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ANNUAL REPORT ON EXPLORATION LICENCE 7841

(WANIPI PROSPECT)

FOR THE PERIOD 02/12/93 TO 01/12/94

MT. DOREEN PROJECT

MT DOREEN 1:250,000 SHEET SF 52-12

VOLUME 1 OF 1

Author: F D BAARDA

Commodities: Gold, Base Metals

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- ■ NT Department of Mines and Energy (1)
- ☐ Yuendumu Mining Company NL (1)
- ☐ Poseidon Gold - Darwin (1)
- ☐ Poseidon Gold - Adelaide (1)

YMC REPORT NO. 007

NPL Report No. 18247

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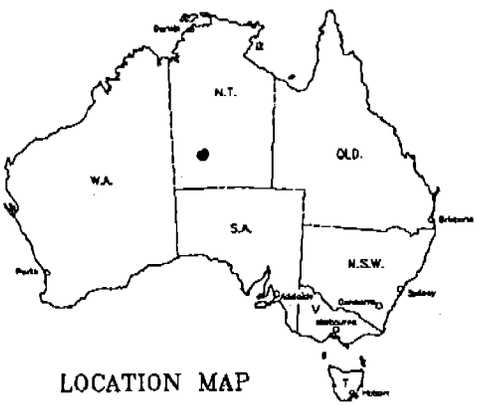
Report Number: 18247

Title: ANNUAL REPORT ON
EXPLORATION LICENCE 7841
MT DOREEN PROJECT FOR
THE PERIOD 02/12/93 TO 01/12/94

Author: FD BAARDA

Date: FEBRUARY 1995



LOCATION MAP

ABSTRACT

Yuendumu Mining Company NL ("YMC") believes that outcrops of ironstone with cellular limonitic boxworks near Wanipi Bluff, may overlie base metal sulphides (possibly auriferous) at depth. For convenience the outcrops are herein referred to as "the gossan".

1. INTRODUCTION

1.1 Location and Access

Wanipi Gossan is located near an old exploration track two kms south of the Vaughan Springs Road. The Vaughan Springs Road turns off the Tanami Road 26kms west of Yuendumu. The turn off to Wanipi Gossan is 29kms west of the Tanami Road.

1.2 Tenement Status

The Exploration Licence consisting of 31 blocks was granted to YMC on 2 December 1992. The area of the licence has now been reduced to 15 blocks for year three.

Effective 1 September 1994, the licence became part of the Mount Doreen Joint Venture ("MDJV") between YMC and Poseidon Gold Ltd ("Posgold").

2. GEOLOGY

The gossan is part of a regional and complex vein system of multiple quartz veins, aplite, pegmatite and some metasedimentary rock. The vein system crops out in an area of granite only some 250 metres north of the unconformity between the Arunta Complex and the overlying Upper Proterozoic Vaughan Springs Quartzite.

The gossan consists of several near vertical "lenses" of ironstone containing abundant cellular boxworks in parts. The ironstone crops out discontinuously over a length of 900 metres striking 120 degrees magnetic, and is from 1.5 - 15m wide.

Geochemical evidence indicates that the gossan is the weathered outcrop of sulphide bearing rocks. This evidence also possibly indicates a two stage process of mineralisation with a high copper - low lead stage, perhaps carrying associated gold. (Barraclough, 1994).

The cellular portion of the gossan consists mainly of limonite which varies in form from massive and earthy to botryoidal and laminar, and it contains minor quartz and rare fluorite. RT Gardiner and Associates (RTGA) have noted that galena and fluorite are well developed in the vein system elsewhere - most notably approximately 4kms west of the Wanipi Gossan.

The gossan is radioactive, in the order of 10x background at the surface.

3. WORK UNDERTAKEN FOR THE PERIOD 02/12/93 TO 01/12/94

3.1 General

Authority Certificate No C94/19, dated 21/01/94 was received from the AAPA (a copy of which was included in last year's Annual Report).

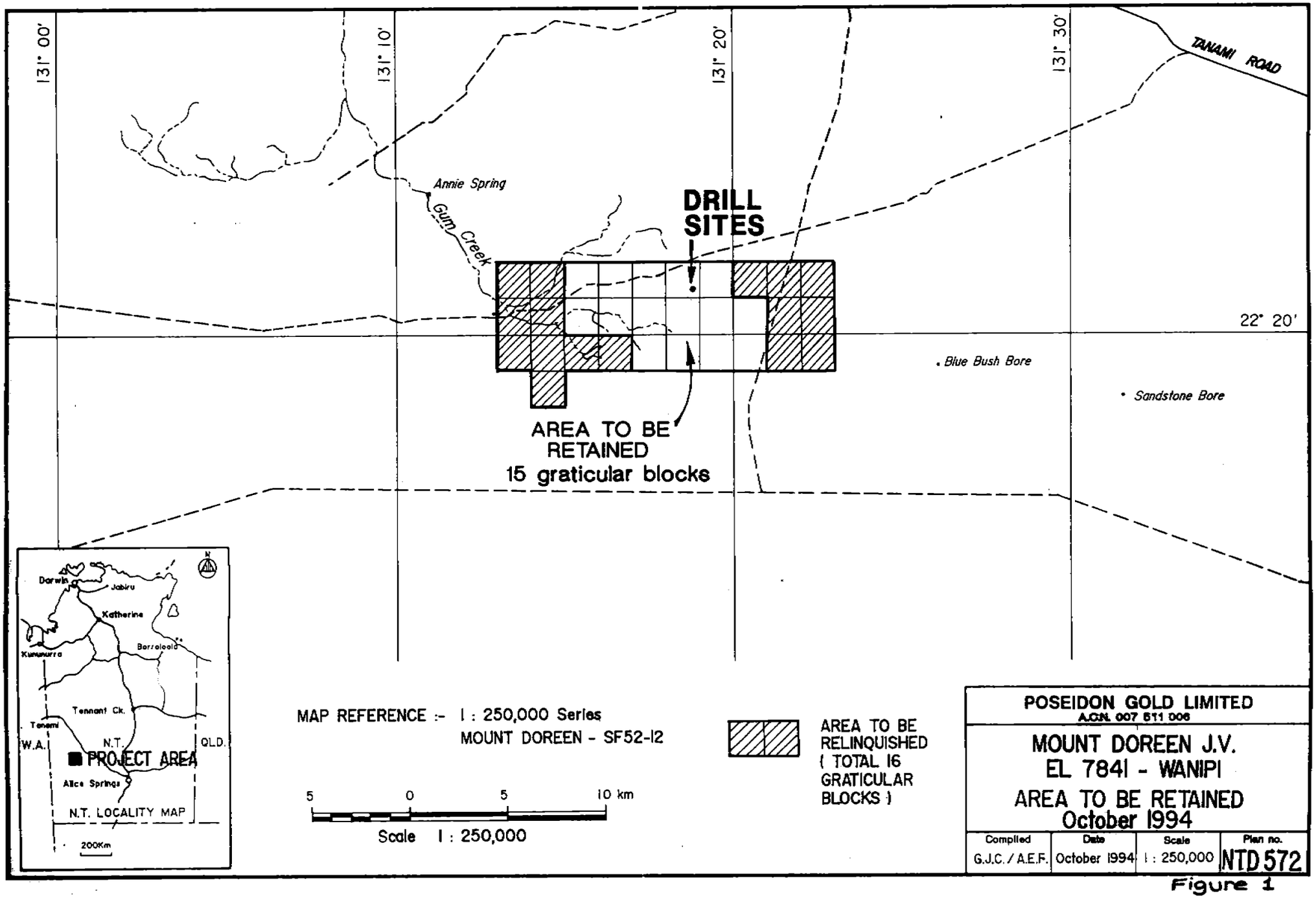

131° 00'
131° 10'
131° 20'
131° 30'
TANAMI ROAD
Annie Spring
Gum Creek
DRILL SITES
22° 20'
Blue Bush Bore
Sandstone Bore
AREA TO BE RETAINED
15 graticular blocks
Darwin
Jabiru
Katherine
Kununurra
Borroloola
Tennant Ck.
Tanami
W.A.
N.T.
QLD.
PROJECT AREA
Alice Springs
N.T. LOCALITY MAP
200Km
MAP REFERENCE :- 1 : 250,000 Series
MOUNT DOREEN - SF52-12
5 0 5 10 km
Scale 1 : 250,000
AREA TO BE RELINQUISHED (TOTAL 16 GRATICULAR BLOCKS)
POSEIDON GOLD LIMITED
A.C.N. 007 511 006
MOUNT DOREEN J.V.
EL 7841 - WANIPI
AREA TO BE RETAINED
October 1994
Compiled G.J.C. / A.E.F.
Date October 1994
Scale 1 : 250,000
Plan no. NTD 572

Figure 1

3.2 Drilling

The drill collar for one of the Central Pacific Mineral's (CPM) 1977 drill-holes was located:

AMG 738160E-7530080N
Declined 45° azimuth 215° magnetic.

Several visiting geologists were shown over the gossan. All agreed that whilst the gossan is relatively small, and the geochemical data not very encouraging, drilling is warranted. Four samples taken during one of these visits were submitted for analysis, and are tabulated in Appendix 1.

As part of negotiations culminating in the Mt Doreen Joint Venture between YMC and Poseidon Gold, the latter agreed to fund drilling of the gossan.

Access and drill sites were prepared by YMC on 14 November. Two RC holes were drilled from 17 - 20 November by Rockdrill.

Thirty-six samples (3m composites) were submitted to Amdel on 02/12/94 (after the anniversary of the Exploration Licence), and results will be reported in the next annual report).

Hole WG 1- AMG 738180E-7530100N
Declined 60° azimuth 215° magnetic.

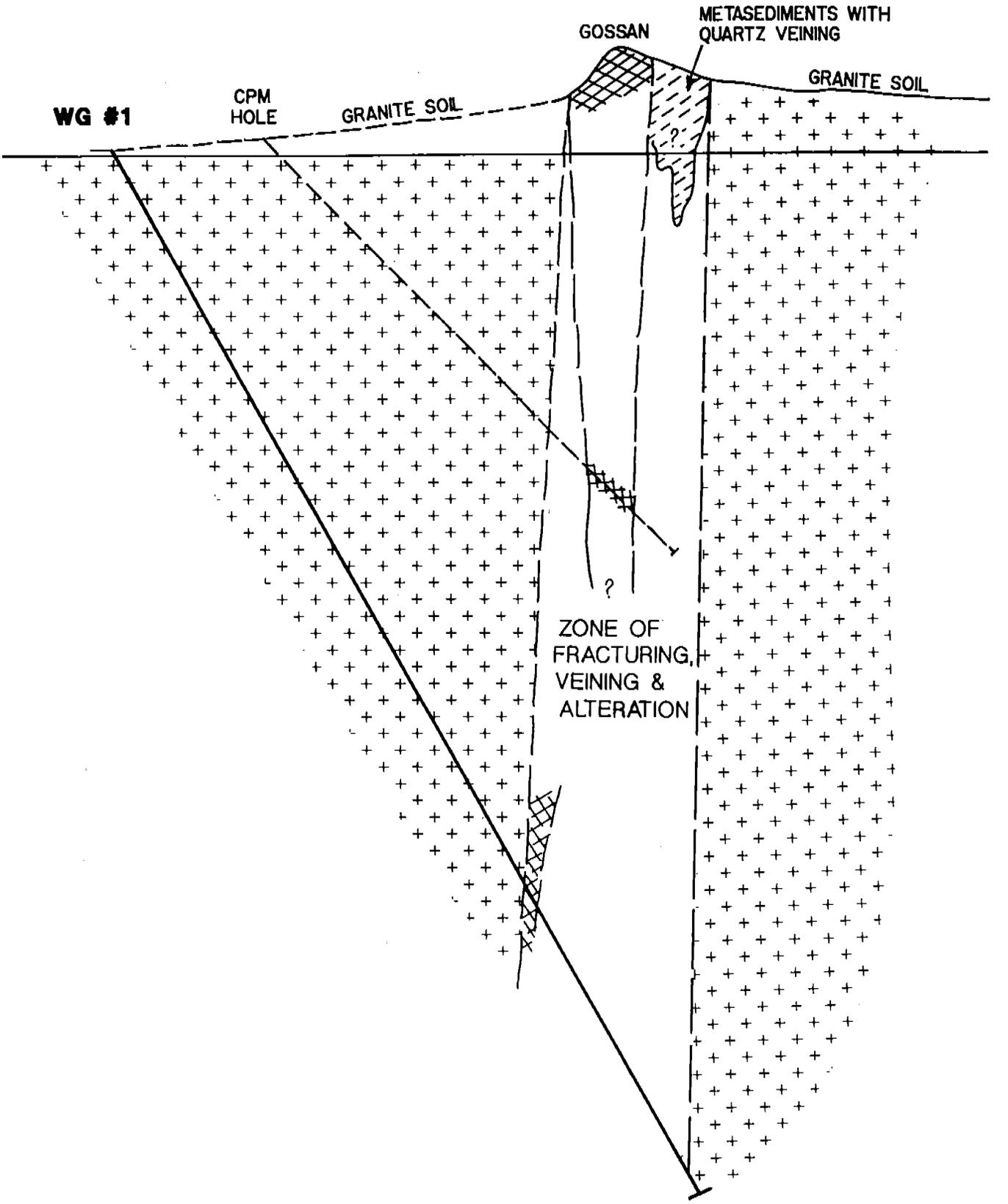
Orientation Surveys:

Depth: 35m
Declined 61.6° azimuth 219° magnetic.
Depth: 62m
Declined 61.8° azimuth 218° magnetic.

Lithology:

0-61m	Granite
61-76m	Kaolinitized (altered?) granite. Water table at 65m.
76-78m	Fracture zone. Quartz veining, yellow stained (limonitic?) clays. Water supply.
78-106m	Granite and clay with occasional yellow and brown staining (altered granite?). Occasional coarse quartz fragments (veining?), occasional orange-brown cherty fragments. Very rare dark metallic grains (sulphide?). Samples wet, poss contaminated.
106-108m	Quartz and light grey clay (altered granite?).

At 84m depth the string got stuck in the hole, probably due to the fracture zone (76-78m) and took over an hour to free. At 108m the string again got stuck in the hole and took nearly 10 hours to free. It was therefore decided 108m was TD!



POSEIDON GOLD LIMITED
A.C.N. 007 511 006

MOUNT DOREEN JV
WANIPI GOSSAN PROSPECT
WG I
CROSS SECTION AT
738 180E 7 530 100N

Compiled	Date	Scale	Plan no.
F. Baarda	March 1995	1 : 500	NTD678

Figure 2

Interpretation

The massive gossan outcrop targeted by this drill hole and previously intersected by CPM's nearby hole, was not intersected at depth, but is believed to be represented by the fracture zone and the quartz stringers (?) and limonite stained clays. The 5 metre thick (at surface) unit of bleached metasediments (purple and white siltstone with a stockwork of quartz veinlets) appears to be absent at depth.

Hole WG 2- AMG 738440E-7529920N
Declined 60° azimuth 216° magnetic.

Orientation Surveys:

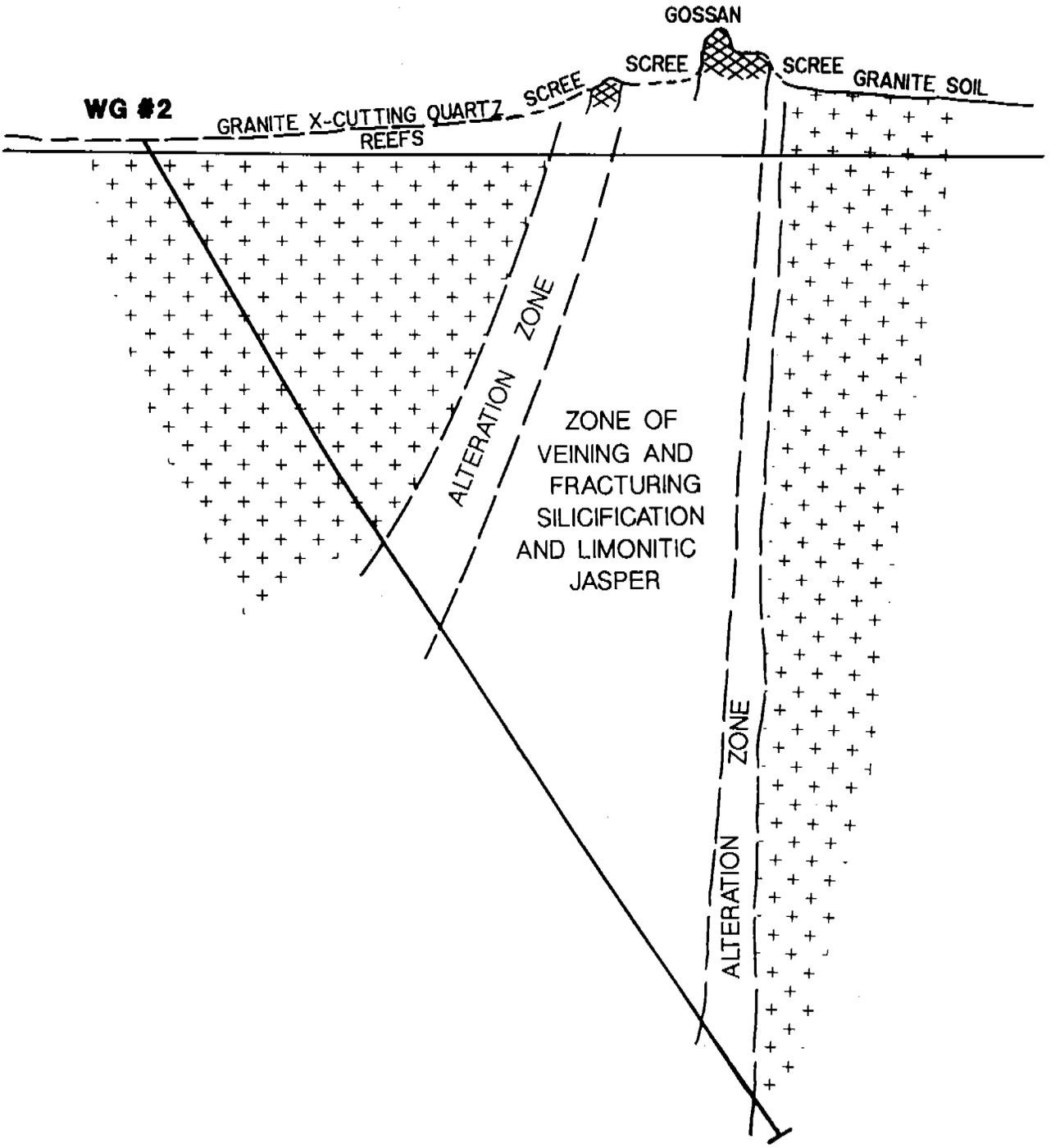
Depth: 30m
Declined 57.3° azimuth 220° magnetic.
Depth: 59m
Declined 56.0° azimuth 217° magnetic.

Lithology:

0-38m	Granite (with kaolinitized white feldspars)
38-41m	Granite with occasional very coarse quartz fragments (veining?), some ferruginous staining and very occasional brown cherty fragments
41-46m	As above with a stockwork (?) of limonitic jasper and quartz stringers (abundant at top of interval). Common grains of a green soapy mineral (nontronite?).
46-84m	Predominantly silica cement often grading to limonitic jasper (white-yellow-dark brown). Common quartz stringers and cemented grains. Occasional siliceous boxworks. Common silica and ferruginous micro-fracture fillings. Abundant white kaolinite, commonly limonite stained (yellow to brown). One fragment of vein quartz containing surviving sulphides (pyrite, sphalerite? and galena?) was found
84-93m	White kaolinite and colloidal (?) cemented quartz and minor muscovite (altered granite). Minor ferruginous fracture fillings, and limonitic staining of clay.
93-96m	Granite. Slightly stained kaolinite, quartz and feldspar. Minor nontronite (?).

Interpretation

Whereas the depth of leaching is greater than anticipated and the width of the zone representing the surface gossan greater at depth (of the order of 30m true thickness), the development of boxworks indicating a sulphide source is relatively minor in the drill cuttings. The occurrence of an economic ore body below the zone of oxidation and leaching is therefore unlikely.



POSEIDON GOLD LIMITED A.C.N. 007 511 006			
MOUNT DOREEN JV WANIPI GOSSAN PROSPECT WG 2 CROSS SECTION AT 738 440E 7 529 920N			
Compiled F. Baarda	Date March 1995	Scale 1 : 500	Plan no. NTD679

Figure 3

3.3 Traditional Owners Relations

A bus load of interested TOs was taken to see the drilling in action. They appreciated the opportunity and were greatly impressed. They were told the first hole had failed to intersect an ore body and wished us luck with the next hole.

4. PREVIOUS EXPLORATION

Keith Rankin and the late M Wood Japangardi (from Yuendumu), prospecting on behalf of CPM and its joint venture partners, discovered that the Wanipi gossan is radioactive. On 4 March 1970 the prospect became known as Rankins Reward, and CPM pegged 17 mineral claims (MC 8H-24H) on 23 March 1970.

The radioactive gossan together with the relatively high radioactive background of the granites outcropping north of the Ngalia Basin, as well as relatively high uranium content of bore water in the region, led CPM to explore successfully the Ngalia Basin sediments for sandstone type uranium deposits.

In 1970 CPM carried out ground magnetic and radiometric surveys over Rankins Reward. The magnetic survey results were below the accuracy threshold of the instrument due to low magnetic susceptibility of the rocks, and no useful pattern was obtained. The radiometric survey obtained background readings of 40-70 cps (using a Scintrex BGS-1S scintillometer). Readings averaged about 150 cps over granitic rocks with isolated areas of higher readings. As expected much higher readings were obtained over the gossan outcrops, with aureoles of decreasing radioactivity away from it. (Ref: R.F. Spark, 1970).

CPM mapped the prospect area at a scale of 1:2400. The map shows the extent of partly gossanous quartz ironstone outcrops, as well as shear zones, quartz veins, etc.

In March 1971, Seigel Associates carried out a Turam Electromagnetic test survey over Rankins Reward on behalf of CPM. A number of conductors were detected, but by current standards, the survey was primitive and results are not very useful.

Two holes were drilled by CPM in 1977:

- One hole inclined at 45 degrees was drilled to a depth of 52.5m. It intersected "quartz with limonitic boxworks" at 36.6m and gossan from 42 to 47.4m. A primitive downhole radiometric log produced a wide radiometric anomaly with a peak (off scale but estimated at 15 times background) at 45m. A reference to "rare uraniferous silicate grains" (J.F. Ivanac pers. comm. to Warren, Steward and Shaw) exists.

- A second hole was drilled to a depth of 76m, and intersected "pyritised granite" from 45.8m to TD. Its location was presumably based on one of the EM conductors referred to above. (Ref: R.T. Gardiner, 1983,5).

The existence and/or location of the drill cuttings, and of any reports on the drilling results are unknown.

Traditional Owners visiting Drilling Operations

In 1983 R.T. Gardiner and Associates ("RTGA") on behalf of YMC mapped and described the gossan. Composite-chip samples were collected which were assayed for several base metals, silver and uranium. In 1987 YMC took some further samples of gossan and quartz vein material, which were assayed for gold (one sample was scanned by XRF for numerous elements). The geochemical evidence led YMC to believe that the gossan may represent the weathered portion of possibly auriferous base-metal sulphide bodies.

During year one of the current licence (1993) YMC carried out an orientation soil sampling survey over the gossan. The traditional owners ("TOs") of the area were consulted through the AAPA (Aboriginal Areas Protection Authority), to determine whether they had any objection to drilling taking place. The TOs not only did not object, but were very keen that YMC should drill the gossan.

5. EXPENDITURE FOR THE PERIOD 02/12/93 TO 01/12/94

Expenditure incurred by YMC prior to the MDJV commencement date (02/12/93 - 31/08/94) is estimated at $2,400 as detailed below.

EMPLOYEE COSTS	$600.00	
SUB TOTAL		$600.00
OPERATING COSTS		
Field Supplies & Consumables	$100.00	
Vehicle Operating Costs	$400.00	
Miscellaneous Costs	$40.00	
SUB TOTAL		$540.00
TENEMENT COSTS		
Tenement Costs	$310.00	
Traditional Landowner Costs*	$600.00	
SUB TOTAL		$910.00
OVERHEADS AND RELATED COSTS		
Administration Costs	$350.00	
SUB TOTAL		$350.00
TOTAL		2,400

** The account for the Traditional Landowner Costs (Sacred Site Clearance) were received after last years report, in which they were estimated at $1,000. The above figure is the excess of actual costs over the estimate.*

Expenditure by PosGold for the period 01/09/94 to 01/12/94:

EMPLOYEE COSTS	$1,631.86	
SUB TOTAL		$1,631.86
OPERATING COSTS		
Stationery/Office Supplies/Printing	$33.45	
Courier/Freight/Postage	$66.00	
Field Supplies/Exploration Consumables	$1,405.00	
Equipment Hire/Lease	$486.20	
Vehicle Operating Costs	$374.44	
Other Contractors/Casuals	$2,644.40	
Drafting Services & Supplies	$14.50	
SUB TOTAL		$5,023.99
TENEMENT COSTS		
Tenement Costs	$340.00	
SUB TOTAL		$340.00
LABORATORY COSTS		
Analytical and Assay	$779.76	
SUB TOTAL		$779.76
DRILLING		
Rotary/Percussion Drilling	$12,555.25	
Site Preparation/Rehab/Environment	$1,683.00	
SUB TOTAL		$14,238.25
SPECIALIST SERVICES		
Other Professional Consultants	$1,311.67	
SUB TOTAL		$1,311.67
OVERHEADS AND RELATED COSTS		
Regional Office Costs	$1,173.14	
Depreciation	$189.61	
SUB TOTAL		$1,362.75
TOTAL		$24,688.28
YMC		$2,400.00
PosGold		$24,688.28
TOTAL EXPENDITURE		**$27,088.28**

6. PROPOSED WORK PROGRAMME FOR YEAR THREE 02/12/94 TO 01/12/95

Samples on site will have their magnetic susceptibility and radioactivity measured, and will thence be removed and disposed of.

The drill sites will be cleaned up and rehabilitated to the station owners satisfaction and so as to meet statutory requirements.

Some of the TO's will be taken to inspect the site after the clean up.

Assay results will be submitted to Poseidon Gold's Geochemist to interpret their commercial significance (if any). A decision will be made whether follow-up (field work and/or additional drilling) is warranted on the EL.

Program costs are estimated at $4,000.00 as detailed below:

EMPLOYEE COSTS		
Salaries and Wages	$1,500.00	
SUB TOTAL		$1,500.00
TENEMENT COSTS		
Traditional Landowner Costs	$250.00	
SUB TOTAL		$250.00
LABORATORY COSTS		
Analytical and Assay	$750.00	
SUB TOTAL		$750.00
DRILLING COSTS		
Site Prep/Rehabilitation/Environment	$1,000.00	
SUB TOTAL		$1,000.00
OVERHEADS AND RELATED COSTS		
Administration	$500.00	
SUB TOTAL		$500.00
TOTAL		$4,000.00

Whilst this is a modest amount, it should be noted that for year two considerably more expenditure was incurred than the amount committed, as well as which the EL now consists of only 15 blocks.

REFERENCES

BARRACLOUGH, D, 1994 - Annual Report EL7841 for the period 02/12/93 to 01/12/93, The Wanapi Prospect, Yuendumu Mining Company NL Report No 005.

BLANCHARD, R, 1968 - Interpretation of Leached Outcrops, Mackay School of Mines, University of Nevada, Nevada Bureau of Mines, Bull 66.

HOWLAND-ROSE, A W, 1971 - Report on a Turam Electromagnetics Test Survey, Rankins Reward, Seigel Association on behalf of Central Pacific Minerals NL.

GARDINER, R T, and Associates, 1983 - Geochemistry of a gossan in the Wanapi Basement Salient, Unpublished Report for Yuendumu Mining Company NL.

GARDINER, R T, and Associates, 1985 - The Wanapi Gossan, Unpublished Report prepared for Yuendumu Mining Company for consideration by potential Joint Venture Partners.

SPARKS, R F, 1970 - Progress Report, M C Applications 8H - 24H Rankins Reward, Central Pac Minerals Report NT 29B.

APPENDIX 1

ADDITIONAL SAMPLES

WANAPI GOSSAN

APPENDIX I:

YUENDUMU MINING COMPANY N.L.

E.L.7841-WANAPI GOSSAN

Samples taken by Mike Kellow (Sons of Gwalia N.L.)-July 1994

Sample No.	Description:	Au(ppb)	Fe(%)	Mn(ppm)	Bi(ppm)	Sb(ppm)	Ni(ppm)
P20801	Cellular Gossan	234	24.68	741	78	10	20
P20802	Qtz.vein in Siltstone(Sth.side of gossan)	<1	2.94	<5	14	<5	9
P20803	Qtz.stockwork (cc first sample)	<1	2.95	39	<5	<5	10
P20804	Gossan wallrock (cc second sample)	<1	3.07	24	<5	<5	9

These samples were taken at the main Gossan body (i.e. the target of drill-hole WG#1)