

**ANNUAL, FINAL AND RELINQUISHMENT REPORT  
FOR EXPLORATION LICENCE 5482  
BARROW CREEK AREA, NORTHERN TERRITORY**

**PREPARED FOR:**

**NORTHERN TERRITORY  
DEPARTMENT OF MINES AND ENERGY  
DARWIN**

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TENNANT CREEK**

*Rec 28/10/91 in T/C*

**REPORT NO: 91035/28/0231**

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## 1. SUMMARY

During the report period (16/9/90 to 15/9/91) Poseidon Gold Limited conducted a re-assessment of all the geochemical and magnetic data collected from previous exploration. This work indicated one area of moderate to low potential in EL5482. Subsequent detailed soil sampling of high potential targets in adjacent EL's 5235 and 6307 reduced the potential in EL5282. The proposed soil sampling programme in EL5482 was therefore not conducted.

Based on the results from soil samples collected and the interpretation of the regional magnetics it is considered that no further work on EL5482 can be justified. As such the decision to relinquish the remaining 4 one minute blocks of the tenement has been made.

## 2. INTRODUCTION

Exploration licence 5482 consists of 8 one minute blocks and forms part of a number of exploration licences being explored by Poseidon Gold Limited in the Barrow Creek area. The licence was first granted in September 1988 to Yuendumu Mining Company (YMC). In 1989, YMC approached Australian Development Limited (now Poseidon Gold) to farm-in to the property and act as exploration Managers. ADL accepted YMC's offer and commenced a regional evaluation.

### 2.1 Location and Access

EL5482 is located approximately 45 km north-west of the small settlement of Barrow Creek, and 35 km west of the Taylor Creek. Access to the licence area is via a narrow well formed track used by Stirling and Neutral Junction Stations. This track intersects the Stuart Highway approximately 5 km south of the Taylor Creek bridge.

### 2.2 Climate

The climate is hot in summer (mean daily temperatures range from 25 deg C to 38 deg C) and mild in winter (10 deg C to 24 deg C). Temperatures exceeding 40 deg C are common during summer.

### 2.3 Physiography

The two most dominant features within the area are the Crawford and Osborne Ranges. These consists of peneplained grey ridges of orthoquartzite within the tightly synclinally folded Hatches Creek Group. Within the licence area the ranges form a number of smaller ridges separated by flat valleys following the regional strike. Small isolated iron-rich sediment pinnacles comprise the Lower Hatches Creek Group along the flanks of the orthoquartzite ridges.

Vegetation is specific in areas of underlying intrusives. The granites are characterised by low lying, but thickly vegetated grasses, *Tricolia* (*spinifex*) and small (1m high) porcupine scrub. Conversely the mica schist and schistose sandstone units predominantly host a thick vegetative cover of ti-tree and mulga that can be used as a marker plant for future prospecting. Bearing this in mind, the latter units appear to be more extensive than the regional geological mapping indicates.

### 2.4 History and Previous Work

The area under investigation shows little evidence of past exploration or prospecting activity. The nearest evidence of activity is a series of small,

shallow prospecting pits in vein quartz known as Petricks Prospect approximately 30 km to the south east. However numerous small workings occur in the granites and amphibolites to the south and south-east of the exploration licence, where Sn, mica, W, Ta, and Cu have been won by prospectors in previous years.

Keewanee Aust. Pty Ltd undertook a broad exploration programme between 1970-1974 within the Crawford-Osborne Range area. Several targets were delineated by a combination of airborne magnetics, radiometrics and EM survey techniques. Targets generated were followed up with geological mapping, gridding, sampling, infill geophysics and a combination of percussion, diamond and RAB drilling techniques.

The prime emphasis was on the discovery of a base metal deposit, with Cu, Ni, Zn, Co, Pb, Sn, Mo, Li and Be being assayed for in most cases. Generally results were disappointing, with a few base metal anomalies being generated. At this stage samples were almost exclusively assayed for Cu and Ni. A moderate tonnage, low grade Cu-Ni resource was delineated east of the Stuart Highway, however the grades were too low to justify further work and the ground was relinquished in late 1973.

Australus Mining Co Pty Ltd undertook limited exploration activity within the Crawford Range Area in 1969. Their efforts concentrated on a broad area of pegmatites, granites and metadolerites. Geochemical samples were assayed for Mo, Cu, Pb, Zn, Ni, Co, Ag, and Mn, but results were disappointing and no further work was undertaken.

### 3. REGIONAL GEOLOGY

The oldest unit recognised during the initial field reconnaissance was the lower Hatches Creek Group which outcrops as brown pelites and a distinctive ferruginous pebbly sandstone to conglomerate. The ferruginous conglomerate in some places has massive goethite, limonite and haematite replacement giving the unit an 'ironstone' appearance. These rocks outcrop as pinnacles up to 30 metres high. The Lower Hatches Creek Group for the most part has been mapped by the BMR as Archaean Arunta Complex.

The most prominent feature of the existing exploration licences is the conformably overlying orthoquartzite and quartz sandstone ridges of the Upper Hatches Creek Group. The most prominent are the Osborne and Crawford Ranges, where they have a maximum relief of 130 metres. Photo interpretation and general reconnaissance of the area investigated suggests the Upper Hatches Creek Group to be approximately 1500m thick. Recent geochronological

dating by the BMR (D. Blake) suggests the Hatches Creek Group to be approximately the same age (1820 my) as the Tomkinson Creek Group which overlies the Warramunga Group north of Tennant Creek. Structurally the Hatches Creek Group in the area has been folded into tight isoclinal folds.

During regional deformation the Lower Hatches Creek Group was intruded by basic to intermediate sills or laccoliths. These sills crop out extensively in the area immediately south of the Osborne Range. These have been identified in the field as metadolerites and metadacites and range from one to thirty metres in thickness, separated by thinner beds of the Lower Hatches Creek Group, ranging between one to ten metres in thickness. The dolerite and dacite emplacement has resulted in the Lower Hatches Creek Group becoming highly schistose in nature. Muscovite and biotite schists are commonly found interbedded with the metadolerites and metadacites immediately south of the Osborne Range. In some cases the schistose sandstones contain remnant pebbly clasts aligned in the direction of the strong regional schistosity.

Late in the regional deformation of the area, intermediate to acid intrusives were emplaced while folding and shearing was still in progress. The granitic intrusives which outcrop to the south of the Osborne Range and the far northwest of the Osborne Range, contain quartz veins which, in some cases, have been mapped as pegmatites by past exploration companies. The quartz veins and granite-schist contacts have been markedly sheared, jointed and faulted late in the deformational history of the area, although the generally unfolded nature of the quartz veins suggest they were emplaced near the end of the orogenic cycle.

These sheeted vein systems are usually discordant with the general regional strike of the schists, metadolerites and quartzites in the area.

A long period of erosion followed with the subsequent deposition of Tertiary sediments which consist of a silty white limestone and calcrete with chert nodules.

#### **4. WORK UNDERTAKEN BETWEEN 16/9/90 AND 15/9/91**

During the latter part of 1990 a complete re-assessment of the previously collected exploration data was made. The assessment covered the data from four exploration licences, namely 5482, 5235, 6306 and 6307. The bulk of the data stems from the large regional soil sampling programme undertaken in 1989 and 1990.

The assessment, which included a comprehensive statistical analysis indicated several areas worthy of follow-up work. One area of limited potential was

located in EL5482. A number of detailed soil sampling grids were established over areas of high potential in EL's 5235 and 6307. Unfortunately this follow-up sampling, although successful in EL's 5235 and 6307 seriously down graded the potential in EL5482 and the proposed work was shelved. The work conducted in EL's 5235 and 6307 will be reported in the appropriate annual reports.

**5. EXPENDITURE BETWEEN 16/9/90 AND 15/9/91**

|                              |                 |
|------------------------------|-----------------|
| Salaries and Wages           | \$ 1,200        |
| Administration and Reporting | \$ 617          |
| Lease Rentals                | \$ 953          |
| Overheads                    | \$ 512          |
| Geophysics                   | \$ 158          |
| <b>TOTAL</b>                 | <b>\$ 3,440</b> |

**6. REFERENCES**

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Barracclough, D., 1986 An Exploration Proposal, Lander South, NT, Unpublished Company Report.

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**7. KEY WORDS**

Barrow Creek, Taylor Creek, EL5482, Gold, Copper, Arsenic, Hatches Creek Group.

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| SNM  | AG<br>ppm | AU<br>ppb | AS<br>ppm | BI<br>ppm | CD<br>ppm | CO<br>ppm | CR<br>ppm | CU<br>ppm | FE<br>ppm | MN<br>ppm | MO<br>ppm | NI<br>ppm | PB<br>ppm | ZN<br>ppm | S<br>ANG | N<br>ANG |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|
| 936  | TR        | TR        | 6         | TR        | TR        | 4         | 40        | 13        | 20020     | 150       | 2         | 8         | 8         | 19        | 373027   | 7667871  |
| 937  | TR        | TR        | 2         | TR        | TR        | 2         | 30        | 13        | 21010     | 57        | 2         | 7         | 8         | 14        | 373021   | 7667600  |
| 938  | TR        | TR        | 5         | TR        | TR        | 3         | 30        | 11        | 17600     | 81        | 2         | 6         | 6         | 13        | 372990   | 7667351  |
| 939  | TR        | TR        | 3         | TR        | TR        | 4         | 30        | 12        | 18700     | 220       | 2         | 7         | 6         | 15        | 372975   | 7667103  |
| 940  | TR        | TR        | 3         | TR        | TR        | 5         | 40        | 45        | 18810     | 160       | 2         | 16        | 6         | 18        | 372962   | 7666847  |
| 941  | TR        | TR        | 5         | TR        | TR        | 4         | 50        | 11        | 15510     | 150       | 2         | 5         | 4         | 13        | 372960   | 7666596  |
| 942  | TR        | TR        | TR        | TR        | TR        | TR        | 40        | 7         | 13522     | 39        | TR        | 3         | TR        | 7         | 372944   | 7666351  |
| 943  | TR        | 2         | 2         | TR        | TR        | 3         | 40        | 8         | 17524     | 120       | 1         | 7         | 2         | 14        | 372932   | 7666111  |
| 944  | TR        | TR        | 3         | TR        | TR        | 3         | 40        | 9         | 19020     | 70        | TR        | 7         | TR        | 13        | 372922   | 7665850  |
| 945  | TR        | TR        | TR        | TR        | TR        | TR        | 60        | 8         | 14366     | 90        | 2         | 5         | TR        | 13        | 372919   | 7665605  |
| 946  | TR        | TR        | TR        | TR        | TR        | 3         | 50        | 11        | 13515     | 96        | 2         | 5         | 4         | 12        | 372903   | 7665357  |
| 947  | TR        | 3         | 2         | TR        | TR        | 3         | 50        | 9         | 14952     | 140       | 2         | 6         | 3         | 10        | 372885   | 7665110  |
| 948  | TR        | TR        | TR        | TR        | TR        | 3         | 50        | 9         | 16112     | 160       | 2         | 6         | 3         | 10        | 372882   | 7664853  |
| 949  | TR        | 3         | TR        | TR        | TR        | 3         | 80        | 11        | 15745     | 93        | 2         | 6         | 4         | 12        | 372872   | 7664603  |
| 950  | TR        | TR        | 5         | TR        | TR        | 4         | 60        | 14        | 21081     | 150       | 2         | 8         | 6         | 16        | 372869   | 7664365  |
| 1001 | TR        | TR        | 2         | 2         | TR        | 2         | 280       | 12        | 18699     | 83        | 3         | 11        | 10        | 16        | 372847   | 7664100  |
| 1002 | TR        | TR        | 2         | 3         | TR        | 2         | 230       | 8         | 16510     | 130       | 2         | 2         | 8         | 12        | 372844   | 7663873  |
| 1934 | TR        | 1         | 2         | TR        | TR        | 4         | 280       | 11        | 19605     | 82        | TR        | 10        | 5         | 11        | 372514   | 7667873  |
| 1935 | TR        | TR        | 3         | TR        | TR        | 5         | 260       | 11        | 17664     | 170       | TR        | 11        | 5         | 11        | 372512   | 7668111  |
| 1936 | TR        | TR        | 7         | TR        | TR        | 5         | 310       | 11        | 20728     | 130       | TR        | 11        | 6         | 10        | 372504   | 7668365  |
| 1937 | TR        | 2         | 2         | TR        | TR        | 3         | 240       | 11        | 19502     | 80        | 3         | 9         | 6         | 11        | 372514   | 7668608  |
| 1938 | TR        | TR        | 6         | TR        | TR        | 5         | 270       | 14        | 22999     | 190       | TR        | 11        | 7         | 14        | 372509   | 7668858  |
| 1939 | TR        | 1         | 4         | TR        | TR        | 4         | 310       | 11        | 20889     | 120       | TR        | 10        | 6         | 12        | 372522   | 7669111  |
| 1940 | TR        | TR        | 3         | TR        | TR        | 4         | 410       | 11        | 19402     | 150       | 1         | 11        | 6         | 11        | 372518   | 7669365  |
| 1941 | TR        | 2         | TR        | TR        | TR        | TR        | 80        | 6         | 11184     | 86        | TR        | 5         | 4         | 7         | 372516   | 7669612  |
| 1942 | TR        | TR        | 3         | TR        | TR        | 3         | 90        | 5         | 11305     | 83        | 3         | 4         | 3         | 8         | 372500   | 7669851  |
| 1943 | TR        | TR        | 12        | TR        | TR        | 7         | 50        | 16        | 21368     | 170       | 3         | 7         | 7         | 19        | 373028   | 7668112  |
| 1944 | TR        | TR        | 6         | TR        | TR        | 5         | 70        | 11        | 21003     | 150       | 2         | 6         | 6         | 12        | 373027   | 7668344  |
| 1945 | TR        | TR        | 4         | TR        | TR        | 4         | 60        | 11        | 19456     | 94        | 2         | 6         | 6         | 14        | 373023   | 7668596  |
| 1946 | TR        | 3         | 7         | TR        | TR        | 7         | 60        | 13        | 23587     | 300       | 5         | 9         | 7         | 17        | 373033   | 7668867  |
| 1947 | TR        | 3         | 2         | TR        | TR        | 6         | 80        | 14        | 18704     | 200       | TR        | 8         | 6         | 17        | 373509   | 7668856  |
| 1948 | TR        | 2         | 6         | TR        | TR        | 5         | 100       | 13        | 18878     | 180       | TR        | 7         | 7         | 15        | 373516   | 7668591  |
| 1949 | TR        | 1         | 5         | TR        | TR        | 6         | 60        | 12        | 21560     | 210       | 4         | 9         | 7         | 18        | 373523   | 7668337  |
| 1950 | TR        | 2         | 6         | TR        | TR        | 5         | 50        | 11        | 20980     | 140       | TR        | 7         | 5         | 16        | 373526   | 7668096  |
| 1951 | TR        | TR        | 2         | TR        | TR        | 3         | 40        | 9         | 18234     | 58        | 2         | 6         | 6         | 10        | 372508   | 7667610  |
| 1952 | TR        | TR        | 2         | TR        | TR        | 4         | 60        | 9         | 18312     | 87        | TR        | 6         | 6         | 10        | 372519   | 7667357  |
| 1953 | TR        | TR        | 4         | TR        | TR        | 5         | 60        | 9         | 18346     | 170       | 2         | 7         | 6         | 11        | 372519   | 7667114  |
| 1954 | TR        | TR        | 3         | TR        | TR        | 3         | 30        | 8         | 15057     | 68        | 2         | 4         | 5         | 7         | 372514   | 7666850  |
| 1955 | TR        | TR        | TR        | TR        | TR        | 4         | 50        | 8         | 17606     | 140       | 2         | 6         | 5         | 9         | 372516   | 7666598  |
| 1956 | TR        | 3         | TR        | TR        | TR        | 3         | 90        | 7         | 16845     | 85        | TR        | 7         | 3         | 10        | 372511   | 7666340  |
| 1957 | TR        | TR        | 3         | TR        | TR        | 3         | 80        | 6         | 18783     | 85        | 3         | 7         | 3         | 14        | 372509   | 7666082  |
| 1958 | TR        | TR        | TR        | TR        | TR        | 3         | 70        | 7         | 16759     | 180       | 3         | 6         | 4         | 10        | 372508   | 7665831  |
| 1959 | TR        | TR        | TR        | TR        | TR        | 3         | 70        | 10        | 16200     | 72        | TR        | 6         | 7         | 11        | 372514   | 7665591  |
| 1960 | TR        | TR        | 3         | TR        | TR        | 4         | 50        | 10        | 16924     | 82        | 2         | 7         | 8         | 11        | 372514   | 7665346  |
| 1961 | TR        | TR        | 2         | TR        | TR        | 5         | 50        | 10        | 20659     | 120       | 3         | 7         | 8         | 13        | 372522   | 7665101  |



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| SNM  | AG  | AU  | AS  | BI  | CD  | CO  | CR  | CU  | FE    | HM  | MO  | NI  | PB  | ZN  | B      | N       |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|--------|---------|
|      | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm   | ppm | ppm | ppm | ppm | ppm | ANG    | ANG     |
| 1962 | TR  | 1   | 2   | TR  | TR  | 5   | 50  | 8   | 16486 | 180 | 5   | 6   | 8   | 11  | 372521 | 7664846 |
| 1963 | TR  | 2   | TR  | TR  | TR  | 4   | 50  | 7   | 16341 | 150 | 2   | 6   | 8   | 10  | 372520 | 7664595 |
| 1964 | TR  | TR  | TR  | TR  | TR  | 3   | 50  | 7   | 18841 | 95  | TR  | 7   | 8   | 13  | 372520 | 7664355 |
| 1965 | TR  | TR  | TR  | TR  | TR  | 3   | 60  | 9   | 18860 | 88  | TR  | 7   | 8   | 14  | 372518 | 7664098 |
| 1966 | TR  | TR  | 4   | TR  | TR  | 3   | 40  | 7   | 14992 | 140 | 2   | 6   | 7   | 11  | 372526 | 7663854 |
| 1967 | TR  | TR  | 3   | TR  | TR  | 4   | 40  | 7   | 18301 | 180 | 2   | 5   | 8   | 10  | 372529 | 7663601 |
| 1968 | TR  | TR  | 3   | TR  | TR  | 5   | 60  | 8   | 19752 | 110 | 2   | 6   | 8   | 12  | 372523 | 7663353 |
| 1969 | TR  | TR  | TR  | TR  | TR  | 4   | 60  | 7   | 18750 | 110 | TR  | 6   | 7   | 12  | 372523 | 7663101 |
| 1970 | TR  | TR  | 2   | TR  | TR  | 3   | 60  | 8   | 19219 | 140 | TR  | 6   | 8   | 14  | 372513 | 7662846 |
| 1971 | TR  | 2   | 2   | TR  | TR  | 3   | 70  | 7   | 18008 | 150 | 3   | 6   | 7   | 12  | 372513 | 7662598 |
| 1972 | TR  | TR  | 2   | TR  | TR  | 3   | 60  | 6   | 16519 | 110 | TR  | 5   | 7   | 9   | 372523 | 7662342 |
| 1973 | TR  | 2   | 2   | TR  | TR  | 3   | 40  | 7   | 20858 | 100 | 4   | 5   | 7   | 12  | 372519 | 7662118 |
| 1974 | TR  | TR  | 2   | TR  | TR  | 3   | 40  | 6   | 15577 | 77  | 4   | 5   | 6   | 7   | 372510 | 7661869 |
| 1975 | TR  | 2   | 2   | TR  | TR  | 3   | 50  | 8   | 15969 | 140 | TR  | 6   | 7   | 9   | 373020 | 7661878 |
| 1976 | TR  | 2   | TR  | TR  | TR  | TR  | 40  | 6   | 17534 | 56  | TR  | 4   | 7   | 9   | 373024 | 7662104 |
| 1977 | TR  | TR  | 2   | TR  | TR  | TR  | 50  | 7   | 15924 | 77  | 2   | 5   | 7   | 10  | 373016 | 7662351 |
| 1978 | TR  | TR  | TR  | TR  | TR  | 3   | 30  | 5   | 16732 | 100 | 2   | 4   | 7   | 8   | 373020 | 7662593 |
| 1979 | TR  | TR  | TR  | TR  | TR  | 2   | 40  | 5   | 15717 | 66  | 2   | 4   | 6   | 7   | 373019 | 7662854 |
| 1980 | TR  | TR  | 2   | TR  | TR  | TR  | 80  | 5   | 15544 | 98  | 3   | 5   | 5   | 8   | 373026 | 7663102 |
| 1981 | TR  | TR  | 4   | TR  | TR  | 3   | 100 | 8   | 14486 | 100 | 2   | 6   | 8   | 10  | 373020 | 7663351 |
| 1982 | TR  | TR  | TR  | TR  | TR  | 3   | 80  | 8   | 14828 | 160 | TR  | 6   | 8   | 11  | 373023 | 7663592 |
| 2655 | TR  | TR  | TR  | TR  | TR  | 3   | 70  | 10  | 13200 | 91  | 2   | 6   | 7   | 13  | 371021 | 7668138 |
| 2656 | TR  | TR  | TR  | TR  | TR  | 4   | 80  | 9   | 15600 | 120 | 2   | 7   | 5   | 13  | 371010 | 7668387 |
| 2657 | TR  | TR  | TR  | TR  | TR  | 5   | 80  | 11  | 16800 | 140 | 2   | 7   | 6   | 15  | 371012 | 7668633 |
| 2658 | TR  | TR  | 3   | TR  | TR  | 4   | 90  | 11  | 18000 | 140 | 1   | 7   | 6   | 14  | 371007 | 7668883 |
| 2659 | TR  | TR  | TR  | TR  | TR  | 8   | 100 | 15  | 21600 | 290 | 1   | 9   | 7   | 19  | 371005 | 7669140 |
| 2660 | TR  | 1   | 3   | TR  | TR  | 5   | 80  | 10  | 16800 | 180 | 1   | 7   | 6   | 16  | 371016 | 7669379 |
| 2661 | 0.1 | 1   | 3   | TR  | TR  | 3   | 80  | 9   | 19200 | 75  | 1   | 6   | 7   | 18  | 371015 | 7669637 |
| 2662 | TR  | TR  | 2   | TR  | TR  | 5   | 150 | 10  | 18000 | 190 | 2   | 7   | 5   | 17  | 371013 | 7669866 |
| 2663 | TR  | TR  | TR  | TR  | TR  | 7   | 210 | 14  | 20400 | 190 | 86  | 300 | 6   | 14  | 370528 | 7669876 |
| 2664 | TR  | TR  | 4   | TR  | TR  | 7   | 110 | 16  | 30000 | 320 | 3   | 15  | 5   | 21  | 370518 | 7669637 |
| 2665 | 0.1 | TR  | TR  | TR  | TR  | 4   | 90  | 10  | 18000 | 130 | 1   | 8   | 7   | 16  | 370503 | 7669388 |
| 2666 | 0.1 | TR  | TR  | TR  | TR  | 7   | 130 | 12  | 20400 | 240 | TR  | 10  | 7   | 21  | 370512 | 7669120 |
| 2667 | 0.1 | TR  | 4   | TR  | TR  | 6   | 60  | 15  | 22800 | 200 | 2   | 9   | 9   | 22  | 370505 | 7668876 |
| 2668 | TR  | TR  | 3   | TR  | TR  | 4   | 110 | 12  | 20400 | 120 | 3   | 10  | 8   | 17  | 370511 | 7668632 |
| 2669 | 0.1 | TR  | 3   | TR  | TR  | 3   | 130 | 8   | 13200 | 91  | 2   | 7   | 6   | 10  | 370510 | 7668381 |
| 2670 | TR  | 1   | 3   | 2   | TR  | 4   | 80  | 9   | 16800 | 83  | 1   | 7   | 6   | 13  | 370521 | 7668129 |
| 2671 | TR  | TR  | TR  | TR  | TR  | 2   | 190 | 6   | 12000 | 82  | 3   | 6   | 5   | 7   | 370515 | 7667875 |
| 2672 | TR  | 4   | TR  | TR  | TR  | 3   | 260 | 8   | 16800 | 75  | 4   | 8   | 6   | 9   | 370522 | 7667631 |
| 2673 | 0.1 | 2   | 2   | TR  | TR  | 2   | 130 | 7   | 16800 | 61  | 2   | 6   | 5   | 10  | 370525 | 7667373 |
| 2674 | TR  | TR  | 2   | TR  | TR  | 3   | 150 | 8   | 12000 | 74  | 3   | 6   | 5   | 9   | 370517 | 7667122 |
| 2675 | TR  | 2   | 2   | 2   | TR  | 3   | 150 | 6   | 19200 | 60  | 3   | 6   | 6   | 7   | 370521 | 7666611 |
| 2676 | TR  | TR  | TR  | 2   | TR  | 2   | 210 | 7   | 18000 | 78  | 4   | 6   | 6   | 7   | 370511 | 7666373 |
| 2677 | TR  | TR  | TR  | 2   | TR  | 2   | 180 | 6   | 15600 | 71  | 1   | 5   | 5   | 6   | 370513 | 7666113 |
| 2678 | TR  | 1   | 2   | 2   | TR  | 2   | 180 | 6   | 14400 | 82  | TR  | 6   | 5   | 7   | 370511 | 7665890 |

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| SNN  | AG  | AU  | AS  | BI  | CD  | CO  | CR  | CU  | FE    | MN  | MO  | NI  | PB  | ZN  | Z      | N       |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|--------|---------|
|      | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm   | ppm | ppm | ppm | ppm | ppm | ANG    | ANG     |
| 2679 | TR  | 2   | TR  | 3   | TR  | 3   | 120 | 8   | 16800 | 110 | 1   | 5   | 5   | 8   | 370516 | 7665620 |
| 2680 | TR  | 1   | 2   | TR  | TR  | 3   | 140 | 7   | 16800 | 83  | 2   | 6   | 6   | 10  | 370509 | 7665371 |
| 2681 | TR  | TR  | 2   | TR  | TR  | 3   | 140 | 8   | 15600 | 120 | 2   | 7   | 6   | 10  | 370511 | 7665137 |
| 2682 | TR  | TR  | 2   | TR  | TR  | 4   | 140 | 9   | 18000 | 150 | 2   | 7   | 7   | 12  | 370513 | 7664900 |
| 2683 | TR  | 1   | TR  | TR  | TR  | 4   | 120 | 9   | 18000 | 110 | 2   | 7   | 8   | 13  | 370517 | 7664622 |
| 2684 | TR  | 1   | TR  | TR  | TR  | 3   | 100 | 9   | 18000 | 130 | 1   | 7   | 7   | 12  | 370501 | 7664369 |
| 2685 | TR  | 1   | 3   | TR  | TR  | 3   | 110 | 8   | 15600 | 120 | TR  | 5   | 6   | 10  | 370499 | 7664122 |
| 2686 | TR  | 2   | 3   | TR  | TR  | 2   | 110 | 10  | 19200 | 77  | 1   | 7   | 7   | 15  | 370495 | 7663858 |
| 2687 | TR  | TR  | TR  | TR  | TR  | 3   | 110 | 10  | 19200 | 96  | TR  | 7   | 7   | 13  | 371006 | 7663859 |
| 2688 | TR  | 2   | TR  | TR  | TR  | 2   | 130 | 7   | 15600 | 87  | TR  | 6   | 5   | 10  | 371014 | 7664381 |
| 2689 | TR  | 1   | 2   | TR  | TR  | 2   | 80  | 10  | 19200 | 85  | TR  | 7   | 7   | 14  | 371015 | 7664891 |
| 2690 | 0.1 | 3   | 3   | TR  | TR  | 2   | 120 | 7   | 15600 | 60  | 3   | 6   | 6   | 9   | 371027 | 7665366 |
| 2691 | 0.1 | 2   | TR  | TR  | TR  | 2   | 80  | 4   | 12000 | 44  | 2   | 4   | 4   | 5   | 371025 | 7665880 |
| 4111 | TR  | TR  | TR  | TR  | TR  | TR  | 50  | 4   | 11770 | 95  | TR  | 4   | 4   | 5   | 370021 | 7667897 |
| 4112 | TR  | TR  | TR  | TR  | TR  | TR  | 40  | 5   | 11428 | 110 | TR  | 5   | 4   | 7   | 370010 | 7668145 |
| 4113 | TR  | TR  | TR  | TR  | TR  | 3   | 50  | 7   | 12504 | 140 | TR  | 8   | 5   | 9   | 370014 | 7668394 |
| 4114 | TR  | TR  | TR  | TR  | TR  | 3   | 40  | 7   | 13394 | 120 | TR  | 7   | 5   | 10  | 370020 | 7668617 |
| 4115 | TR  | 2   | 2   | TR  | TR  | 3   | 30  | 8   | 13866 | 150 | TR  | 7   | 6   | 12  | 370021 | 7668876 |
| 4116 | TR  | TR  | 3   | TR  | TR  | 4   | 40  | 11  | 15417 | 250 | TR  | 9   | 7   | 24  | 370017 | 7669131 |
| 4117 | TR  | TR  | 3   | TR  | TR  | 3   | 20  | 7   | 14878 | 150 | TR  | 7   | 8   | 10  | 370016 | 7669378 |
| 4118 | TR  | TR  | 2   | TR  | TR  | 4   | 40  | 9   | 14822 | 160 | 1   | 8   | 7   | 19  | 370013 | 7669634 |
| 4119 | TR  | TR  | 3   | TR  | TR  | 4   | 70  | 7   | 14532 | 180 | TR  | 7   | 7   | 11  | 370017 | 7669882 |
| 4120 | TR  | 2   | 3   | TR  | TR  | 5   | 110 | 10  | 18201 | 230 | 1   | 7   | 9   | 17  | 369518 | 7669859 |
| 4121 | TR  | 1   | 3   | TR  | TR  | 5   | 80  | 10  | 16800 | 230 | 1   | 8   | 7   | 16  | 369522 | 7669620 |
| 4122 | TR  | 1   | 3   | TR  | TR  | 5   | 50  | 11  | 19323 | 160 | TR  | 10  | 8   | 20  | 369516 | 7669382 |
| 4123 | TR  | TR  | TR  | TR  | TR  | 3   | 70  | 9   | 15160 | 94  | TR  | 8   | 6   | 13  | 369508 | 7669124 |
| 4124 | TR  | 1   | 3   | TR  | TR  | 3   | 70  | 9   | 15618 | 160 | TR  | 10  | 5   | 13  | 369515 | 7668877 |
| 4125 | TR  | TR  | 4   | TR  | TR  | TR  | 60  | 8   | 14511 | 61  | TR  | 7   | 5   | 11  | 369514 | 7668617 |
| 4126 | TR  | TR  | TR  | TR  | TR  | 2   | 30  | 6   | 14005 | 76  | TR  | 7   | 4   | 13  | 369520 | 7668363 |
| 4127 | 0.1 | TR  | 4   | TR  | TR  | 3   | 20  | 8   | 14822 | 120 | TR  | 8   | 4   | 11  | 369513 | 7668121 |
| 4128 | TR  | TR  | TR  | TR  | TR  | TR  | 70  | 8   | 15819 | 69  | TR  | 7   | 4   | 10  | 369524 | 7667871 |
| 4129 | TR  | TR  | TR  | TR  | TR  | 2   | 70  | 6   | 12225 | 100 | TR  | 6   | 3   | 6   | 369518 | 7667621 |
| 4130 | TR  | TR  | 5   | TR  | TR  | 3   | 100 | 7   | 14293 | 94  | TR  | 6   | 3   | 9   | 369505 | 7667373 |
| 4131 | TR  | TR  | TR  | TR  | TR  | TR  | 90  | 5   | 12698 | 94  | 1   | 6   | 2   | 7   | 369512 | 7667119 |
| 4132 | TR  | TR  | TR  | TR  | TR  | 3   | 80  | 11  | 17968 | 150 | TR  | 8   | 4   | 13  | 369516 | 7666888 |
| 4133 | TR  | TR  | TR  | TR  | TR  | TR  | 80  | 7   | 17020 | 98  | 1   | 7   | 4   | 8   | 369511 | 7666612 |
| 4134 | TR  | TR  | TR  | TR  | TR  | TR  | 70  | 7   | 14992 | 59  | TR  | 6   | 3   | 7   | 369517 | 7666339 |
| 4135 | TR  | TR  | 2   | TR  | TR  | TR  | 20  | 5   | 12802 | 49  | TR  | 6   | 3   | 7   | 369530 | 7666112 |
| 4136 | TR  | TR  | 2   | TR  | TR  | 3   | 110 | 8   | 17186 | 200 | 1   | 7   | 3   | 11  | 369515 | 7665864 |
| 4137 | TR  | TR  | 2   | TR  | TR  | TR  | 60  | 6   | 19981 | 84  | TR  | 6   | 5   | 14  | 369525 | 7665351 |
| 4138 | TR  | 1   | 2   | TR  | TR  | 3   | 50  | 7   | 16412 | 120 | TR  | 7   | 5   | 11  | 369521 | 7664863 |
| 4139 | TR  | 1   | 2   | TR  | TR  | TR  | 60  | 7   | 17577 | 93  | TR  | 7   | 5   | 11  | 369525 | 7664369 |
| 4140 | TR  | TR  | 2   | TR  | TR  | 2   | 90  | 7   | 19057 | 110 | TR  | 7   | 5   | 12  | 369522 | 7663855 |
| 4141 | TR  | 3   | 4   | TR  | TR  | 3   | 80  | 8   | 19281 | 120 | TR  | 8   | 6   | 11  | 370003 | 7663859 |
| 4142 | TR  | TR  | 2   | TR  | TR  | 3   | 110 | 8   | 17865 | 140 | TR  | 9   | 5   | 12  | 370012 | 7664385 |

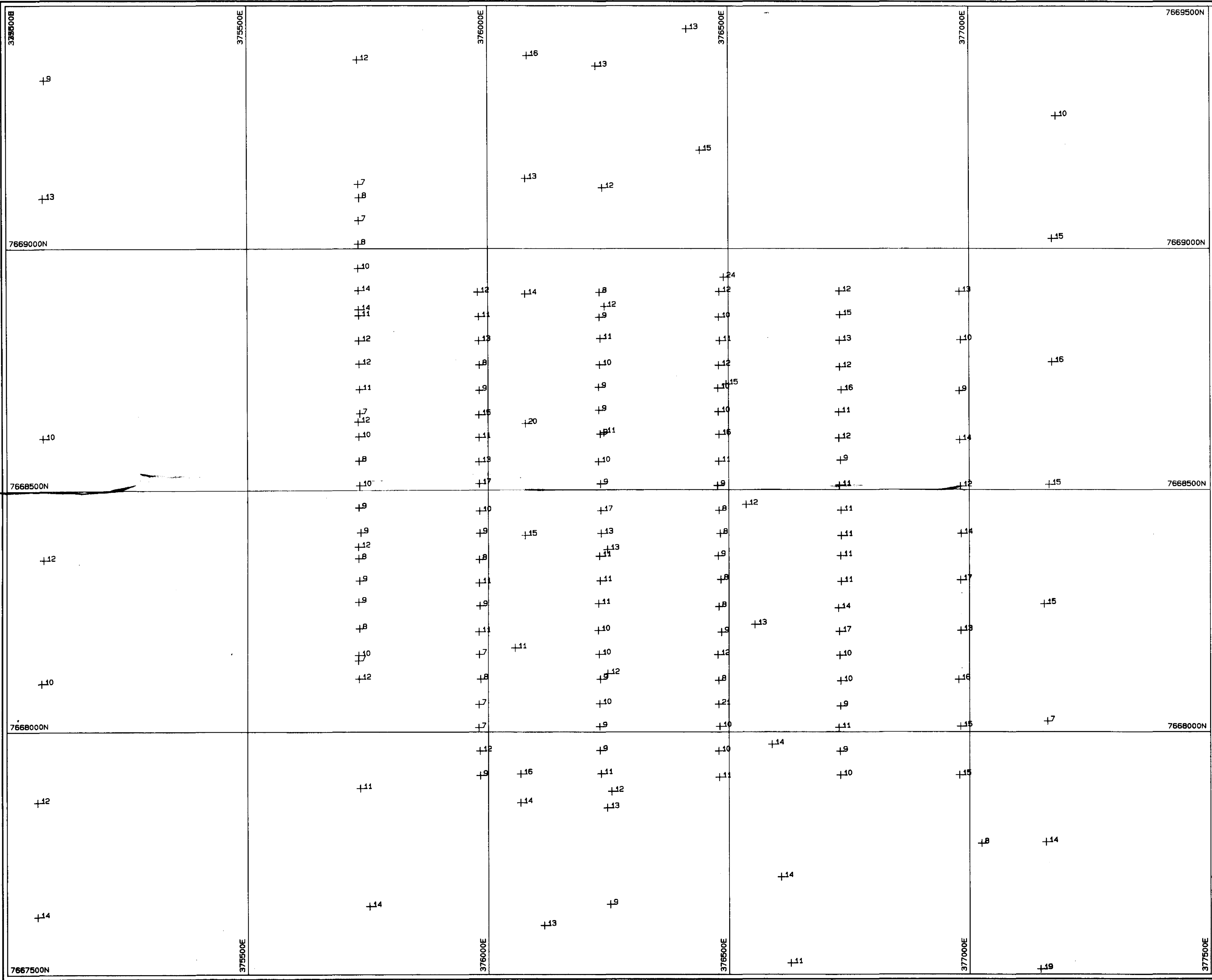
## POSEIDON GOLD LIMITED - BARROW CREEK JOINT VENTURE

## SOIL GEOCHEMISTRY REPORT 16/09/90

| SNN  | AG  | AU  | AS  | BI  | CD  | CO  | CR  | CU  | FE    | MN  | MO  | NI  | PH  | ZN  | R      | N       |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|--------|---------|
|      | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm   | ppm | ppm | ppm | ppm | ppm | AMG    | AMG     |
| 4143 | TR  | TR  | 4   | TR  | TR  | 4   | 40  | 9   | 18241 | 190 | TR  | 9   | 6   | 13  | 370002 | 7664890 |
| 4144 | TR  | TR  | 2   | TR  | TR  | 2   | 20  | 8   | 18594 | 97  | TR  | 9   | 4   | 11  | 370003 | 7665392 |
| 4145 | TR  | TR  | 4   | TR  | TR  | 3   | 20  | 6   | 17508 | 140 | TR  | 7   | 3   | 8   | 370008 | 7665882 |
| 4146 | TR  | TR  | 2   | TR  | TR  | 8   | 70  | 9   | 18036 | 150 | TR  | 8   | 4   | 11  | 370916 | 7666138 |
| 4147 | TR  | TR  | TR  | TR  | TR  | TR  | 90  | 5   | 15301 | 69  | TR  | 6   | TR  | 6   | 370005 | 7666378 |
| 4148 | TR  | TR  | 4   | TR  | TR  | TR  | 60  | 5   | 11416 | 69  | TR  | 7   | 5   | 7   | 370009 | 7666648 |
| 4149 | TR  | TR  | TR  | TR  | TR  | 3   | 70  | 5   | 12446 | 110 | TR  | 6   | 4   | 7   | 370018 | 7666898 |
| 4150 | TR  | 1   | TR  | TR  | TR  | 3   | 140 | 13  | 20072 | 94  | 1   | 7   | 5   | 10  | 370011 | 7667136 |
| 4151 | TR  | TR  | TR  | TR  | TR  | TR  | 150 | 5   | 15741 | 86  | TR  | 6   | 4   | 5   | 370004 | 7667386 |
| 4152 | TR  | TR  | TR  | TR  | TR  | TR  | 50  | 6   | 12440 | 87  | TR  | 5   | 4   | 8   | 370030 | 7667645 |



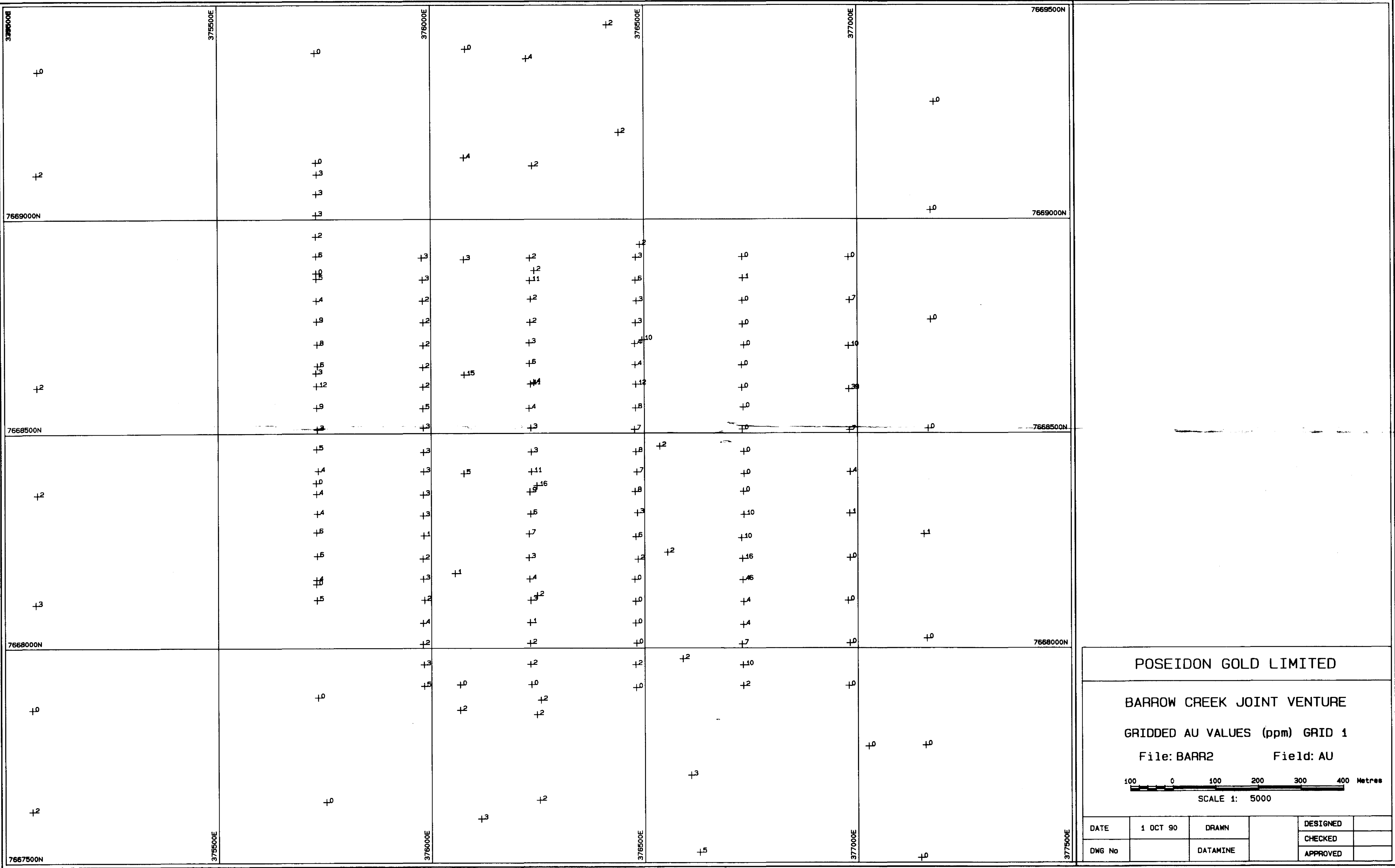




|                                                                  |          |          |           |          |  |
|------------------------------------------------------------------|----------|----------|-----------|----------|--|
| POSEIDON GOLD LIMITED                                            |          |          |           |          |  |
| BARROW CREEK JOINT VENTURE                                       |          |          |           |          |  |
| GRIDDED CU VALUES (ppm) GRID 1                                   |          |          |           |          |  |
| File: BARR2                                                      |          |          | Field: CU |          |  |
| <div>100 0 100 200 300 400 Metres</div> <div>SCALE 1: 5000</div> |          |          |           |          |  |
| DATE                                                             | 1 OCT 90 | DRAWN    |           | DESIGNED |  |
| DWG No                                                           |          | DATAMINE |           | CHECKED  |  |
|                                                                  |          |          |           | APPROVED |  |

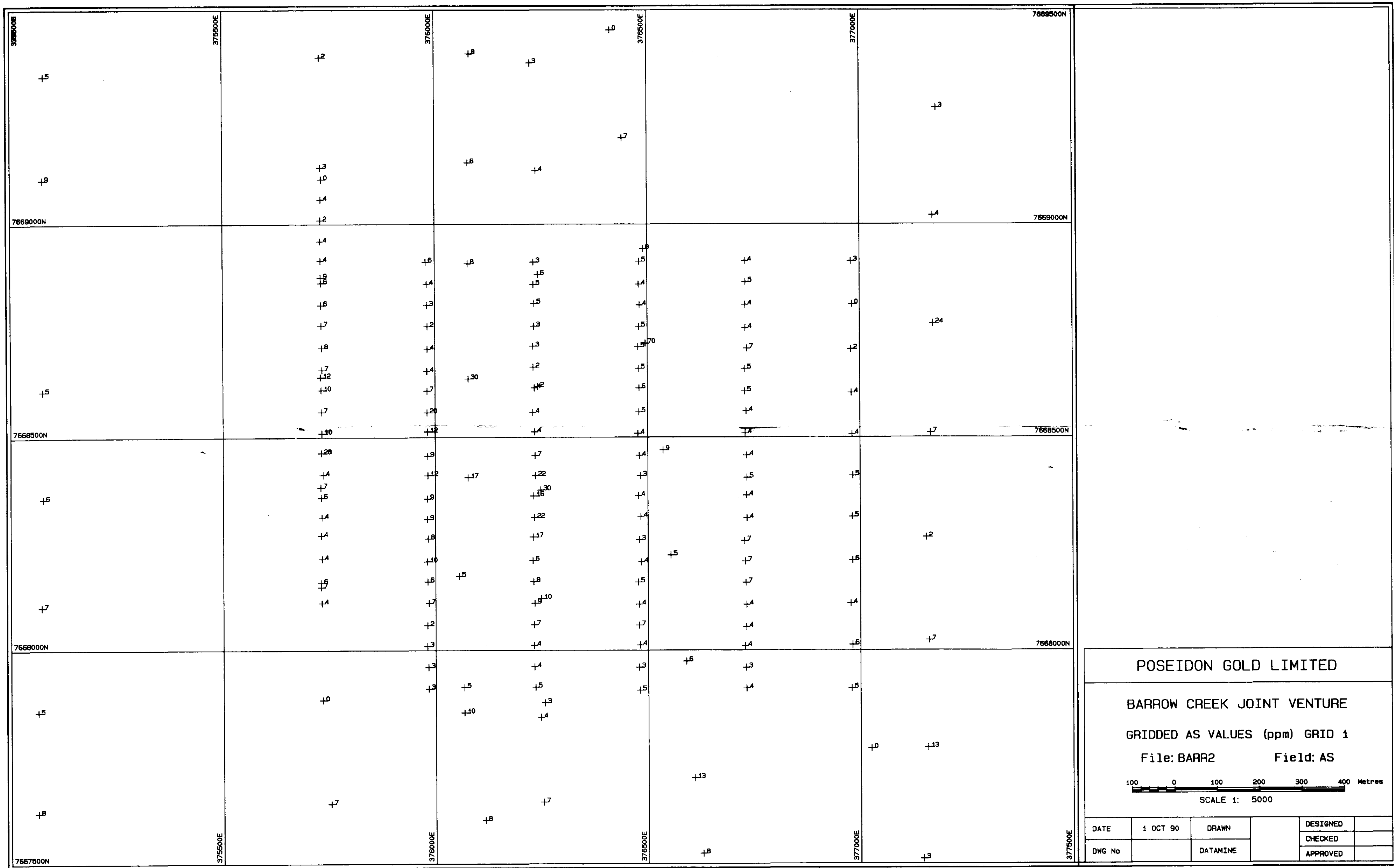
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