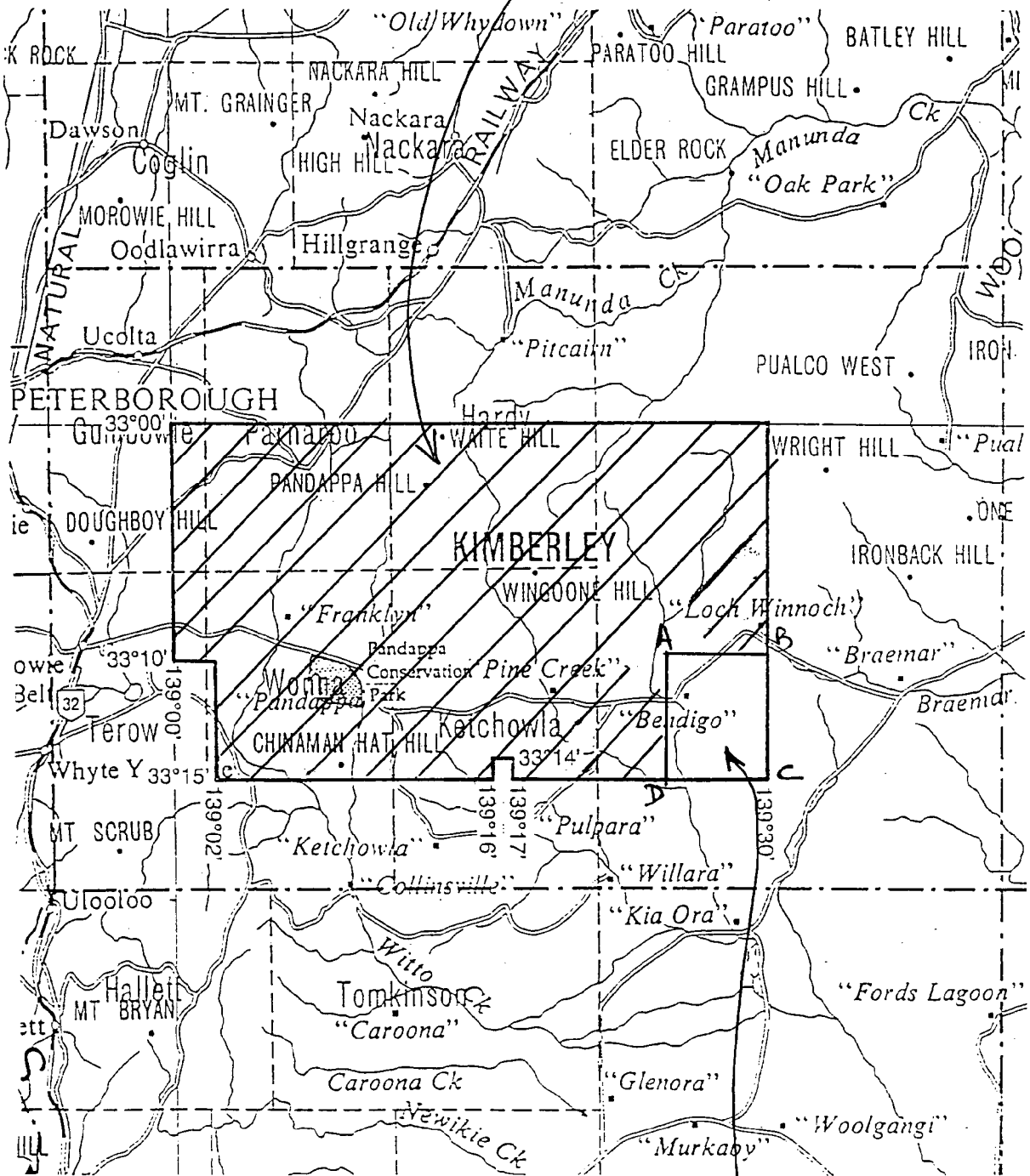
KILOMETRES

Figure 1 General location map for EL 2326

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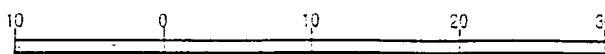
SCHEDULE A

Area Surrendered.



Area Retained.

SCALE 1 : 500 000



KILOMETRES

- A. 139°25'E 33°10'S
- B. 139°30'E 33°10'S
- C. 139°30'E 33°15'S
- D. 139°25'E 33°15'S

Figure 2 General location map for EL 2326

NOTE: There is no warranty that the boundary of this Exploration Licence is correct in relation to the other features on the map. The boundary is to be ascertained by reference to the Australian Geodetic Datum.

SAMPLE NO.	LONGITUDE	LATITUDE	AU (ppm)	AS (ppm)	COMMENTS
68606	139°03.646'	33°05.684'	0.03	1390	Sulphidic vein quartz within sandy Appila Tillite host rocks
68607	139°02.233'	33°07.750'	0.02	38	As above
68608	139°06.888'	33°10.493'	0.84	220	Tensional ladder quartz veins from small pits and gouges
68609	139°08.273'	33°14.228'	< 0.02		Vughy and iron rich quartz from fault / breccia zone
68610	139°08.474'	33°20.993'	< 0.02		Milky white vein quartz from fault zone
72315	139°06.850'	33°10.460'	0.04		Quartz vein subcrop
72316	139°06.830'	33°10.431'	0.03		As above
72317	139°06.801'	33°10.412'	0.02		As above
72318	139°06.810'	33°10.397'	0.05		As above
72319	139°06.820'	33°10.360'	0.03		As above
72320	139°08.423'	33°20.950'	0.02		White milky quartz from fault zone
72321	139°08.401'	33°20.922'	0.02		As above
72322	139°08.497'	33°20.887'	0.03		As above
72323	139°08.489'	33°21.124'	0.02		As above
72324	139°08.003'	33°14.201'	< 0.02		Iron rich vein quartz from fault zone
72325	139°07.983'	33°14.279'	0.02		As above

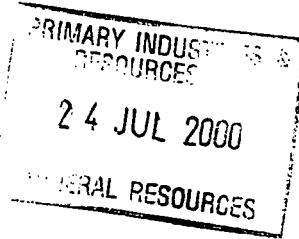
TABLE 1 Assay results for selected rock chip samples from EL 2326



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Mr. Jeff Valentine
Company Exploration
Mineral Resources Division, PIRSA
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Adelaide SA 5000



18 July 2000

Dear Jeff,

RE : Technical reporting for EL 2326

I wish to advise that Havilah has no new technical data of significance to report for this EL for the period ending 30 April 2000. Although I did carry out some field work during the period, this was of a reconnaissance nature and sampling results were negative. We also employed a consultant to carry out some detailed aeromagnetic data interpretation over the EL, however at the present time this work has not been finished and the consultant is now away for a few weeks.

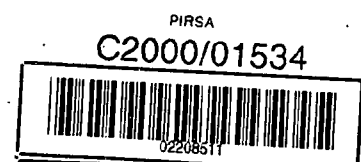
One reason our field work has been minimal over the period is because we have been in negotiations with Normandy Mining for almost the past twelve months re a JV on the EL. In fact Normandy first approached Havilah in September 1999, and after some delay for budgetary reasons they agreed to prepare a formal Heads of Agreement in February this year. We left it to them, however in a sign of the difficult times we are in, they informed us in June that due to budgetary constraints they no longer wished to proceed.

We are now reviewing our position concerning the EL, in particular our future work plans.

Please do not hesitate to contact me if you require further information.

Yours sincerely

Chris Giles
Exploration Manager

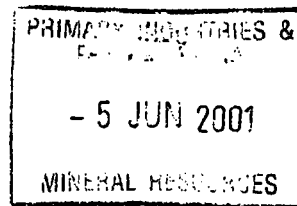




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Mr. G. Kwitko
Company Exploration
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28 May 2001

Dear George,

RE : Annual (final) reports for EL's 2277, 2326, 2331

I wish to advise that we carried out no new work on these EL's during the past year prior to relinquishment. Our main pre-occupation was re-evaluating our available data and trying to arrange joint ventures, and in the case of EL 2277, also working through Native Title issues. Consequently we have no new scientific data to report and therefore were considering not lodging final annual technical reports, as has been the case in the past where we have had no new data to report.

If this is not acceptable, please let me know and we will proceed to prepare final reports for these former EL's.

Yours sincerely

Chris Giles
Exploration Manager

PIRSA

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