

Though no re-calculations were completed after the drilling of the final two holes later in the year, initial estimates of the geological resource suggested about 45,000 tonnes grading 4.2 g/t gold (as shown on table 11.). As the final two holes - MRC661 and MRC662, designed to check continuity of mineralisation between 25 metre spaced drill sections - did not intersect good mineralisation at the RL level tested, the resource tonnage figure is possibly reduced by 10-20%.

A feature of the drill results was the intersection of some very high grade mineralisation - including 5 metres grading 31 g/t (centred on one metre grading 132 g/t).

### Discussion

It's clear from the drilling results that the mineralisation through the Highway area is narrow and erratic in terms of grade, but sometimes containing very high grades. Further work in the area should involve drilling out the deposit on a 12.5 by 10 metre pattern to try and arrive at accurate tonnage/grade figures.

### **KENDERGARDEN**

The Kendergarden prospect is approximately 200 metres west of the northern end of the Hercules Pit. Mineralisation can be seen in shallow pits to comprise discordant quartz-limonite (sulphide) veining within a sequence of shales, siltstones and greywackes. The trend of the mineralisation is sub-parallel to the Northern Hercules trend.

The area straddles the former boundary between Cyprus tenements and a tenement block owned by Ken Day Pty Ltd but acquired by Cyprus in early 1988. The ground was always considered prospective for gold mineralisation and it was geologically mapped (enclosure 146) and one RC hole drilled (with negative results) in 1986 but any systematic drilling programme was deferred until the ownership situation was rationalised.

As well as the 1989 work described below, some costeaning was carried out by the mining division. Location and assay details for this costeaning will be supplied in a later report.

### Geological Mapping

The geological setting of this area is shown on enclosures 146, 184 and 132. The mineralisation is essentially Northern Hercules style and it appears to be located close to the point of intersection of a major shear and an anticline axis.

## Drilling

The programme comprised 748 metres of air-trac drilling (in 42 holes) and 246 metres of RC (7 holes). The air-trac drilling (commissioned and monitored by the Mining Division) was on a 25 x 10 metre basis while the RC drill sections were 25 metres apart with generally one hole per section.

Drill logs for the RC holes (there are no available air-trac logs) are presented in appendix 3 while drill hole gold analyses are contained in appendix 4. Any available repeat gold together with arsenic-silver-copper-lead and zinc analyses are contained in appendix 5.

A drillhole collar summary report is presented as appendix 12. There are no available down hole survey data. Enclosures 166-183 are 1:250 scale drill sections containing all gold assay data, available lithological data and interpreted ore blocks. Drillhole intersections are listed in table 13.

## Discussion

While no ore resource calculations have been made, the area may have potential to host up to 50,000 - 100,000 tonnes of gold mineralisation. Further work should involve more RC and possibly air-trac drilling on initial 25 metre sections.

## **EUREKA**

The Eureka prospect, 1.4 km. SSE of the Moline Plant contains a number of discontinuous gossanous zones over a strike length of 3 km. They represent southern extensions of the Moline Dam and Southern Hercules mineralised zones (being mined in the Moline and School pit areas respectively). These zones are possibly on opposite limbs of an anticlinal complex with a closure near Eureka Creek - a major E-W drainage system through the centre of the prospect.

In the late 1960's United Uranium N.L. examined a 200 metre long quartz-limonite-scorodite gossan immediately south of Eureka Creek. Shallow costeaning at 16 metre (50 feet) intervals gave best intersections of 6 metres (20 feet) grading 1.4 g/t, 6 metres grading 1.1 g/t and 3 metres grading 2.4 g/t. They also found some free gold.

In 1984-85, Cyprus initially assessed the northern half of the area with 1:2,500 scale mapping/rock chip sampling, a ground magnetometer survey and one RC drillhole which drill-tested (with negative results) a "bullseye" magnetic anomaly co-incident with part of scorodite gossan.

TABLE 12.  
KENDERGARDEN

Surpac - DRILL HOLE COLLAR SUMMARY - \HER database

HOLEID	NORTHING	EASTING	R.L.	DEPTH	DIP	AZIMUTH
AT038	1925.50	811.20	120.90	18.00	-60.00	90.00
AT039	1925.30	819.00	120.30	18.00	-60.00	90.00
AT040	1950.10	815.80	123.70	18.00	-60.00	90.00
AT041	1950.00	807.40	123.40	18.00	-60.00	90.00
AT042	1975.30	803.50	127.10	18.00	-60.00	90.00
AT043	1998.40	801.80	131.10	18.00	-60.00	90.00
AT044	1998.00	794.30	130.40	18.00	-60.00	90.00
AT045	2024.90	793.80	132.50	18.00	-60.00	90.00
AT046	2175.30	788.70	128.90	18.00	-60.00	90.00
AT047	2149.80	783.50	126.30	18.00	-60.00	90.00
AT048	2149.80	793.30	128.30	18.00	-60.00	90.00
AT049	2125.30	784.50	127.60	18.00	-60.00	90.00
AT050	2103.10	787.40	128.60	14.00	-60.00	90.00
AT051	2102.10	799.60	129.80	18.00	-60.00	90.00
AT052	2077.30	791.50	129.40	18.00	-60.00	90.00
AT053	2075.10	800.10	129.90	18.00	-60.00	90.00
AT054	2052.40	799.40	132.80	18.00	-60.00	90.00
AT055	2053.00	790.60	131.30	18.00	-60.00	90.00
AT056	1999.30	873.70	126.20	15.00	-60.00	90.00
AT057	2043.70	850.70	131.50	18.00	-60.00	90.00
AT058	2050.20	904.40	129.70	18.00	-60.00	90.00
AT059	2074.40	958.70	131.90	8.00	-60.00	90.00
AT060	2074.30	955.30	131.90	13.00	-60.00	90.00
AT061	2097.10	955.60	132.10	18.00	-60.00	90.00
AT062	2096.20	944.90	131.70	18.00	-60.00	90.00
AT063	2049.80	961.40	131.50	18.00	-60.00	90.00
AT064	2075.20	973.70	130.90	18.00	-60.00	90.00
AT065	2125.60	937.10	129.90	18.00	-60.00	90.00
AT066	2125.50	949.20	131.60	18.00	-60.00	90.00
AT067	2125.40	960.90	132.00	18.00	-60.00	90.00
AT068	2150.00	951.30	132.00	18.00	-60.00	90.00
AT069	2150.40	942.20	131.40	18.00	-60.00	90.00
AT070	2150.40	932.70	130.70	18.00	-60.00	90.00
AT071	2175.10	947.70	131.40	18.00	-60.00	90.00
AT072	2175.00	934.90	130.50	18.00	-60.00	90.00
AT073	2175.60	920.70	129.10	18.00	-60.00	90.00
AT082	1842.90	912.70	129.80	18.00	-60.00	90.00
AT083	1896.00	933.60	132.10	18.00	-60.00	90.00
AT144	1671.00	901.00	123.00	18.00	-60.00	90.00
AT147	1671.00	907.00	123.00	15.00	-60.00	90.00
AT148	1650.00	902.00	125.00	29.00	-60.00	90.00
AT150	1875.00	937.00	132.00	24.00	-60.00	90.00
MRC615	2026.00	785.00	131.00	36.00	-60.00	90.00
MRC616	2000.00	790.00	130.00	36.00	-60.00	90.00
MRC617	1975.00	796.00	126.00	36.00	-60.00	90.00
MRC618	1975.00	808.00	126.20	18.00	-60.00	90.00
MRC619	1925.00	800.00	121.00	36.00	-60.00	90.00
MRC620	1875.00	925.00	131.00	42.00	-60.00	90.00
MRC621	1675.00	892.00	124.00	42.00	-60.00	90.00

Drill Statistics :                      42x Airtrac =        748.00 m  
    7x RCP    =        246.00 m  
 NOTE:  
 Azimuth 90.00 = GRID EAST            TOTAL    =        994.00 m

TABLE 13.

KENDERGARDEN - Drillhole Intersections

Data from database HER/KEN

MAR-90

Reporting grade = 0.500

Tolerances:-

min grade = 0.500

min lowgrade length = 2.000

HOLE ID	FROM	TO	LENGTH	AU1 GRADE
=====				
<u>AIRTRAC DRILLING</u>				
AT038	6.00	8.00	2.00m.@	3.375
AT039	14.00	15.00	1.00m.@	1.190
AT042	14.00	18.00	4.00m.@	5.248
AT043	7.00	11.00	4.00m.@	1.488
AT044	17.00	18.00	1.00m.@	2.650
AT045	12.00	18.00	6.00m.@	2.112
AT050	5.00	7.00	2.00m.@	2.210
AT056	5.00	7.00	2.00m.@	1.105
AT058	7.00	8.00	1.00m.@	2.790
AT061	10.00	12.00	2.00m.@	1.495
AT062	3.00	4.00	1.00m.@	1.260
AT064	7.00	8.00	1.00m.@	1.870
AT065	14.00	15.00	1.00m.@	1.250
AT069	4.00	5.00	1.00m.@	3.050
AT071	6.00	7.00	1.00m.@	1.190
AT072	5.00	7.00	2.00m.@	0.685
AT073	6.00	7.00	1.00m.@	1.720
AT083	11.00	17.00	6.00m.@	1.743
AT144	12.00	16.00	4.00m.@	3.228
AT147	3.00	4.00	1.00m.@	1.610
AT147	6.00	8.00	2.00m.@	3.285
AT148	15.00	17.00	2.00m.@	1.230
AT150	12.00	16.00	4.00m.@	3.300

TABLE 13. CONTINUED

## RC DRILLING

MRC615	22.00	24.00	2.00m.@	1.045
MRC615	27.00	29.00	2.00m.@	1.180
MRC616	23.00	25.00	2.00m.@	1.515
MRC617	16.00	17.00	1.00m.@	1.230
MRC617	23.00	24.00	1.00m.@	6.290
MRC617	27.00	28.00	1.00m.@	2.000
MRC618	8.00	9.00	1.00m.@	20.300
MRC618	10.00	12.00	2.00m.@	4.195
MRC618	13.00	17.00	4.00m.@	4.398
MRC619	29.00	31.00	2.00m.@	0.625
MRC620	15.00	17.00	2.00m.@	0.920
MRC620	23.00	25.00	2.00m.@	0.980
MRC620	28.00	29.00	1.00m.@	2.170

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### Gridding

The 1989 exploration programme commenced with 50 x 25 metre spaced gridding over the gossanous zones and wider spaced gridding in areas of lesser interest. The total amount of gridding was 62.4 line kilometres, spread over five 1:1,000 scale sheets (Ref enclosures 185-189).

### Geological Mapping

As well as being partially covered by a 1:5,000 scale mapping programme around the open pit areas (enclosure 184) a 1:1,000 scale geological mapping/rock chip sampling programme covered the zones of interest. A total of 143 rock chip samples were collected. Geological fact mapping and rock chip geochemical data are shown on enclosures 185-189 while rock chip geochemical data are also listed in appendix 1.

### Soil Geochemistry

The gridded areas were soil sampled on a 50 x 25 or 100 x 25 metre pattern. Analytical data are listed in appendix 6 and gold-arsenic-silver values plus gold contours are shown on 1:1,000 scale soil geochemical plans presented as enclosures 190-194.

As can be seen from the plotted data there are a number of high intensity gold and arsenic anomalies, with soil gold values up to 520 ppb.

### Costeaning

Approximately 2000 metres of costeaning assessed some of the soil and rock chip anomalous zones. Because of logistical problems the costeaning programme was not completed - it did not fully test the zones of interest on the southern sheet (sheet 5.).

The costean locations are plotted on the geological and geochemical plans, the gold-arsenic-silver analyses are plotted on the geochemical plans, complete analyses are listed in appendix 2, costean geological mapping and gold values shown on 1:250 scale enclosures 195 and 196 and costean intersections listed on table 14.

The geochemical data indicate that surface gossans with more than plus 1 g/t gold over 5 metres in costeans are not widely represented.

TABLE 14  
EUREKA  
COSTEAN INTERSECTIONS

NORTHING	EASTING (FROM)	(TO)	WIDTH (m)	GRADE OF GOLD (g/t)
14100	12640	12650	10	0.38
14000	12600	12627.5	27.5	0.35
	12632.5	12642.5	10	0.46
13850	12587.5	12590	2.5	0.37
13700	12515	12520	5	1.28
including	12517.5	12520	2.5	2.13
13650	12500	12505	5	0.43
	12515	12520	5	0.30
13600 (1984)	12500	12505	5	1.10
13750	12565	12570	5	0.34
13550	12492.5	12495	2.5	0.38
13500	12495	12997.5	2.5	0.40
13200	12285	12287.5	2.5	0.84
13000	12360	12362.5	2.5	0.42
12900	12352.5	12355	2.5	1.78
12850	12360	12362.5	2.5	0.88
12700	12352.5	12355	2.5	0.72
			(with 1.8% As)	
12600	12312.5	12315	2.5	0.27
12100	12425	12430	5	0.39
11700	12337.5	12340	2.5	0.54
11600	12380	12382.5	2.5	0.29

## Discussion

From the work to date it does not appear that there are any obvious drill targets with significant (+ 100,000) tonnage potential but that a number of smaller target zones could, cumulatively, produce in excess of this tonnage.

It's difficult to try and estimate sub-surface gold grades from costean values and, at this time, any costean values above 0.25 g/t can probably be considered interesting. The discouraging feature of the costean work completed to date is the generally narrow widths of anomalous material.

## **HIGH CHINESE**

This area, between 2.5 and 7 km. south of Moline covers a area of essentially "railroad" geology where convergent anticline axes through Tumbling Dice, Moline Dam and Southern Hercules have become sub-parallel and/or merged (as can be expected when moving up-sequence through a south plunging anticlinal complex). Rock units through the prospect are ridge-forming greywackes with quartzitic intercalations and substantial quartz veining, siltstones, shales and minor cherts. They are probably at the Mount Bonnie to Burrell Creek Formation stratigraphic level.

Prior to 1989 the area had been assessed on a regional reconnaissance basis only though some skeletal gridding had been completed in 1987. There are two known areas of shallow chinese exploratory hard rock diggings and several areas of eluvial/alluvial workings as shown on enclosures 197 and 200.

## Gridding

During 1989 a total of 27.6 line km. of gridding was constructed on a 200 x 25 metre basis, subsequently closing down to 100 x 25 or 50 x 25 metres in areas of interest.

## Soil Geochemistry

Approximately 1900 soil samples were collected over the grid in a number of phases. Gold-arsenic-silver-copper-lead and zinc results and gold contours are shown on 1:5,000 scale enclosures 197, 198 and 199 as well as 201 and 202 (EL Dollarado-Bonnie Line sheets). Complete soil geochemical data are listed in appendix 6.

The soil sampling programme delineated a number of zones of interest in two separate areas: 12400N to 11000N and 10600N to 8500N. The relatively non-anomalous area from 11000N to 10600N is the topographically highest in the Moline area and the lack of anomalies could be a function of topography (there are a number of gossans through the area).



### Rock Chip Geochemistry

Geochemical data for rock chips collected in the area prior to the 1989 gridding are shown on enclosures 9 and 10 while the results of 31 samples collected after the gridding and soil geochemistry are shown on enclosure 200. Complete geochemical data are contained in appendix 2. (The pre-gridding data are in the regional section).

The results of the limited rock chip geochemistry confirm that there are multiple gossanous zones through the area; maximum rock chip value to date is 5.3 g/t.

### Discussion

High Chinese is obviously an area of substantial interest and should be further assessed by additional soil geochemistry - particularly at the north end (north of Eureka Creek and south of Tumbling Dice) where reconnaissance soil sampling lines in 1986 (Ref enclosure 9) located anomalies - and by a systematic geological mapping/rock chip sampling program followed up by costeaning (if possible, given some difficult topography) and shallow air-trac or RC drilling. Topographic maps of the area at 1:1,000 scale should be produced and used as basemaps for further work.

### EL DOLLARADO - BONNIE LINE

El Dollarado - Bonnie Line is the name given to a grid system covering a sulphidic chert (BIF)-shale-tuff-greywacke sequence (Gerowie Tuff?) trending in a NW direction through the old El Dollarado diggings on a now disused part of the Kakadu Highway 2 km. north of Moline. (The El Dollarado diggings comprise a shaft and an adit each dug about 20 metres into a ridge of pyritic, manganiferous chert (BIF) that does not appear to carry any gold!!).

Excepting for some skeletal gridding on the southern half of the area the only pre-1989 work was of a regional nature and can be noted on the 1:10,000 scale plans (enclosures 5-12) accompanying this report. The fact of similar stratigraphy to Tumbling Dice - Moline Dam - Southern Hercules and the discovery of a number of rock chip gold anomalies during regional work prompted the 1989 exploration programme.

### Gridding

Approximately 22 line kilometres of gridding was constructed or rehabilitated on an initial 200 x 25 metre basis generally with subsequent closing down to 100 x 25 metres in areas of interest. The gridding is shown on 1:5,000 scale enclosures 201 and 202 as well as the above mentioned regional enclosures.

### Soil Geochemistry

Approximately 770 soil samples were collected over a strike length of 2.6 km. in the northern part of the grid. Gold-arsenic-silver geochemical data and gold contours are shown on enclosures 9, 201 and 202 while complete (gold-arsenic-silver-copper-lead-zinc) data are listed in appendix 6.

Some restricted strike length low to moderate gold anomalies were delineated. Completely believable responses were up to 32 ppb; a 1540 ppb response on line 12400N is suspect and was not confirmed by repeat sampling (although, if coarse gold is involved, this is not necessarily a negative result).

### Discussion

The soil geochemistry over the northern part this area has produced relatively disappointing results. While the outcropping rocks appear to be stratigraphic equivalents of the "stratabound"? mineralised sequences at Moline there is not the same aeromagnetic anomaly association. The significance of this is uncertain.

The soil anomalies so far outlined could be further evaluated by infill soil sampling and rock chip sampling possibly followed by costeaning and/or drilling. The south end of the area has not yet been soil sampled. As there are a number of gold - and particularly arsenic - rock chip and magnetic anomalies in this area (ref enclosures 8 and 12) this work should be carried out in due course.

### **SIMPLE DREAMS**

Simple Dreams, 3 km. SE of Moline, consists of a number of sub-parallel zones of quartz-pyrite-arsenopyrite-(limonite-scorodite) mineralisation that is probably shear controlled but essentially conformable with bedding of enclosing greywackes and siltstones. The zone dips steeply to the west on the western side of a narrow ridge 20-40 metres higher than adjacent ground.

The area was initially gridded and geologically mapped/rock chip sampled and partly magnetically surveyed and soil sampled in 1986-1987. Previous reports to the Mines Department have contained a 1:2,500 scale geologic/geochemical magnetic plan (numbered 3547), the area then being known as Wandie Ridge. As indicated by an insert to this plan the gossanous zones of interest appear peripheral to a large low-intensity aeromagnetic anomaly. The anomaly can be seen on the aeromagnetic contour plan presented an enclosure 11.

### Geological Mapping

An 1100 x 200 metre area - centred on the western and most continuous of the quartz-limonite-scorodite gossans - was mapped/rock chip sampled at 1:1,000 scale. Data are presented on enclosure 204. Rock chip assay and lithological data are presented in appendix 1.

The gossan is 750 metres long, generally 2-6 metres wide, variably limonitic/scoroditic and has produced rock chip analyses up to 7.3 g/t gold, 12.4% arsenic, 14 ppm silver and 0.74% lead.

### Soil Geochemistry

A total of 238 soil samples were collected at 25 metre spacings on 50 metre spaced grid lines and analysed for gold-arsenic-silver-copper-lead and zinc. The gold-arsenic-silver values as well as gold and arsenic contours are plotted on enclosures 204 and 205 while complete soil geochemical results are contained in appendix 6.

The contoured data indicate a number of semi-continuous gold anomalies along the outcropping gossanous zone though with a lower intensity - (up to 150 ppb) - than would have been expected; (the values are significantly lower than Tumbling Dice). There are several restricted strike-length but higher intensity gold anomalies to the east and west of the gossan. A very strong arsenic anomaly along the gossan trend, with many values in excess of 2000 ppb, reflects the presence of scorodite in the gossan.

### Drilling

During the year the western zone (shown on enclosures 203-205) and part of a central zone (ref plan 3547 in 1987 report) were partially drill tested with 242 metres of air-trac drilling (in 14 holes) and 617 metres of RC (13 holes). The air-trac drilling (not completed because of rig unavailability) generally comprised one hole to test the gossan per 25 metre spaced section while the RC drilling comprised one or two holes on sections spaced between 25 and 100 metres.

Drill logs for all the drilling are presented in appendix 3 while drill hole gold analyses are contained in appendix 4 and available repeat gold and arsenic-silver-copper-lead-zinc analyses are contained in appendix 5. A drill hole collar summary is presented as table 15 and drill hole locations are shown on the geological plan (enclosure 203). There are no available down hole survey data. Enclosures 206-227 are 1:250 scale drill sections containing lithological and assay data as well as interpreted ore blocks. Drill hole intersections are listed on table 16.

TABLE 15.  
SIMPLE DREAMS

Surpac - DRILL HOLE COLLAR SUMMARY - \SDZ database

HOLEID	NORTHING	EASTING	R.L.	DEPTH	DIP	AZIMUTH
AT188	13050.00	10540.00	145.00	13.00	-60.00	90.00
AT189	13025.00	10528.50	145.50	21.00	-60.00	90.00
AT190	13000.00	10525.00	148.50	13.00	-60.00	90.00
AT191	12975.00	10516.00	151.00	15.00	-60.00	90.00
AT192	12950.00	10514.00	155.00	20.00	-60.00	90.00
AT193	12925.00	10506.00	159.00	21.00	-60.00	90.00
AT194	12900.00	10502.00	161.00	18.00	-60.00	90.00
AT195	12875.00	10501.00	161.00	15.00	-60.00	90.00
AT196	12850.00	10493.50	161.00	22.00	-60.00	90.00
AT197	12825.00	10492.50	162.00	19.00	-60.00	90.00
AT198	12800.00	10491.00	162.00	13.00	-60.00	90.00
AT199	12775.00	10482.50	160.00	19.00	-60.00	90.00
AT200	12750.00	10484.00	158.00	15.00	-60.00	90.00
AT201	12725.00	10481.00	155.00	18.00	-60.00	90.00
MRC489	12802.03	10811.10	156.10	54.00	-60.00	90.00
MRC490	12750.01	10810.19	157.44	54.00	-60.00	90.00
MRC491	12325.26	10515.67	152.47	48.00	-60.00	90.00
MRC492	12549.76	10490.13	157.35	54.00	-60.00	90.00
MRC493	12699.80	10467.66	150.67	54.00	-60.00	90.00
MRC494	12349.97	10515.39	152.79	54.00	-60.00	90.00
MRC495	12500.34	10497.43	157.57	48.00	-60.00	90.00
MRC496	12599.60	10478.38	156.95	48.00	-60.00	90.00
MRC497	12800.08	10473.47	158.18	35.00	-58.00	90.00
MRC511	12750.91	10472.37	154.76	42.00	-60.00	90.00
MRC512	12850.23	10479.87	157.02	36.00	-60.00	90.00
MRC513	12901.60	10485.23	156.69	42.00	-60.00	90.00
MRC519	12748.00	10460.00	150.00	48.00	-60.00	90.00

Drill Statistics :	14x Airtrac =	242.00 m
	13x RCP =	617.00 m
	TOTAL =	859.00 m

NOTE:  
Azimuth 90.00 = GRID EAST

TABLE 16.  
SIMPLE DREAMS - Drillhole Intersections

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Data from database SDZ  
Reporting grade = 0.500  
Tolerances:-

MAR-90

min grade = 0.500  
min lowgrade length = 2.000

HOLE ID	FROM	TO	LENGTH	AU1 GRADE
=====				
AIRTRAC DRILLING				
-----				
AT193	7.00	9.00	2.00m.@	1.620
AT194	7.00	11.00	4.00m.@	0.883
AT195	2.00	6.00	4.00m.@	2.130
AT197	7.00	10.00	3.00m.@	1.007
RC DRILLING				
-----				
MRC492	13.00	19.00	6.00m.@	1.967
MRC493	26.00	28.00	2.00m.@	0.745
MRC495	16.00	20.00	4.00m.@	0.910
MRC496	20.00	22.00	2.00m.@	1.300
MRC497	25.00	28.00	3.00m.@	2.893
MRC511	16.00	22.00	6.00m.@	3.613
MRC512	23.00	25.00	2.00m.@	0.970
MRC513	29.00	31.00	2.00m.@	6.200
MRC519	30.00	32.00	2.00m.@	1.095
=====				

As can be seen from Table 16 and the drill sections there are a small number of significant intersections and a large number of clearly sub-economic intersections.

### Discussion

After the RC but prior to the air-trac drilling the area was inferred to have potential for up to 50,000 tonnes of mineralisation grading 3-4 g/t. Following the air-trac drilling, however, this potential appears to have been substantially reduced.

The air-trac drilling results were almost too bad to be true given the gossan values and some good RC intersections. Perhaps some studies on the effectiveness of air-trac drilling in hard, quartzitic ground should be conducted.

While there is not a lot in the way of surface rock chip or soil gold values, a large hill at the northern end of the western gossanous zone exhibits a significant amount of quartz veining and disseminated ex-sulphide textures and - also because of the aeromagnetic anomaly in this area - should be considered a target zone for gold mineralisation.

### DINGO

Dingo, 4 km. SW of Moline, contains a + 600 metre long gossan located and initially assessed by gridding, rock chip sampling and a ground magnetometer survey in 1987.

The gossan - which appears to be a well bedded, quartz veined, micro/meso folded limonitic (sulphidic) chert/shale (BIF) interbedded with highly carbonaceous shale - contained up to 35 g/t gold, 3.45% arsenic, 90 ppm silver and 4.4% lead in rock chip samples.

Airborne and ground magnetic data (enclosures 11 and 228) indicated that the gossan was semi-coincidental with a magnetic anomaly and that it appeared to be located on the eastern flank of a south plunging overturned anticline. Regional geological and magnetic data and the fact that the gossans are in a highly carbonaceous shale suggest the mineralised sequence to be part of the Koolpin Formation.

### Soil Geochemistry

A total of 142 soil samples were collected on a 50 x 25 metre basis over a strike length of 750 metres and width of 200 metres. Gold-silver-arsenic-copper-lead and zinc analyses are listed in appendix 6 and data are plotted and contoured on enclosures 230-233.