

ANNUAL REPORT OF
EXPLORATION ACTIVITIES ON
EXPLORATION LICENCE 5482
FOR THE PERIOD
16.09.89 to 15.09.90
AND PROPOSED EXPENIUTRE
FOR YEAR FOUR

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CR90/672

TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	3
	1.1 Location and Access	3
	1.2 Climate	3
	1.3 Physiography	3
	1.4 History and Previous Work	4
2.0	REGIONAL GEOLOGY	5
3.0	MINERALISATION	7
4.0	WORK UNDERTAKEN	8
5.0	EXPENDITURE	10
6.0	PROPOSED FORTH YEAR EXPENDITURE	11
7.0	REFERENCES	12

LIST OF FIGURES AND TABLES

REGIONAL LOCATION MAP

GEOCHEMICAL TRAVERSE PLANS

- SAMPLE LOCATION GRID 1
- AU GRID 1
- AS GRID 1
- CU GRID 1

1.0 INTRODUCTION

Exploration Licence 5482 covers an area of 32 one minute blocks. The licence was first granted in September 1988 to Yuendumu Mining company. Negotiations are at an advanced stage to have this exploration licence included in a joint venture agreement between Yuendumu Mining company and Australian Development Limited in which ADL will act as Manager. To this end, ADL has begun exploration on EL 5482, on behalf of YMC, in anticipation of this agreement being registered in mid 1990.

1.1 Location and Access

EL 5482 is located approximately 45km north-west of the small township 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.

1.2 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.

1.3 Physiography

The two most dominant features which characterise the exploration licence area are the Crawford and Osborne Ranges. These consist of peneplained grey ridges of orthoquartzite within the tightly synclinally folded Hatches Creek Group. Within the licence area the ranges are a number of smaller but similar ridges separated by flat valleys spread out along 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.

1.4 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.

Kewanee 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 by this method 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, hence 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, hence no further work was undertaken.

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, 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 10 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.

3.0 MINERALISATION

A number of styles of mineralisation may occur in the vicinity of EL 5482, all of which must be considered and tested. Repetition of lithologies in the area bounded by the margin of the Lander Trough to the north and the Willowra Regional Gravity Ridge to the south indicates potential exists from 134 deg 15' E in the east to at least the Hanson River to the west. More specifically the types of targets considered are :

- 1) Possible granite - contact style mineralisation, especially where granites juxtapose metabasic intrusives or iron-rich psammities, pelites or cherts.
- 2) Sheared base-metal bearing basic rocks and mineralised shears near the southern margin of the Lander Target.
- 3) Possible Carlin-type mineralisation associated with the Taylor (thrust) fault (Barracough, 1986).
- 4) A mineralised black shale sequence known to outcrop to the east of EL 5482. This sequence was drilled by Kewanee Aust and was found to be highly anomalous with respect to copper.
- 5) Sn and W bearing pegmatites known to exist in the region.

4.0 WORK UNDERTAKEN

During YEAR THREE of tenure the work undertaken on EL 5482 has included:

- i) Geological reconnaissance work to validate air photo interpretations and ratify the geophysical (magnetic) interpretations.

ADO's Consultant Geophysicist was asked to review the results of aeromagnetic survey and to provide more specific targets on which to base the Year THREE and FOUR work programme.

- iv) Regional geochemical sampling.

(Assay results of the regional geochemistry programme are found in Table 4.1 and plans are provided at 1:25,000 scale for Sample Numbers, Au, As and Cu.)

A pronounced north-west trending magnetic strike is noted within the licence area. Soil samples of -180 micron fraction and +180 micron\ -1mm were collected over 250 metre intervals across strike of the magnetic linear and on lines spaced 500 metres apart. In the area surrounding the Petrick's workings the sample interval was 50 metres on lines spaced 100 metres apart. Orientation sampling undertaken in other areas within the Barrow Creek region and has highlighted the variability of background values with respect to some of the base metal elements. Background values of soil samples taken over the Arunta (micaeous) schists are typically 20 ppm Zn, 10-15 ppm Cu, 10 ppm Ni and 1 ppb Au. Background values of soil samples taken over the conformable dolerites are typically 20-25 ppm Zn, 50 ppm Cu, 20 ppm Ni and 1 ppb Au.

Sampling of the licence area was part of a regional soil sampling programme in which samples were taken over EL's 6306, 6307, 5235 and 5482. Sample Grid 1 is enclosed, and encompasses EL 5482 and EL 6307. Approximately 900 regional samples were collected over this grid and analysed for Ag, Au, As, Bi, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb and Zn. The sample results presented in Table 4.1 represent the samples east of the 374000E AMG which cross the strike of EL 5482.

- v) The contracting of the Central Lands Council to undertake a sacred sites survey of the area to ensure aboriginal sites of significance are not disturbed by exploration activities.

In January 1989, Australian Development Operations approached the Central Lands Council (CLC) with the intention of contracting the CLC to undertake a Sacred Site Clearance in the Barrow Creek region. Two areas were defined by ADL for this survey, which included areas under Exploration Licences 5235, 5482, 6306 and 6307. A Sacred Site Protection Agreement was also signed to ensure the protection of any sites located within these areas. This agreement is known as the Neutral Junction Site Clearance Agreement.

The site clearance survey was undertaken by the CLC between 6th and 19th February 1989. Although this work was apparently documented at the time and a map produced of the significant sites, results of the survey were not made available to ADL\YMC until a 1 : 250 000 scale map was received on 21st August 1989. At this scale site cannot be clearly defined to the accuracy required to adequately ensure exploration work would not interfere with these sites.

Under the Neutral Junction Site Clearance Agreement, exploration work cannot be undertaken until an agreement has been made with respect to the documented sites and the area represented by these sites. The 1 : 250 000 scale map provided by the CLC has indicated forty-five (45) sites of significance in the vicinity of EL's 5235, 5482, 6306 and 6307!

Australian Development Operations has, by having site clearances undertaken over Perpetual Pastoral Leasehold, displayed its commitment to protect any sacred sites and to ensure harmonious relationships and minimal interference with Aboriginal communities. Since an exploration work programme has not been possible over these areas for a large proportion of the 12 months of tenure, the exploration expenditure for EL 5235 was significantly less than ADL's internal budget for the area.

An additional site survey was conducted in the Petrick's area during April 1990, to document the sites which are in the vicinity of the planned work programme. This survey involving field officers of the CLC, representatives of YMC and ADO and traditional custodians failed to document the specific sites in the field, however after protracted negotiations with the CLC a draft proposal by ADO has been accepted in principle. During the field survey the traditional custodians indicated that they were not disturbed by ADO conducting a regional soil survey in the vicinity of the sites, however they were adamantly opposed to any form of drilling in the area.

TABLE 4.1

POSEIDON GOLD LIMITED - BARROW CREEK JOINT VENTURE

SOIL GEOCHEMISTRY REPORT 16/09/90

SNN	AG ppm	AU ppb	AS ppm	BI ppm	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	MN ppm	MO ppm	NI ppm	PB ppm	ZN ppm	B ANG	N 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	6	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

POSSIDON GOLD LIMITED - BARROW CREEK JOINT VENTURE

SOIL GEOCHEMISTRY REPORT 16/09/90

SNN	AG ppm	AU ppb	AS ppm	BI ppm	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	MN ppm	MO ppm	NI ppm	PB ppm	ZN ppm	B ANG	N 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

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	PB	ZN	E	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	12604	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 ppm	AU ppb	AS ppm	BI ppm	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	MN ppm	MO ppm	NI ppm	PB ppm	ZN ppm	E AMG	N 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	370016	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

5.0 EXPENDITURE

Final year accounts for EL 5482 for the period of tenure (17/9/89 - 16/9/90) are listed below:

SALARIES	1,880
WAGES	1,340
ASSAYS	2,558
DIESEL	556
CONSULTANTS	88
FRIEGHT	891
GEOLOGICAL EQUIPMENT	70
MOTOR VEHICLES	718
TENURE	160
TRAVEL AND ACCOMADATION	2,269
HIRE OF EQUIPMENT	252
PRINTING	194
COMMUNICATIONS	95
COMPUTER SUPPORT	870
ADMINISTRATION AND REPORTING	1,131
MAINTENANCE	955
DRAFTING	623
CONSUMABLES	241
FIELD OVERHEADS	261
LEGAL FEES	804

	\$16,445
	=====

This figure (\$16,445) compares with the Year Three covenant of \$16,000.

6.0 PROPOSED EXPENDITURE FOR THE PERIOD 16/9/90-15/9/91

The potential nature of mineralisation in the vicinity of EL 5482 will necessitate the following work programme and expenditure :

PROPOSED BUDGET FOR EL 5482

ASSAYS	1,900
SALARIES	2,000
WAGES	1,200
GEOPHYSICS	600
DIESEL	400
FRIEGHT	600
MOTOR VEHICLES	500
TENURE	160
TRAVEL AND ACCOMADATION	250
COMMUNICATIONS	50
ADMINISTRATION AND REPORTING	800
MAINTENANCE	700
DRAFTING	400
CONSUMABLES	240
FIELD OVERHEADS	200

	\$10,000
	=====

The above budget will enable approximately 150 regional soil samples to be collected on 250 metre sample intervals and 500 metre line spacing. The magnetic anomaly in the NW of the licence area is of particular interest and sampling will be concentrated over this feature. If results are encouraging a small RAB programme of drilling will be undertaken. A contingency budget for the area has been set aside in this event.

References

Bagus, L., 1985 Geology of the Taylor 1:100 000 Map Sheet, Northern Territory: Tech. Rept. GS 85/4 Nor. Terr. Geol. Surv. (Aust)

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

Felderhof, J. B and Barracclough, D., 1974 Annual Report - Osborne-Crawford Range, year ending 27/12/73 EL 804: Kewanee (Aust) Pty Ltd (Unpublished Company Rept) Nort. Terr. Aust. D.M.E. File CR 74/12.

POSELTON GOLD LIMITED

BARRON CREEK JOINT VENTURE

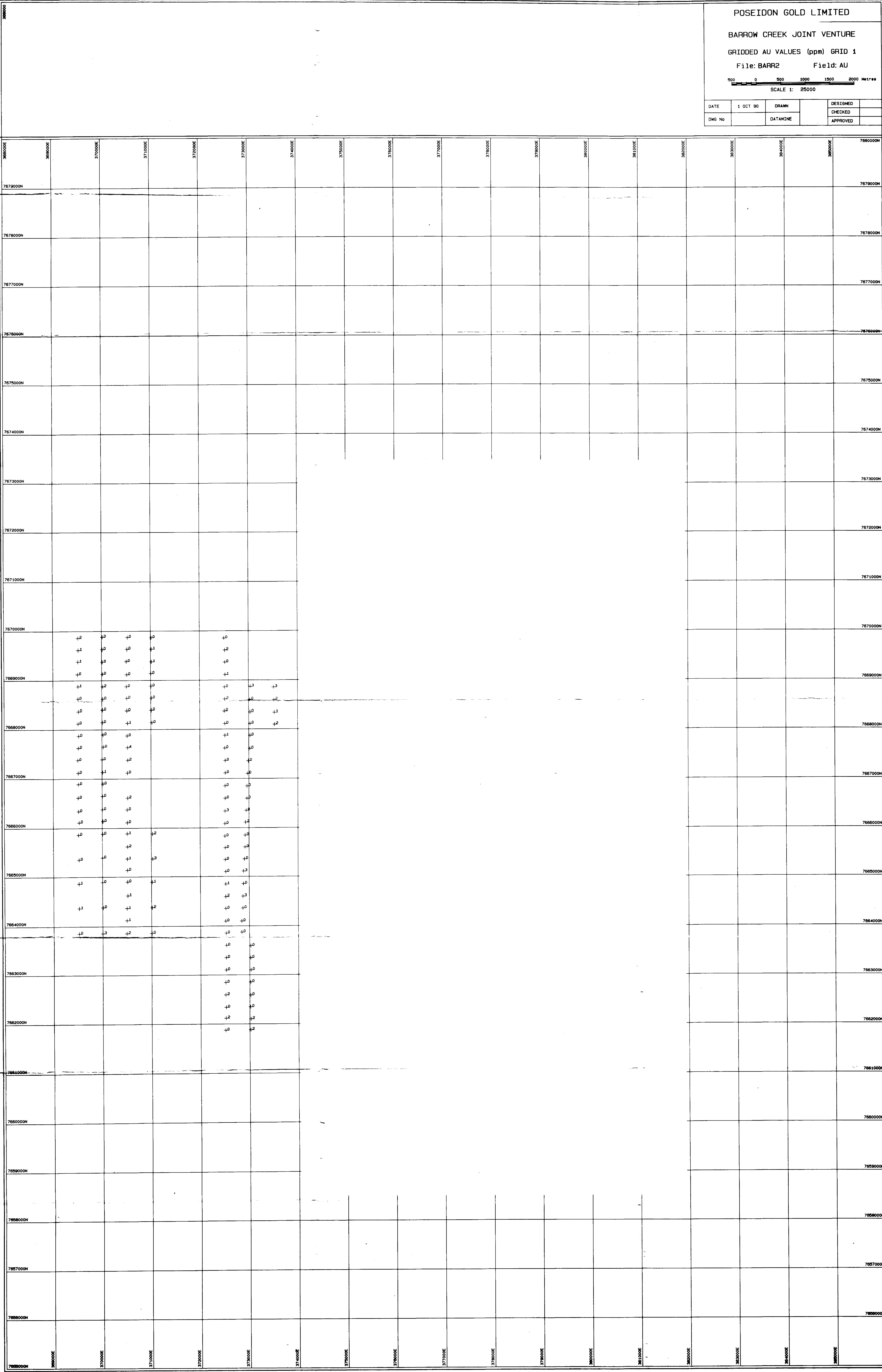
SAMPLE NUMBERS GRID 1

File: BARR2 Field: SN

500 0 500 1000 1500 2000 2500
SCALE 1:25000

DATE	1 OCT 90	DRAWN	DESIGNED	
DWG No		DATETIME	CHECKED	
			APPROVED	

CR90/672



POSEIDON GOLD LIMITED

BARROW CREEK JOINT VENTURE

GRIDDED AU VALUES (ppm) GRID 1

File: BARR2 Field: AU

500 0 500 1000 1500 2000 Metres

SCALE 1: 25000

DATE	1 OCT 90	DRAWN		DESIGNED	
DWG No		DATAMINE		CHECKED	
				APPROVED	

POSEIDON GOLD LIMITED

BARROW CREEK JOINT VENTURE

GRIDDED AS VALUES (ppm) GRID 1

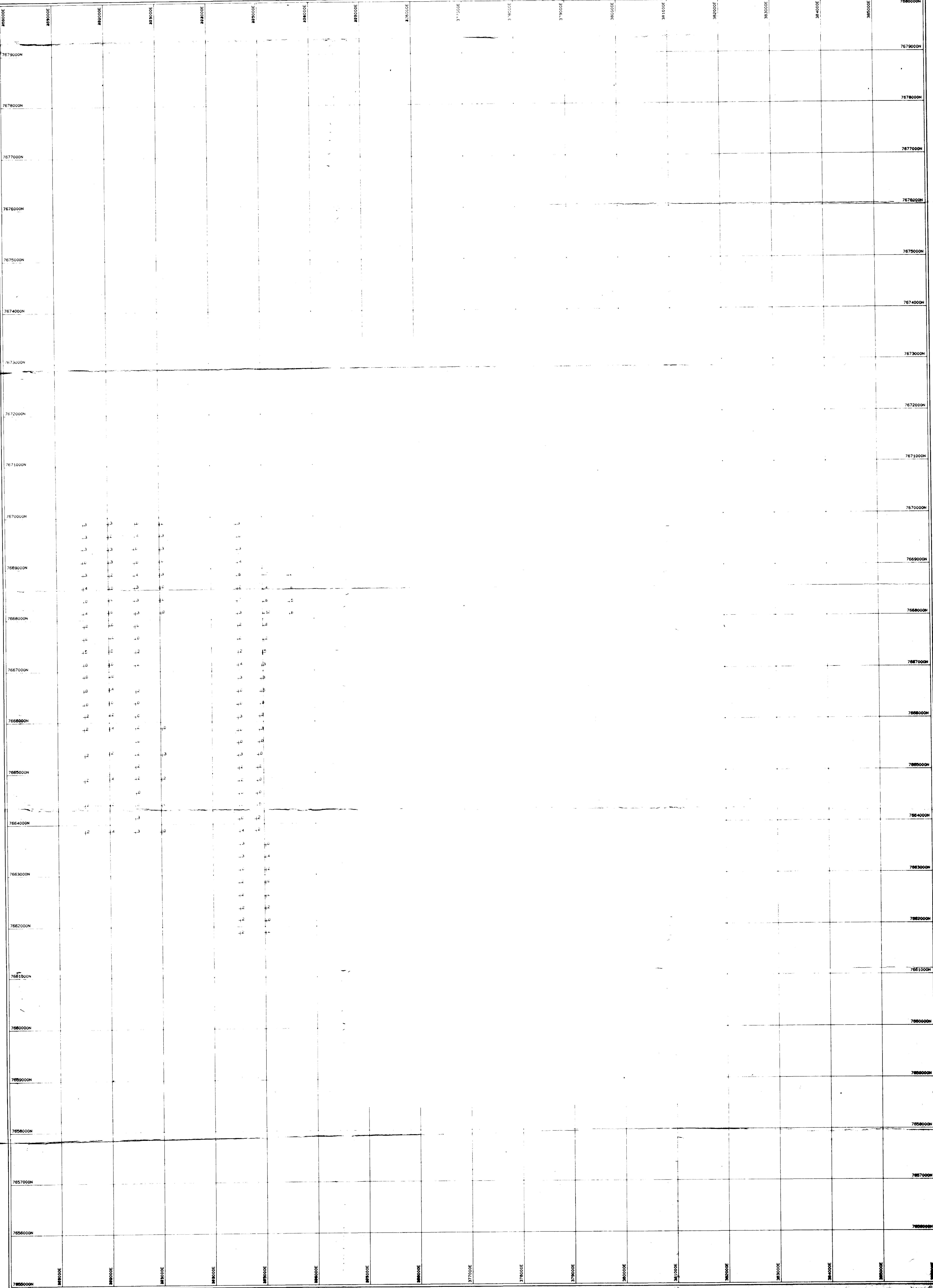
File: BARR2

Field: AS



SCALE 1: 25000

DATE	1 OCT 90	DRAWN		DESIGNED	
DWG No		DATETIME		CHECKED	
				APPROVED	



366000

POSEIDON GOLD LIMITED

BARROW CREEK JOINT VENTURE

GRIDDED CU VALUES (ppm) GRID 1

File: BARR2Field: CU

5000500100015002000

Metres

SCALE 1: 25000

DATE	1 OCT 90	DRAWN		DESIGNED	
DWG No		DATETIME		CHECKED	
				APPROVED	

CR90/672

366000E	365000E	370000E	371000E	372000E	373000E	374000E	375000E	376000E	377000E	378000E	379000E	380000E	381000E	382000E	383000E	384000E	385000E	768000N
7679000N																		7679000N
7678000N																		7678000N
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7669000N		+10	+7	+14	+10		+5											7669000N
		+10	+9	+16	+9		+6											
		+11	+7	+10	+10		+11											
		+9	+11	+12	+15		+11											
7668000N		+9	+8	+15	+11		+14	+13	+14									7668000N
		+8	+7	+12	+14		+11	+11	+13									
		+6	+7	+8	+9		+11	+11	+12									
		+8	+5	+9	+10		+11	+16	+11									
7667000N		+8	+4	+6			+11	+13										7667000N
		+6	+6	+8			+9	+13										
		+7	+5	+7			+9	+11										
		+5	+13	+8			+9	+12										
7666000N		+11	+5				+8	+6										7666000N
		+7	+5	+6			+8	+11										
		+7	+5	+7			+7	+7										
		+5	+9	+8			+6	+6										
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7662000N							+7	+6										7662000N
							+6	+8										
7661000N																		7661000N
7660000N																		7660000N
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7658000N																		7658000N
7657000N																		7657000N
7656000N																		7656000N
7655000N	365000E	370000E	371000E	372000E	373000E	374000E	375000E	376000E	377000E	378000E	379000E	380000E	381000E	382000E	383000E	384000E	385000E	386000E