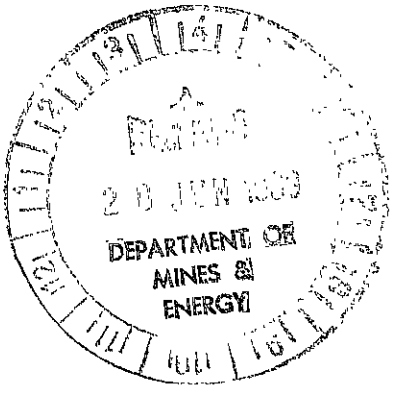
ROSEQUARTZ MINING NL

DAVENPORT PROSPECT - EL 5867

ANNUAL AND FINAL REPORT



ALEX ROMANOFF

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1.0 - Summary

An evaluation of EL 5867 was carried out which included a regional assessment as well as a field sampling programme to appraise the tenement for gold mineralization of the Davenport type.

Davenport-type gold mineralization is associated with quartz veins intruded into fractures within various sub-units of the Ooradidgee Subgroup of the Hatches Creek Group of Proterozoic sedimentary and volcanic rocks. The known mineralized localities are however constrained to zones of favorable host rocks (shales, siltstones and gabbroic intrusives), and geographically constrained by their proximity to the underlying highly deformed Warramunga Group rocks, which probably represent the source for the gold mineralization in the Hatches Creek. Known Davenport-style gold occurrences are small, patchy and low grade, and have recorded only very minor gold production.

The rocks within EL 5867 do not meet the above criteria by being lithologically unfavorable, as well as being geographically remote from the Warramunga Group, and/or too high in the stratigraphic column to be significantly affected by any mineralization remobilized from that group.

This conclusion was borne out by insignificant results from rock-chip and stream sediment samples collected on the prospect.

On the basis of this initial review no further work is recommended for EL 5867.

2.0 - Tenement

The Davenport Prospect consists of a single Exploration Licence EL 5867, comprising 131 minute blocks covering an area of 450 square km. It is registered in the name of Rosequartz Mining N.L., and was granted on 5th May 1988 for a period of six years.

3.0 - Location and Access

The tenement is situated 120 km south-southeast of the town of Tennant Creek in the central Northern Territory of Australia. The northwest corner of EL 5867 lies some 20 km east of Wauchope roadhouse on the Stuart Highway.

The prospect lies within the Singleton pastoral lease, and the northwest and southwest sectors of EL 5867 are easily reached along existing station tracks (see Plate 1). Mobility off the tracks is difficult because of a rugged topography of outcropping sandstone ridges and plateaux which stand in relief of up to 100 metres. Partial 4-wheel drive access is possible by careful negotiation along valley floors associated with the drainages of

Wycliffe Creek and its tributaries, as well as several non-tributary drainages flowing to the southwest. The usual obstacles of creek beds and potential tyre damage by stakes left from burned shrubbery are to be expected.

The high ridges and the basinal plateau of Curtis Pound are accessible only on foot.

4.0 - Geology

The prospect lies within the BONNEY WELL 1:250,000 Geological Sheet (SF53-2), and encloses a section of the Davenport Range structure of the Davenport Province. The latter comprises the southern portion of the Tennant Creek Inlier, a belt of deformed mid-Proterozoic sedimentary and volcanic rocks which outcrop through flat-lying Phanerozoic basin sediments for some 400 km to the northwest and southeast of the town of Tennant Creek.

The basal unit of the Tennant Creek Inlier is the Warramunga Group of tightly folded Lower Proterozoic rocks, represented in BONNEY WELL by turbiditic sediments, cherts and felsic volcanics. Near Tennant Creek the group hosts important gold-copper-bismuth deposits associated with magnetite-rich hydrothermal bodies closely associated with banded iron formation and hematitic shale. No significant mineralization has been found by exploration within the Warramunga of BONNEY WELL, but the unit is believed to have a higher level of background mineralization than the overlying Hatches Creek Group, and is conceptually a good source formation for mineralization remobilized into the latter.

The rocks of the prospect area have been assigned to the Hatches Creek Group of sedimentary and volcanic rocks which comprise at least 10,000 metres of shallow marine sediments with occasional interbedded felsic and mafic volcanic flows. Locally the sediments are largely quartz sandstones, with subordinate lithofeldspathic sandstones, conglomerates and siltstones.

The Hatches Creek Group is subdivided into three subgroups, all of which are represented in the prospect area (Plate 1).

The basal Ooradidgee Subgroup is represented by the Kurinelli Sandstone which outcrops along the axis of the Ridgewall Anticline. In the prospect it consists of a white to pale brown, massively bedded, silicified quartz sandstone.

The overlying Wauchope Subgroup is represented by virtually its complete stratigraphic column comprising the basal Unimbra Sandstone, overlain in succession by the Yeeradgi Sandstone, the Coulters Sandstone, the Frew River Formation siltstone, and capped by the Kudinga Basalt.

The uppermost Hanlon Subgroup is represented only by the basal Errolola Sandstone which caps the Curtis Pound structure along

the axis of the Curtis Syncline.

The stratigraphic succession is folded into several large, upright folds with amplitudes of several kilometres along axial lines trending east-southeast, with less intense cross-folds defining a series of anticlinal dome and synclinal basin structures. These are clearly defined in outcrop by ridges of resistant quartz sandstones and intervening valleys underlain by lithofeldspathic sandstones and volcanic rocks.

Intrusive rocks are limited to quartz reefs along several cross-cutting faults, and minor axial-plane fractures within the Ridgewall Anticline. One small zone of dolerite intrusion was discovered within the anticline during the field programme (See Plate 1).

Minor occurrences of Cambrian Andagera Formation conglomerates unconformably overlie the Proterozoic rocks in places.

5.0 - Mineralization

There is no known mineralization within EL 5867 except for a minor uranium anomaly near the base of the Errolola Sandstone within Curtis Pound (NTGS - Bonney Well Notes - P.21).

Elsewhere in the sheet area tungsten mineralization occurs at the Wauchope Tungsten Field located some 15 km to the northwest of EL 5867. It consists mainly of wolframite associated with quartz veins conformably intruded into shallow-dipping sandstones of the Taragan member of the Ooradidgee Subgroup. Possibly tuffaceous intervals were noted in the sequence during a field visit, but this identification has not been confirmed by other workers. The tungsten mineralization is probably related to the Devils Marbles granite intrusion.

Gold mineralization within the Hatches Creek Group has been found in fault-related quartz veins intruding sedimentary and mafic volcanic members of the basal Ooradidgee Subgroup. These occurrences are mainly situated along the northeastern slopes of the Murchison Ranges, which lie some 25 km northeast of EL 5867, and include the Kurundi, Great Davenport and Power of Wealth gold mines. Mineralization is reported as patchy and low grade, and the total recorded gold production for the Davenport Province to 1977 was only about 15 Kg.

6.0 - Rosequartz Mining N L - Work Programme - 1988-89

6.1 - Ridgewall Anticline

After a study of background data it was decided that those portions of the prospect containing outcrops of Ooradidgee Subgroup rocks should be evaluated for Davenport-style gold mineralization. The only exposure comprises the Kurinelli

Sandstone which occurs within the core of the Ridgewall Anticline in the southern sector of EL 5867.

A field examination showed Kurinelli to be locally represented by well-exposed, massively bedded, silicified quartz sandstones. Quartz intrusion is limited to a few small reefs intruding occasional axial plane fractures or cross-cutting fault zones. The quartz is invariably white and vitreous, with no indication of sulphides likely to be associated with gold mineralization.

In the absence of favorable outcrop indications the potential geochemical activity of the formation was tested by a total of 25 samples comprising 14 stream sediment samples and 9 rock-chip samples, which were analyzed for gold by Analabs in Darwin.

The stream sediments comprised samples of 5 kg minimum weight, seived to -2 mm on site, and analyzed by the BLEG (Bulk Leach Extractable Gold) method. The rock chips were analyzed by acid extraction with AAS finish.

6.2 - Curtis Pound

An exposure of Kudinga Basalt at the western nose of the Curtis Pound structure was examined and found to consist of amygdaloidal olivine basalt with an upper cherty horizon that probably represents a tuffaceous phase at the end of the eruptive event.

The unit has a true thickness of about 400 metres, and probably consists of several flow episodes as indicated by the presence of amygdaloidal basalts at various levels across the section. The basalt is of conventional plagioclase/clinopyroxene (with occasional olivine) composition with secondary chlorite and carbonate; the amygdules being filled with feldspar, quartz, chlorite and epidote, with occasional thin rims of pyrite or chalcopyrite.

The unit has undergone only a gentle folding, and there is no indication of shearing or quartz veining that might be host to gold mineralizaton. A single stream sediment sample (321024) taken at the base of the formation carried no detectable gold.

The section was examined for scoriaceous altered flow top material that might be host for Keweenawan-type copper mineralization, but none was noted.

7.0 - Discussion of Results

7.1 - Ridgewall Anticline Sector

The geology and sampling location map of this structure appears on Plate 2 - Insert A.

The Kurinelli Sandstone unit which occurs at the core of the Ridgewall Anticline hosts gold mineralization at several localities in the Davenport Ranges. These tend to be associated with shale, mafic volcanic and gabbroic intrusive sub-units of the Kurinelli, and are geographically located along the northeastern slope of the Murchison Range subdivision of the Davenport Province. All the mineral occurrences lie near the basal unconformity which separates the Hatches Creek Group rocks from those of the underlying Warramunga Group. The Warramunga Group is older, more deformed and more pervasively mineralized than the Hatches Creek, suggesting that the occasional mineralized quartz veins in the latter represent localized remobilization from the Warramunga. In this context the proximity of the known mineral occurrences in the Kurinelli to the basal unconformity becomes significant, as is the presence of lithologies which form more favorable hosts for mineralization in those areas.

The Kurinelli Sandstone within EL 5867 is both compositionally unfavorable (massive quartz sandstone) and too remote from the potential source rocks of the Warramunga Group in both the geographic and stratigraphic sense for gold mineralization of the Davenport type to have been introduced.

This conclusion is borne out by the lack of significant gold values from samples collected during the field programme.

7.2 - Curtis Pound Sector

The Kudinga Basalt unit shown in Plate 3-Insert B is located at the top of the Wauchope Subgroup, and is both too high in the stratigraphic column and too undeformed to be a favorable host for any gold mineralization remobilized from the Warramunga Group.

No other mineral potential was established during the work programme.

8.0 - Conclusions and Recommendations

A regional assessment of Davenport Prospect EL 5867 suggested that the rocks of this area of the Davenport Ranges are not good potential hosts for gold mineralization by virtue of:

- their unfavorable lithology and/or structure.
- their geographical and stratigraphic remoteness from potential source rocks of the underlying Warramunga Group.

These conclusions were borne out by the unfavorable sampling results from both the Kurinelli Sandstone exposure areas, and the Kudinga Basalt unit of the Wauchope Subgroup.

No further work is recommended for EL 5867.

9.0 Expenditure

	$
Geologist	2,850.00
Field Assistant	875.00
Accommodation/Meals	1,500.00
Vehicle	750.00
Fuel/servicing	300.00
Consumables	120.00
Assays	750.00
Reports/Drafting	1,650.00
Overheads	1,320.00
Total	10,115.00

APPENDIX 1

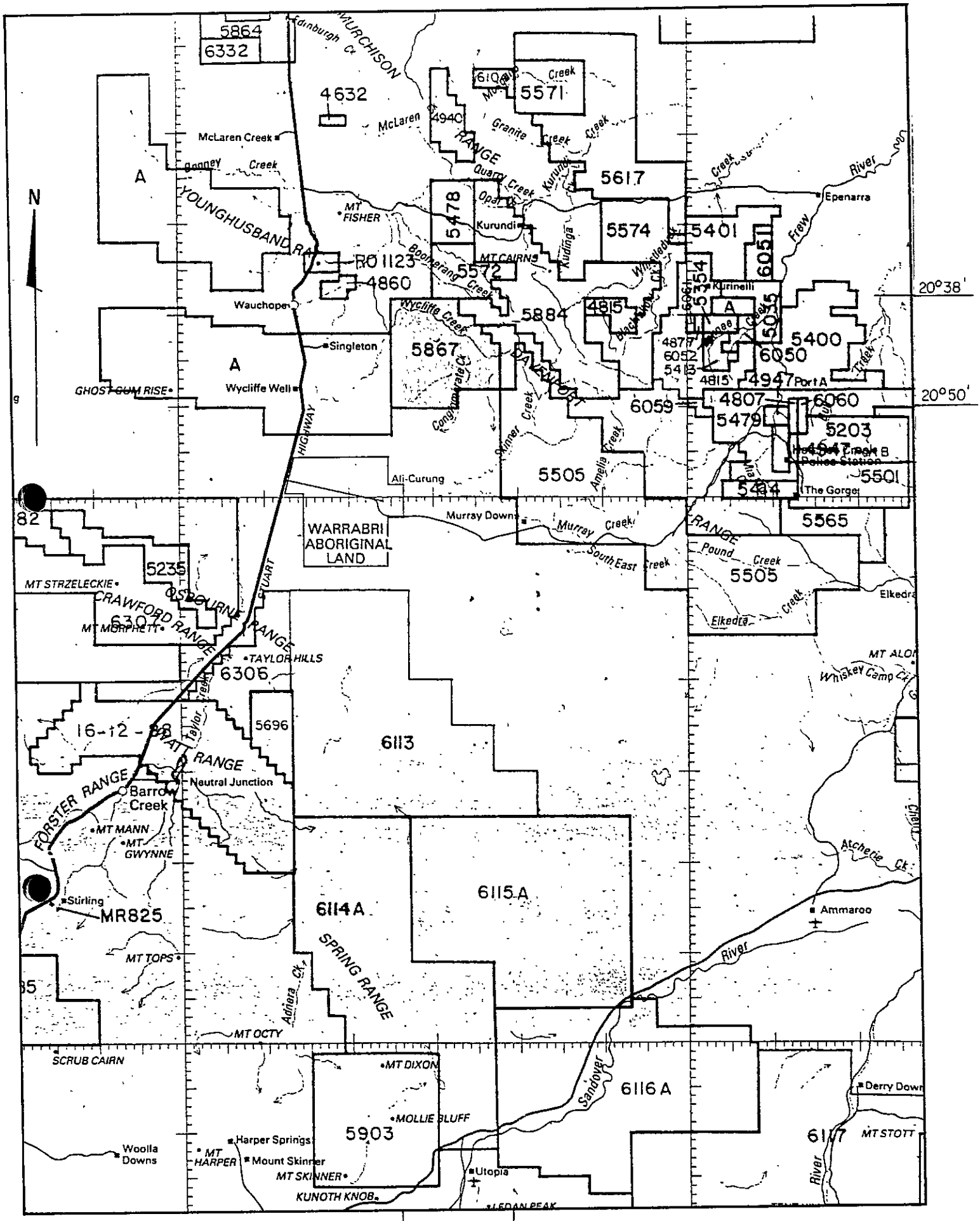
SAMPLE INVENTORY

Appendix - 1

Sample Inventory

Sample Number	Description	Gold Assay (gm/tonne) (unless specified)
321001	Rock chip. Quartz reef in cross-cutting fault zone.	0.036
321002	Rock chip. Composite of quartz floaters.	0.048
321003	Rock chip. Quartz from small saddle reef in sandstones.	0.012
321004	Rock chip. Red-brown silty sandstone with minor quartz stringers.	0.048
321005	BLEG	0.3ppb
321006	BLEG	0.2ppb
321007	BLEG	0.4ppb
321008	BLEG	0.3ppb
321009	Rock chip. Dolerite. Small outcrop with minor carbonate alteration.	<0.012
321010	Rock chip. Quartz floaters near dolerite outcrop.	0.024
321011	Rock Chip. Quartz floaters. Brecciated, limonitic.	0.012
321012	BLEG	SNR
321013	BLEG	0.3ppb
321014	BLEG	0.2ppb
321015	Rock chip. Cambrian conglomerate at base of Andagera Fm.	<0.012
321016	BLEG	0.4ppb
321017	BLEG	0.4ppb
321018	BLEG	0.7ppb

Sample Number	Description	Gold Assay (gm/tonne) (unless specified)
321019	BLEG	0.2ppb
321020	BLEG	0.2ppb
321021	Rock chip. Quartz along axial plane fracture in sandstones.	0.024
321022	BLEG	0.3ppb
321023	BLEG	0.5ppb
321024	BLEG	0.3ppb
321025	Rock chip. Laterite.	<0.012



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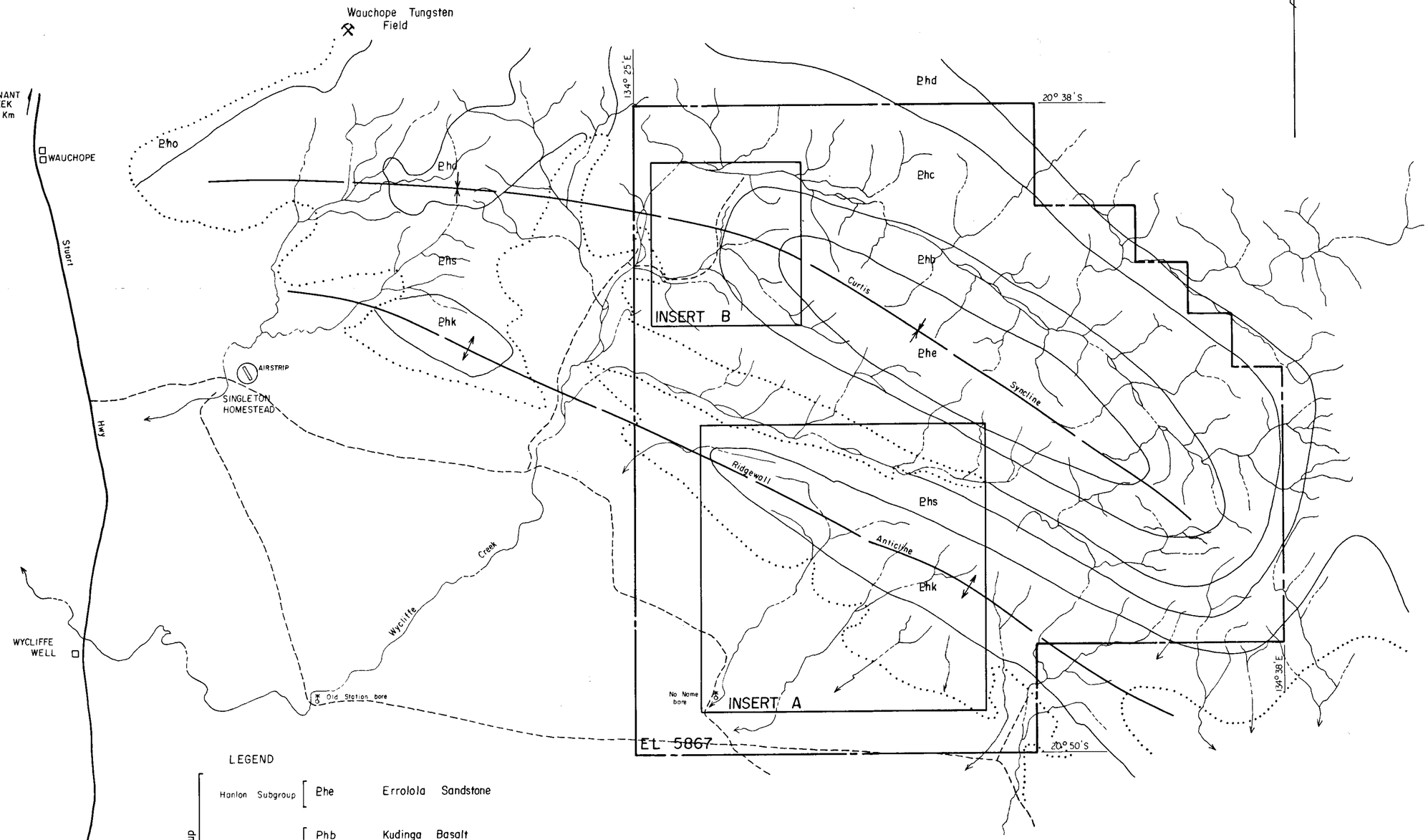
LOCALITY MAP
EL 5867

FIGURE 1



LEGEND

Hatches Creek Group	Hanlon Subgroup	Phe	Errolola Sandstone
	Wauchope Subgroup	Phb	Kudinga Basalt
		Phc	Coulters Sandstone (**includes overlying Frew** River Formation)
		Phd	Yeeradgi Sandstone (locally a siltstone)
		Phs	Unimbra Sandstone
	Ooradidgee Subgroup	Phk	Kurinelli Sandstone (Pho – Taragan Sandstone sub - unit)

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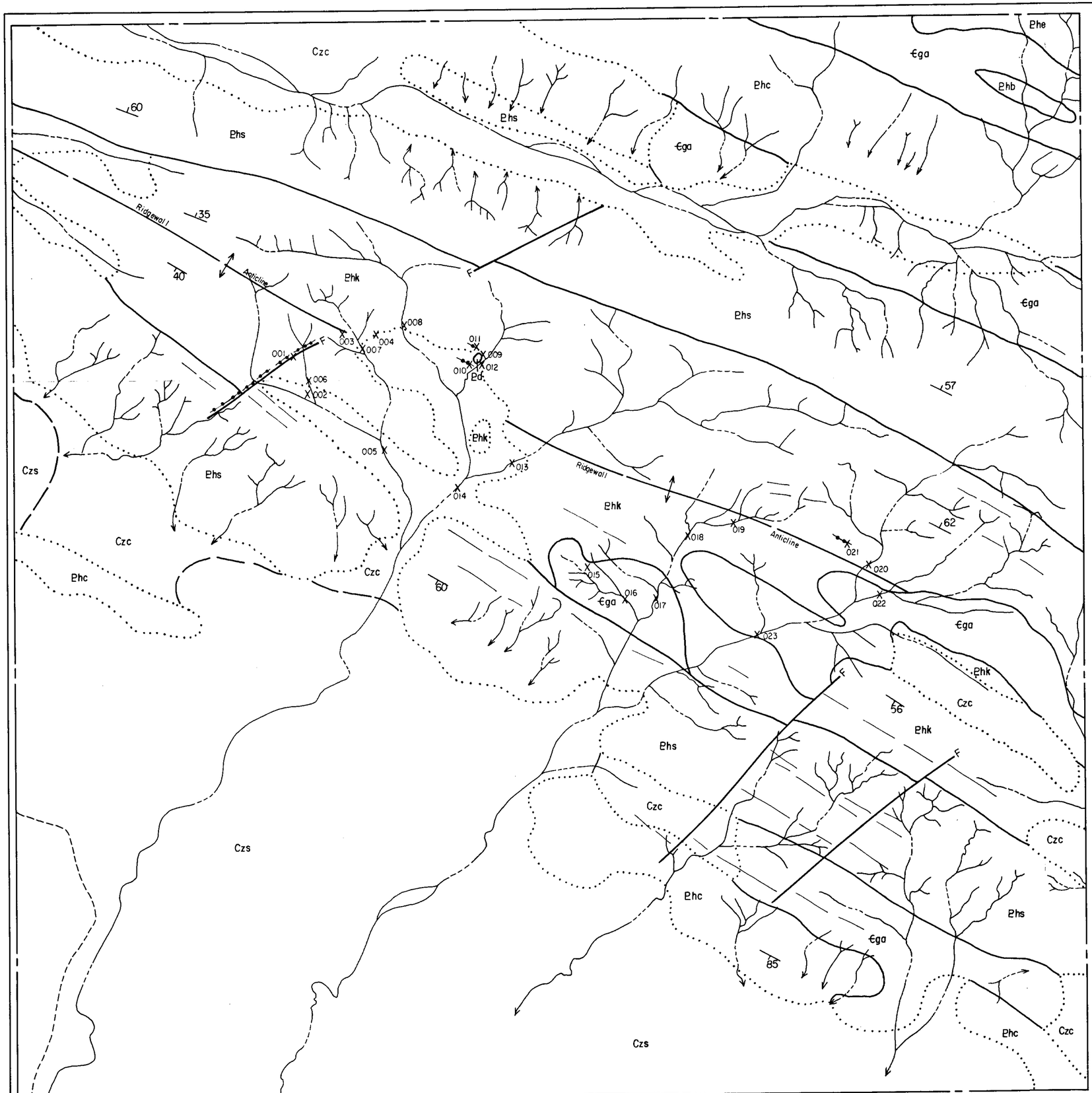
SIMPLIFIED PROTEROZOIC BASEMENT GEOLOGY

DAVENPORT PROSPECT EL 5867

PLATE I



LEGEND

Cainozoic
- Czs — Sands, aeolian
- Czc — Sands, gravels, colluvium related to active drainage

Cambrian, Georgina basin
- Ega — Andagera Formation – flat lying conglomerates and sandstone

Proterozoic, Intrusives
- Ed — (?) Proterozoic doleritic intrusive
- Quartz vein

Hatches Creek Group

Hanlon Subgroup
- Ehe — Errolola Sandstone – quartz sandstone and lithofeldspathic sandstone

Wauchope Subgroup
- Ehb — Kudinga Basalt – amygdaloidal olivine basalt. Shallow sub-aqueous or sub-aerial flow
- Ehc — Coulters Sandstone – quartz sandstone, lithofeldspathic sandstone
- Ehs — Unimbra Sandstone – quartz sandstone, lithofeldspathic sandstone. Conglomerates at base

Ooradidgee Subgroup
- Ehk — Kurinelli Sandstone – massively bedded quartz sandstone

- Sample location and number, prefixed 321
- Fault
- Anticline
- Geological contact
- Outcrop boundary
- Bedding strike and dip
- Trend lines
- Drainage, track

N

0 1 2 Km
Scale 1 : 25 000

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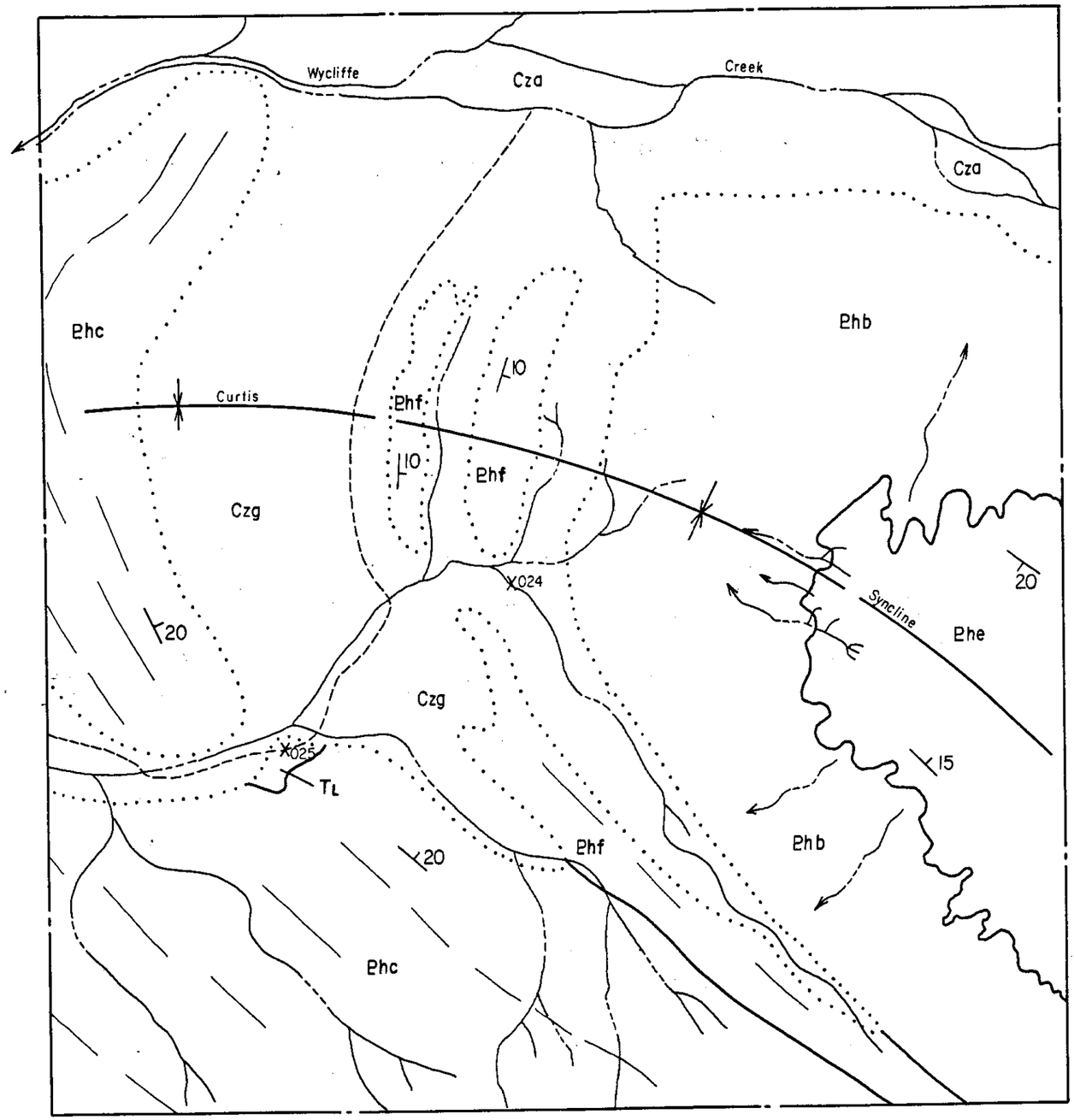
GEOLOGY AND SAMPLING LOCATION

DAVENPORT PROSPECT EL 5867

INSERT A

PLATE 2



LEGEND

Cainozoic

- Cza — Sand, silts active channel deposits
- Czg — Gravels, colluvium and residual soils
- T_L — Tertiary laterite

Proterozoic

Hatches Creek Group

Hanlon Subgroup

- Ehe — Errolola Sandstone – quartz sandstone and lithofeldspathic sandstone

Wauchope Subgroup

- Ehb — Kudinga Basalt – amygdaloidal olivine basalt. Shallow sub-aqueous or sub-aerial flow
- Ehf — Frew River Formation – quartz sandstone, siltstone, limestone
- Ehc — Coulters Sandstone – quartz sandstone and lithofeldspathic sandstone

- 025 X — Sample location and number, prefixed 321
- Syncline
- Geological contact
- Outcrop boundary
- 20 — Bedding strike and dip
- Trend lines
- Drainage, track

0 — 1 — 2 Km

Scale 1: 25 000

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GEOLOGY AND SAMPLING LOCATION

DAVENPORT PROSPECT EL 5867

INSERT B

PLATE 3