



Cyprus Gold Australia Corporation

PROJECT A-84-111C
GEO607**OPEN FILE**

88-2880

| | |
|----------------------|----------|
| MINES | |
| File Ref. E.L. 36/82 | |
| 22 NOV 1988 | |
| Doc. Ref. | |
| Action Officer | Initials |
| Refer to Letter | |
| 21.11.88 | |
| | |
| | |
| | |
| | |
| Resubmit to | Date |

PROGRESS REPORT

OCTOBER 1987 TO OCTOBER 1988

EXPLORATION LICENCE 36/82

CYGNET

TASMANIA

P JONES

NOVEMBER 1988

REPORT 614

CYPRUS

DISTRIBUTION

- o Sydney
- Department of Mines
- o Field
- o Spare 1
- o Spare 2
- o Arimco

CONTENTS

| | Page |
|--|------|
| RECOMMENDATIONS | 1 |
| EXPLORATION TARGETS | 2 |
| DESCRIPTION OF THE PROPERTY AND OWNERSHIP | 3 |
| LOCATION AND ACCESS | 5 |
| HISTORY AND PREVIOUS EXPLORATION | 7 |
| REGIONAL GEOLOGY AND MINERALIZATION | 8 |
| GEOLOGY AND MINERALIZATION OF THE PROPERTY | 9 |
| WORK CONDUCTED BY CYPRUS | 12 |
| EXPLORATION POTENTIAL | 15 |
| EXPENDITURE | 16 |

FIGURE

1 LOCATION After Page
3

APPENDICES

- 1 DIAMOND DRILLHOLE LOGS CT-87-19, 20
2 ANALYTICAL RESULT SHEETS

ENCLOSURES

- | | | Scale |
|---|---|-------|
| 1 | EL 36/82 - Mount Mary - Drill Section ● LINE 10300N | 1:250 |
| 2 | ● LINE 10350E | 1:250 |

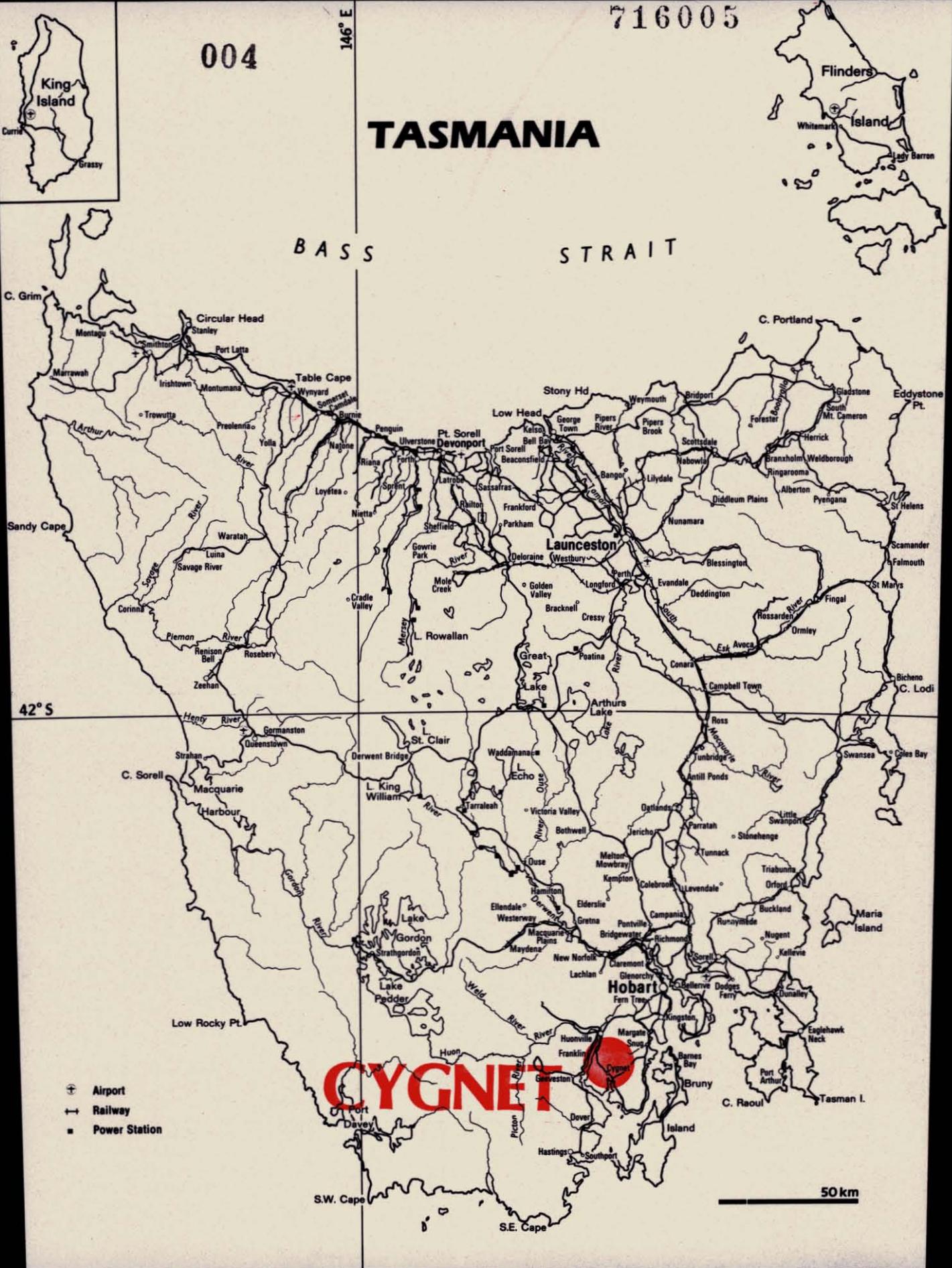
TASMANIA

716005

004

146° E

BASS STRAIT

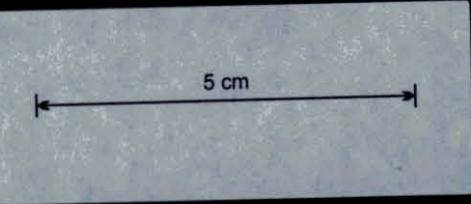


42° S

- ⊕ Airport
- Railway
- Power Station

CYGNET

50 km



Project Location

RECOMMENDATIONS

Cyprus Gold Australia Corporation should actively undertake joint venture negotiations with prospective applicants in order to obtain differing geological hypotheses which may lead to the definition of gold mineralization.

006

716007

EXPLORATION TARGETS

The tenement has geologic similarities to the Nevada goldfields in the United States and the target is for Carlin Style (replacement) fine grained, open pittable deposits and shear zone deposits as well as porphyry and/or breccia pipe deposits within the Cretaceous gold-silver bearing intrusive.

007

716008

DESCRIPTION OF THE PROPERTY AND OWNERSHIP _____

Amoco Minerals Australia Company (now Cyprus Gold Australia Corporation) applied for a 100 square kilometer exploration licence EL 36/82, embracing potential host rocks for replacement style gold mineralization.

The tenement is bounded on the north by AMG 522400mN, on the east by 510000mE, on the south by 521400mN and on the west by 500000mE (Figure 1).

Numerous objections were forthcoming from the licence application necessitating a Wardens Court hearing before the licence was granted on October 26, 1984 for a period of twelve months. The licence is renewable for a further twelve months subject to Mines Department approval.

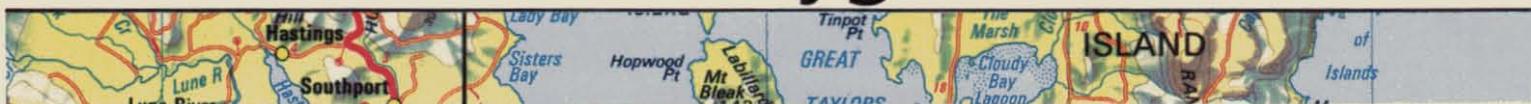
Cyprus entered into a 50/50 joint venture with Poseidon Limited in 1983. This venture is currently inactive with Poseidon



716009

10 km

FIGURE 1
Cygnet EL 36/82



electing not to contribute to exploration and will dilute should the program continue.

Pre-existing mining leases occur in the tenement, one of which lies south of the Mount Mary line of workings (986 P/M) and the second at Killala Bay (902 P/M) (Cyprus Report 459 - Enclosure 1). These are both stone and mineral leases.

010

LOCATION AND ACCESS

The tenement lies approximately 36 kilometers south-southwest of Hobart and is centered on the township of Cygnet. Sealed and gravel all-weather roads transect the property giving reliable access to most areas.

Steep terrain associated with the alkali intrusive porphyries is accessible only by four-wheel drive and foot however the sediments in general are less steep and are undulating to flat.

No difficulties would be anticipated with respect to power, water and transport should a mine be developed. The area has an annual rainfall of 75-90 centimeters in the lower lying areas and 125 centimeters in the higher areas.

HISTORY AND PREVIOUS EXPLORATION

Around the turn of the century numerous mines were developed in the Cygnet district and some 3000 ounces of gold were produced to 1902. Early workings concentrated on the richer alluvial deposits and it was not until 1898 that lode mining began on the hornfelsed contact zones between the alkali intrusives and the surrounding flat lying to gently dipping fossiliferous, limey and carbonaceous siltstones, mudstones, tillites and marine limestones. Gold values from the altered sediments averaged from trace to 22 g/t with silver credits, however the very fine grained nature of the gold hindered recoveries and hence further development. Old reports also noted that gold (to 6 g/t), silver and sulfides were present in some altered alkali to acidic intrusives raising the possibility of porphyry style gold deposits.

Recent exploration was undertaken in the district by Pechiney in 1971 with a limited stream sediment sampling program being

012

implemented. Minor copper anomalies were defined, one draining from Mt Windsor (275 ppm) and the other at Mount Mary (115 ppm). However no assaying for gold or silver was conducted.

BHP conducted a small orientation program over two gold occurrences at the Mount Mary and Livingstone Mines to ascertain the suitability of the alkali intrusive to host large tonnage low-grade porphyry style gold mineralization. The ground was not pegged and no further work was conducted, however sampling by BHP showed an association of gold with silver, arsenic, copper, lead, zinc and possibly barium.

The Golden Apple Mining Syndicate of Cygnet held the area to 1982 conducting minor gridding, mapping and rudimentary geophysical surveys. No major geochemical work was undertaken. The Mount Mary gold mine was protected by Mining Lease Applications (MLAs 1059, 1060) which were later revoked by the Mines Department. The vacant MLAs were applied for by Cyprus and included into EL 36/82.

013

REGIONAL GEOLOGY AND MINERALIZATION

A large block of Permo-Carboniferous lower marine mudstones, sandstones and shales from the relatively horizontal basement complex found throughout southeastern Tasmania. These are disconformably overlain by Triassic fluvio-lacustrine sequences of sandstone, siltstone and mudstone. Doming and faulting of the sediments preceded and accompanied the intrusion of Jurassic dolerites (140-170 million years). Cretaceous Port Cygnet Alkaline Intrusives (100-110 million years) were the final units intruded into the sequence carrying with them gold, silver and minor base metal values.

The dolerite appears to have been injected as multiple sheets and the alkaline rocks as a laccolithic tongue and dike swarm. The alkali intrusive belt is approximately 25 kilometers long by 10 kilometers wide and extends from just south of Snug to Surges Bay on the west bank of the Huon River. Recent fluvial and Pleistocene glacial erosion have produced the present topography.

GEOLOGY AND MINERALIZATION OF THE PROPERTY

Geological control within the tenement is hampered by poor outcrop and mapping is based on Mines Department photogeological interpretation (Kingsborough 1:50000 Geological Sheet 8311N (83)) coupled with follow-up roadside mapping.

The sedimentary units within the licence range in age from Permian (850 meters thick) to Triassic (450 meters thick). The basal Permian unit is the Truro Tillite which has a thickness in excess of 300 meters. This unit is overlain paraconformably by a sequence of fossiliferous (bryozoa and brachiopods plentiful) marine mudstones and siltstones (Woody Island Siltstone, Bundella Mudstone and Deep Bay Formation) which pass upwards into Upper Permian Risdon Sandstone and sandy siltstones of the Abels Bay Formation. A fault bounded block of Triassic coarse quartz sandstone occurs at Deep Bay in the southeastern portion of the licence.

The sediments form a gently domed sequence centered west of Cygnet with dips of 5 to 10°. The doming with associated radial and concentric faulting is due to the intrusion of a large mass of Jurassic dolerite. The vent area for the dolerite also appears to have been the locus for the emplacement of Cretaceous alkali to acid intrusives in the form of sills and numerous dikes. The alkaline rocks intrude Permian sediments and Jurassic dolerite but to date have not been found to intrude Triassic rocks. Hybrid rocks also occur where Cretaceous intrusives have partially assimilated Jurassic dolerite during emplacement.

The coincidence of what are apparently unique dome structures at Cygnet and at nearby Oyster Cove and the petrologically distinct alkaline intrusives suggest a strong northeast-southwest generative link between the two. This is borne out by the predominance of workings and anomalous gold stream sediment values occurring along a similar trend.

Several small lode and alluvial gold deposits have been worked in the district since 1898. Most of the gold production estimated at 3000 ounces has come from alluvial deposits. The largest of these were at Lymington (Forsters Rivulet) and Wheatlys Bay (Riseleys Creek). Small lodes were prospected by adits and shafts at the Mount Mary and Livingstone mines near Cygnet and prospecting pits were sunk at other localities where pyrite and other sulfides had developed in alkali to felsic intrusives and adjacent sediments (Black Jack Ridge and Kings Hill workings).

The style of mineralization within the sediments is analogous to a replacement type (Carlin style) gold deposit. This premise further enhanced by work conducted by BHP in 1979 which showed a close association of gold with arsenic, antimony, mercury, barium and sulfur, key elemental associations for Carlin type deposits, during their orientation survey.

A diamond hole drilled along strike to the 'vein' system at the Mount Mary mine was logged and assayed by Cyprus for the Golden Apple Mining Syndicate in order to ascertain the nature and

016

grades of the gold mineralization. Eleven meters of core from 74-85 meters assayed 0.23 g/t gold within a pyritic and epidotized, chloritic pebbly and brecciated mudstone. The sediments were intruded by a thick sequence of altered monzonitic porphyries which are weakly anomalous in gold. The so-called reef system was not encountered.

Recent costeaning and drilling has shown the mineralized zones are associated with wide zones of shearing and clay/carbonate/epidote/hematite alteration adjacent to altered feldspar alkali porphyries. A possible mode of genesis for the mineralization invokes selective replacement of carbonaceous rich sections by solutions associated with intrusion of alkali dikes, sills, etc along shear zones and other zones of structural weakness.

017

WORK CONDUCTED BY CYPRUS

During the period assay data for the two completed diamond holes (CT-87-19, 20) drilled at Mount Mary were received and Rare Earth Element (REE) assaying was conducted on sections of drill core and percussion chip samples from seven of the percussion and diamond drill holes (totalling 121 samples).

Significant gold values were encountered from both drillholes (Appendix 1) over widths varying from 2 to 6 meters. Values greater than 0.2 g/t gold for both holes are listed in the following table. Analytical result sheets are included as Appendix 2.

SIGNIFICANT GOLD INTERSECTIONS FROM CT-87-19 AND 20

| Hole | From (m) | To (m) | | Width | Au (g/t) | Ag (g/t) |
|---------------|-------------|-----------|---|-------|-------------|-------------|
| CT-87-19 | 4 | 8 | = | 4m | 0.25 | |
| 10070N:10350E | 16 | 18 | = | 2m | 1.10 | 9.5 |
| -50° GS | 22 | 26 | = | 4m | 0.24 | |
| | 38 | 42 | = | 4m | 0.23 | |
| | 44 | 50 | = | 6m | 0.47 | |
| | 88 | 90 | = | 2m | 0.21 | |
| | 114 | 116 | = | 2m | 0.38 | 0.5 |
| CT-87-20 | 18 | 20 | = | 2m | 0.20 | |
| 10100N:10300E | 46 | 48 | = | 2m | 0.80 | 5.0 |
| -45° GS | 86 | 90 | = | 4m | 1.60 | |
| incl | 88 | 90 | = | 2m | 3.07 | 6.0 |

Gold values show a strong association with the Cretaceous alkali dikes and intrusives being found at the intrusive margins, internally or within shears or faults cutting the alkali sequence. Minor gold is observed within altered mudstones either showing evidence of shearing or in close proximity to the intrusives.

Drillhole CT-87-20 cut a 2 meter interval grading 3.07 g/t gold lying approximately 50 meters down-dip beneath mineralization encountered in CTR-87-5 (3 meters of 4.26 g/t gold). However a wide zone (17 meters of 1.0 g/t gold) of low grade gold mineralization encountered in CTR-87-5 associated with the higher grade interval failed to be cut in CT-87-20.

Hole 20 showed some major geological changes from the previous two holes drilled on section 10300E, CTR-87-11 and 5. The massive alkali intrusive encountered in both holes 5 and 11 appears to interfinger with Truro Tillite in hole 20 as thin dikes, this coinciding with abrupt termination of some mineralized zones encountered in holes 5 and 11 (Enclosure 1). Hole 20 was terminated in a major altered and silicified brecciated fault zone.

019

Section 10350E (Enclosure 2) showed some mineralization continuity with a 12 meter zone assaying 0.21 g/t gold from hole CTR-87-6 being intersected 40 meters down-dip in hole 19 assaying 4 meters of 0.23 g/t gold and a further 6 meters of 0.47 g/t gold. However, an 18 meter interval assaying 0.41 g/t gold from hole 7 failed to be encountered in hole 19 other than for a few 2 meter intervals grading from 0.13 to 0.38 g/t gold. Significantly a major fault was encountered in the vicinity of the projected zone. The best interval for hole 19 was 2 meter at 1.10 g/t gold occurring near surface.

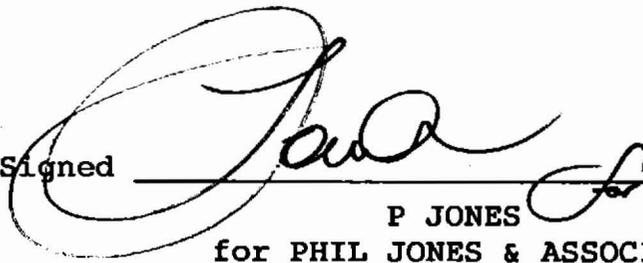
An assessment of the REE potential of the Alkali intrusive sequence was conducted utilizing both diamond core and percussion chip samples from the drilling program (Appendix 2). The cursory assessment was focused on the Mount Mary prospect and random samples were assayed by ICP by Analabs after the samples were dried and pulped. Elements assayed for were: yttrium, lanthanum, cerium, praseodymium, neodymium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium with detection limits varying from 1 to 20 ppm.

Results showed above background values were defined associated with the alkali intrusive rocks, however none of the assays proved encouraging enough to warrant additional assaying. Large areas of the Cretaceous Intrusives remain unsampled for REE's and there still may be potential for this style of mineralization elsewhere within the property.

EXPLORATION POTENTIAL

The tenement is considered to have significant potential for hosting a replacement style (Carlin type) disseminated gold deposit associated with the intrusion of gold anomalous alkali porphyries into limey and carbonaceous mudstones, tillites, siltstones and limestones. However detailed programs conducted by Cyprus and Poseidon have failed to identify economic mineralization and it is now felt new blood is needed to generate new ideas to further evaluate the tenement's potential. Joint venture partners are now being actively sought.

Signed _____



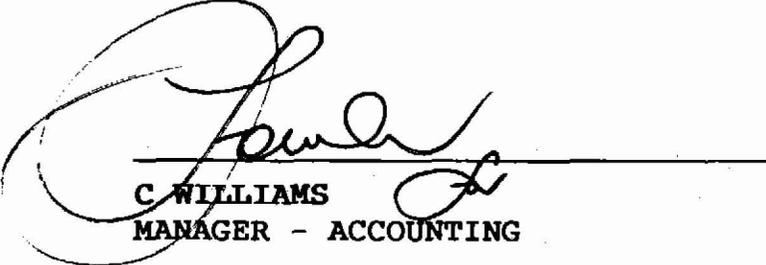
P JONES
for PHIL JONES & ASSOCIATES

CYPRUS GOLD AUSTRALIA CORPORATION

EXPENDITURE FOR THE PERIOD TWELVE MONTHS ENDED OCTOBER 31, 1988

CYGNET EXPLORATION LICENCE 36/82

| | \$ |
|-------------------------------------|--------------------|
| Salaries and Wages | 325.00 |
| Benefits | (259.95) |
| Drafting | 1,411.03 |
| Cookery | 144.06 |
| Field Office Rent | - |
| Field Supplies | 13.25 |
| Freight | 1,377.77 |
| Travel | 824.22 |
| Aircraft Charter | - |
| Communications | 517.34 |
| Assays | 1,649.01 |
| Drilling | 1,259.93 |
| Consulting Fees | (1,700.00) |
| Contract Geological | 9,013.35 |
| Other Contractors | 190.00 |
| Equipment Rental | - |
| Equipment Operation and Maintenance | 725.27 |
| Property Payments | 2,700.00 |
| | ----- |
| | \$18,190.28 |
| Overhead at 10% | 1,819.03 |
| | ----- |
| TOTAL | \$20,009.31 |
| | ===== |



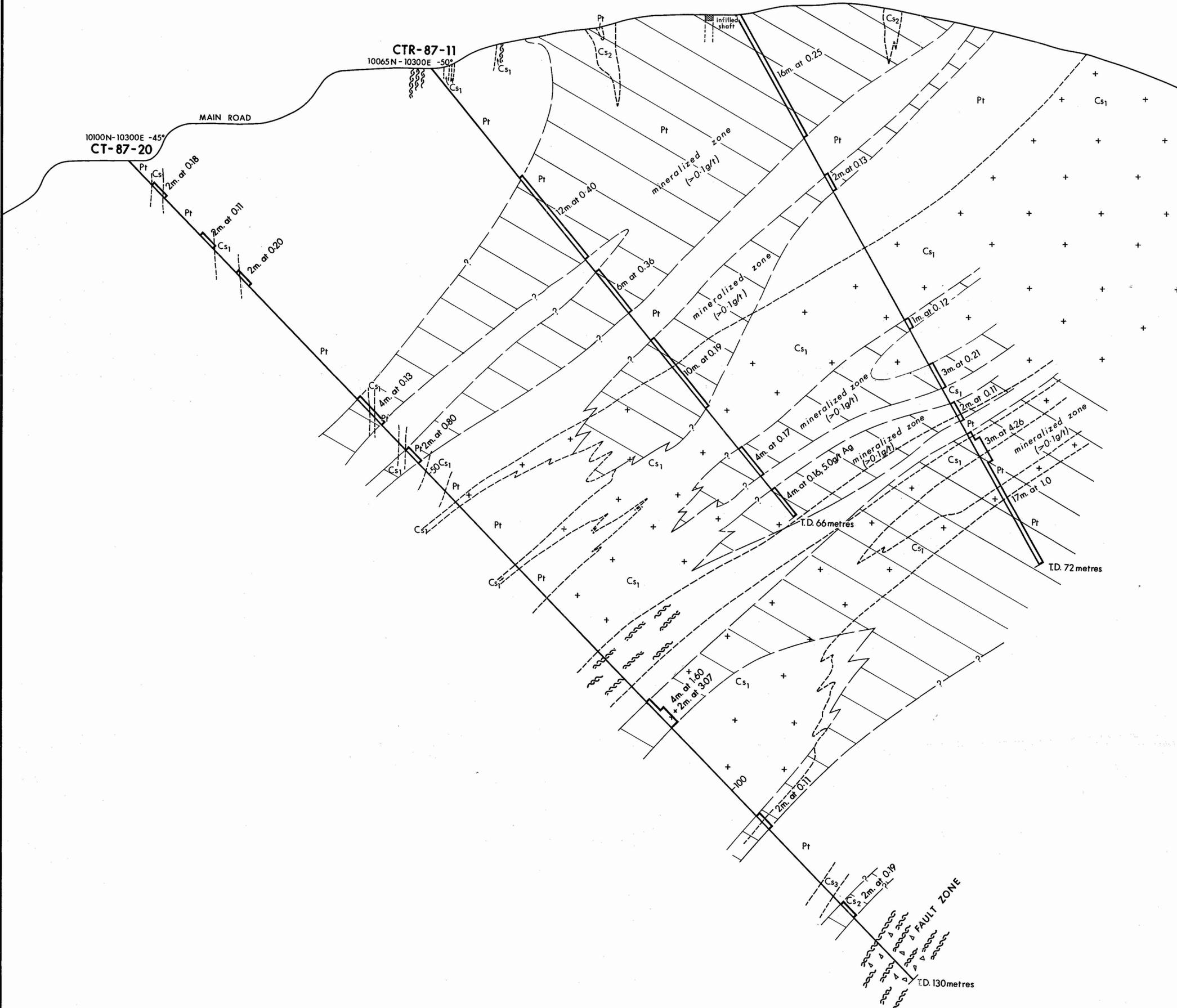
 C WILLIAMS
 MANAGER - ACCOUNTING

CTR-87-5 10030N-10300E -60°

CTR-87-11 10065N-10300E -50°

CT-87-20 10100N-10300E -45°

MAIN ROAD



LEGEND

- Pt Permian: Truro Tillite
- Cs₁ Cretaceous: Syenite, porphyritic, variably altered
- Cs₂ Monzonite syenomonzonite, variably altered
- Cs₃ Lamprophyre
- Lithological boundary
- Fault zone
- Shear zone
- Mineralized zone assaying >0.1g/t Au
- Assay interval and grade (g/t)
- T.D. Total depth
- CTR Percussion hole
- CT Diamond hole

88-2880

CYPRUS 716023

CYGNET EL 36/82

MOUNT MARY
 DRILL SECTION -
 LINE 10300E
 CTR-87-5, CTR-87-11,
 CT-87-20

DRAWN BY: P.J.
 DRAFTSMAN: J.M.T.
 DATE: Dec. 1987
 REVISIONS:
 FILE No.

5 cm

SCALE 1:250

ENCLOSURE 1

10050N

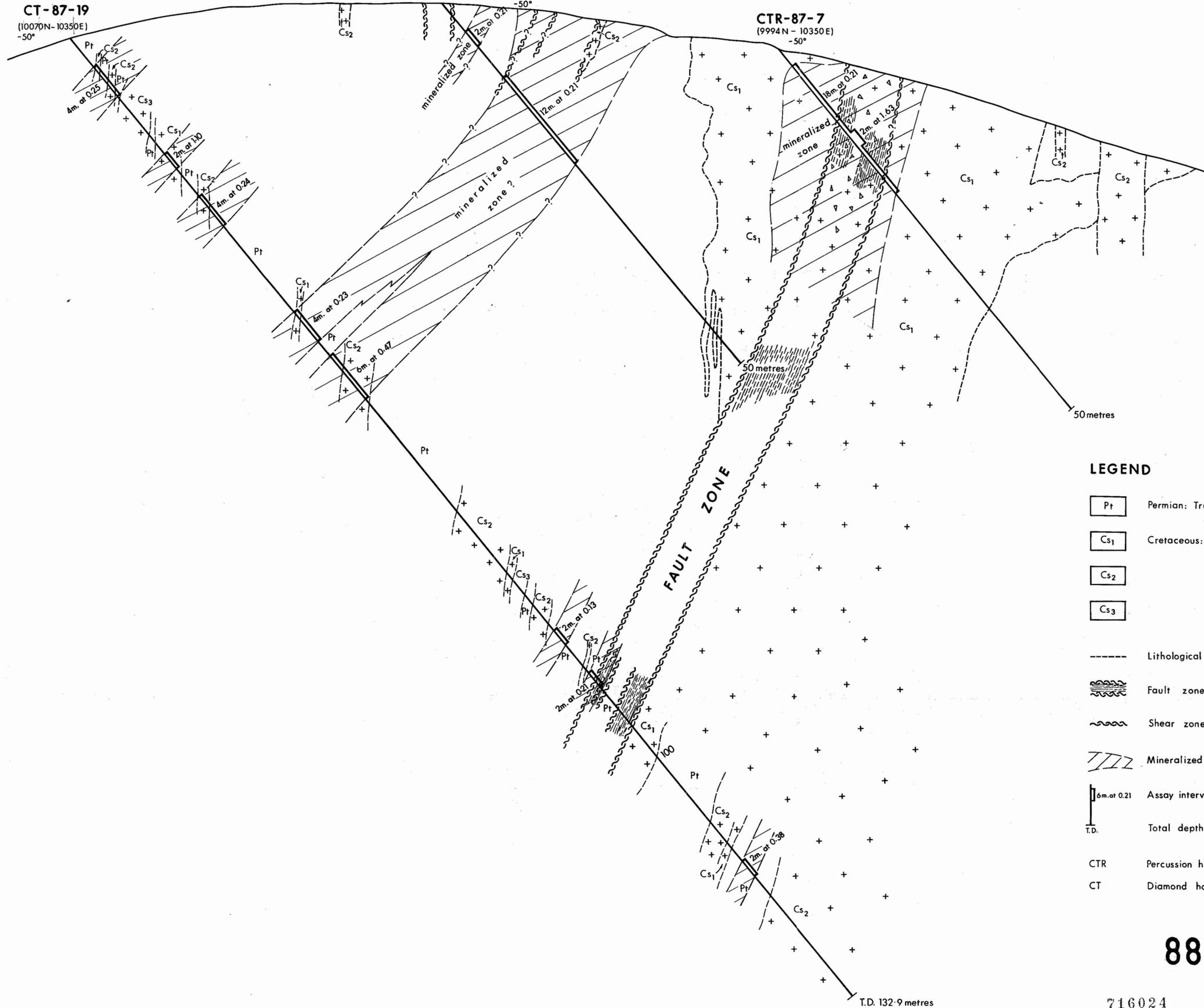
10000N

9950N

CT-87-19
(10070N-10350E)
-50°

CTR-87-6 (10030N-10350E)
-50°

CTR-87-7
(9994N-10350E)
-50°



LEGEND

- Pt Permian: Truro Tillite
- Cs₁ Cretaceous: Syenite, porphyritic, variably altered
- Cs₂ Monzonite syenomonzonite, variably altered
- Cs₃ Lamprophyre
- Lithological boundary
- Fault zone
- Shear zone
- Mineralized zone
- 6m. at 0.21 Assay interval and grade (g/t)
- T.D. Total depth
- CTR Percussion hole
- CT Diamond hole

88-2880

716024

5 cm

| | |
|---------------------|-------------------|
| CYPRUS | |
| CYGNET EL 36/82 | |
| MOUNT MARY | |
| DRILL SECTION - | |
| LINE 10350E | |
| CTR-87-6, CTR-87-7, | |
| CT-87-19 | |
| SCALE 1:250 | DRAWN BY: P.J. |
| 2.5 0 2.5 5.0 | DRAFTSMAN: J.M.T. |
| METRES | DATE: Dec. 1987 |
| | REVISIONS: |
| | FILE No. |
| | ENCLOSURE 2 |

APPENDICES

APPENDIX 1

DIAMOND DRILLHOLE LOGS CT-87-19, 20

drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY **Hole** CT-87-19

Co-ordinates 10070 mN 10350 mE **Logged by** P. A. JONES.

| | |
|--------------------------|----------------------|
| AMG reference | |
| County | |
| Parish | |
| Portion | |
| Elevation | |
| Declination | 50° G.S. |
| Direction | G M T |
| Commenced | |
| Completed | |
| Total depth | 132.9 metres |
| Drilling company | F. ORTNER |
| Rig type | MINDRILL |
| Drilling type | DIAMOND |
| Hole size | HQ ³ , NQ |
| Core size | |
| Depth of casing | PVC TO 2.5 metres. |
| Assay sample type | 1/2 core. |
| Water table depth | |
| Water yields | |

| Bore Hole Survey | | | Type | | | | | | | | |
|------------------|-----|------|-------|-----|------|-------|-----|------|-------|-----|------|
| Depth | Dip | Brg. | Depth | Dip | Brg. | Depth | Dip | Brg. | Depth | Dip | Brg. |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Notes

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page ONE

| From | To | Code | Description | mineralization in bold type |
|------|------|------|--|-----------------------------|
| 0.00 | 3.60 | | Mixture of hornfelsed altered pebbly mudstone and thin altered monzonite dykes. Little core recovery as drilling with HQ - no barrel or tube, to set HW casing. | |
| 3.60 | 4.20 | | HORNFELSED ALTERED PEBBLY MUDSTONE Massive, siliceous (hornfelsed) pyrrhotite actinolite altered grey purple green pebbly mudstone. Many of the pebbles are totally replaced by fibrous actinolite and minor pyrrhotite. Core very hard - siliceous? Good recovery +95%. | |
| 4.20 | 4.50 | | OXIDISED MONZONITE (DYKE) Orange yellow coloured coarse grained, altered, heavily oxidised monzonite. Feldspars show argillic alteration. Dyke contacts show little obvious evidence of disruptive intrusion, no brecciation and no obvious evidence of thermal effects. Good core recovery although core badly broken. | |
| 4.50 | 6.30 | | HORNFELSED ALTERED PEBBLY MUDSTONE Massive siliceous (hornfelsed) pyrrhotite actinolite altered grey purple green pebbly mudstone. Many of the pebbles are altered and replaced by fibrous actinolite plus often pyrrhotite. Good recoveries +95%. | |
| 6.30 | 7.40 | | BLEACHED ALTERED MONZONITE Bleached cream spotted green potassic and actinolitic altered coarse to medium grained monzonite dyke. The ferromagnesium minerals (hornblende) are totally altered to actinolite. Some feldspars argillic altered. Good core recovery +95%. | |

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page TWO

| From | To | Code | Description | mineralization in bold type |
|-------|-------|------|---|-----------------------------|
| 7.40 | 7.90 | | HORNFEISED ALTERED PEBBLY MUDSTONE. | |
| | | | Grey purple cream partly bleached, actinolite pyrrhotite altered very massive hard siliceous (hornfelsed) pebbly mudstone. Bleaching evidenced by tonal colour variations diffusing away from cross cutting fractures. Weak carbonate veining and open space filling. Good core recovery +95% | |
| 7.90 | 13.30 | | EQUIGRANULAR LAMPROPHYRE | |
| | | | Oxidised brown to grey brown massive equigranular mafic rich medium to coarse grained veined intrusive. Unit extensively hematite chlorite altered. Hornblende laths chloritised as is biotite? Unit weakly cut by hematite filled veinlets both cross cutting and subparallel to c.a. Good recoveries even though unit overall is highly weathered and very soft. Good recoveries + 95%. | |
| 13.30 | 14.05 | | HORNFEISED ALTERED PEBBLY MUDSTONE | |
| | | | As for interval 7.40 - 7.90 metres except zone more fractured with some open space unfilled. | |
| 14.05 | 18.75 | | ALTERED WEAKLY STOCKWORKED SYENOMONZONITE. | |
| | | | Oxidised orange yellow cream argillic epidote hematite (pyrite) altered moderate to strongly veined (locally stockworked) hematite and iron oxide infilled coarse grained, locally weakly sanidine porphyritic syenomonzonite. Epidote alteration of mafic minerals and calcic feldspars argillically altered. Stockwork, heavily ferruginous zone 16.5 to 17.10 metres good recovery +95% with minor sections very broken. | |

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page THREE

| From | To | Code | Description | mineralization in bold type |
|-------|-------|------|--|-----------------------------|
| 18.75 | 21.40 | | WEAKLY ALTERED PEBBLY MUDSTONE. Weakly actinolite pyrite (hematite) altered grey broken massive unfossiliferous pebbly mudstone. Actinolite replacing some of the pebbly material. Core badly broken downhole especially at dyke contact 21.40 metres. | |
| 21.40 | 23.20 | | MODERATELY TO STRONGLY ALTERED MONZONITE. Fine to medium grained oxidised cream orange massive moderately to strongly veined (hematite filled) and hematite minor epidote altered monzonite. Abundant clotty disseminated hematite after pyrite and ferromagnesium minerals. Contact downhole with pebbly mudstone showing hornfelsing (silicification?). Good recovery in broken ground + 95%. | |
| 23.20 | 37.85 | | MODERATELY ALTERED PEBBLY MUDSTONE. Grey to altered grey beige coloured massive, weakly to moderately veined (manifest by beige coloured argillic alteration diffusing away from fractures - locally stockworked) weakly actinolite hematite altered - predominantly pebbly material, pebbly mudstone. Portions of core extensively veined others only weakly. Core weakly broken. Good recoveries + 95%. | |
| 37.85 | 38.60 | | SANIDINE PORPHYRITIC WEAKLY ALTERED SYENITE. Grey, speckled orange green massive variably altered (weathered?) from slight to highly with both epidote and hematite replacing certain minerals and minor actinolite (chlorite) also present. Very weathered sections being cream yellow coloured coarse grained textured clays. Good recovery + 95%. | |

030

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page FOUR

| From | To | Code | Description | mineralization in bold type |
|-------|-------|------|--|-----------------------------|
| 38.60 | 45.90 | | <p>MODERATELY TO STRONGLY ALTERED PEBBLY MUDSTONE.</p> <p>Grey altered beige colour strongly epidote hematite minor carbonate altered (filling fractures) pebbly mudstone. Portions of moderately fractured and veined mudstone show diffusing beige coloured argillic alteration away from fractures. Veining is yellow green epidote minor hematite and carbonate filled. Core moderately to strongly broken. Good recoveries +95%</p> | |
| 45.90 | 50.50 | | <p>COMPLETELY ALTERED INTRUSIVE.</p> <p>Oxidised? cream yellow coarse grained textured very argillic altered puggy intrusive. Clays are very susceptible to water and expand vigorously. Upper contact is manifest by a 25 cm wide laminated hematitic ironstone zone. The lower contact is a crushed zone. Minor sediment (grey mudstone) fragments occasionally present. Lower section of sequence in general less altered, showing argillic alteration of coarse grained monzosyenite. A number of fracture surfaces are strongly slickensided. Good core recovery + 95%.</p> | |
| 50.50 | 65.15 | | <p>WEAKLY ALTERED PEBBLY MUDSTONE.</p> <p>Dark grey massive weakly to moderately broken weakly pyrite actinolite hematite trace epidote carbonate altered pebbly mudstone. Unit more moderately altered near upper contact and less altered downhole. Some pebbles (non siliceous type) selectively replaced by actinolite / pyrite / hematite. Minor thin hematite carbonate veining. Moderate hematite filled fracture surfaces. Good core recoveries +95%. Thin mafic (chloritized) rich dyke, approx 15cms width at 62.4 metres.</p> | |

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page FIVE.

| From | To | Code | Description | mineralization in bold type |
|-------|-------|------|--|-----------------------------|
| 65.15 | 73.80 | | <p>MODERATELY ALTERED MONZOSYENITE.</p> <p>Grey, coarse grained weakly sanidine (zoned) porphyritic epidote pyrite altered massive monzosyenite. Pyrite to 3-4% as disseminated fine grained clots, epidote alteration of calcic? feldspars plus some of mafic minerals. Core stained hematite red and weakly to moderately hematite veined at both contacts. Core otherwise only weakly veined generally carbonate filled. Core weakly broken, good recoveries + 95%.</p> | |
| 73.80 | 74.85 | | <p>PORPHYRITIC FINE GRAINED INTRUSIVE.</p> <p>Grey brown sanidine (zoned) porphyritic (up to 2cm in length) very fine grained, hematite chlorite altered syenite? Upper contact approximately 20° to ca. Hematite after pyrite! Minor brecciated, hornfelsed pebbly sediment from 73.8 to 74.3 possible large xenolith.</p> | |
| 74.85 | 77.15 | | <p>HEMATITIC LAMPROPHYRE</p> <p>Browny green, hematite limonite orange stained fine to medium grained very mafic, massive, weakly broken lamprophyre. No obvious large feldspars, possible feldspars greeny brown altered (chlorite?), some carbonate altered? Tabular mafic minerals altered to hematite? (steely grey black) Sharp 40° to c.a. contact downhole showing little thermal alteration or brecciation. Good recoveries +95%</p> | |
| 77.15 | 78.40 | | <p>HEMATITE ALTERED GRITTY MUDSTONE.</p> <p>Very weakly hematitic (cherry red colouration) altered, massive grey to dark grey, weakly broken gritty mudstone.</p> | |

032

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page SIX

| From | To | Code | Description mineralization in bold type |
|-------|-------|------|--|
| 78.40 | 81.10 | | <p>MODERATELY TO STRONGLY ALTERED MONZOSYENITE.</p> <p>Moderate to Strongly epidote pyrite hematite minor carbonate altered grey to bleached beige (argillic alteration) coloured coarse grained to weakly porphyritic monzosyenite. Pyrite to 3-4% occurs as disseminated clots. Bottle green yellow epidote replacing some feldspars, some mafic minerals and some of the matrix. Trace carbonate hematite veining. Pyrite oxidising to hematite. Upper contact 20 cm wide pugh breccia zone. Lower contact very sharp, no brecciation but minor crushing.</p> |
| 81.10 | 86.90 | | <p>MODERATELY ALTERED PEBBLY MUDSTONE.</p> <p>Massive grey, weakly purple weakly hornfelsed moderately actinolite epidote pyrite (pyrrhotite) altered minor carbonate hematite veined pebbly mudstone. Sequence more strongly altered and veined to approx. 84 metres - adjacent to overlying intrusive. Pyrite occurring as disseminations and thin veinlets. Pyrrhotite occurs with actinolite alteration of some of the pebble material. Minor carbonate reaction rims surround some of pebbles. Good core recovery + 95%.</p> |
| 86.90 | 87.35 | | <p>STRONGLY ALTERED SYENOMONZONITE</p> <p>Strongly pyrite chlorite (light green to cream colouration) possibly argillic altered coarse grained syenomonzonite. Pebbly Mudstone xenolith. Good recoveries.</p> |
| 87.35 | 88.80 | | <p>WEAKLY ALTERED PEBBLY MUDSTONE.</p> <p>Actinolite pyrrhotite altered massive grey green purple pebbly mudstone. Possibly weakly hornfelsed. Minor hematite after pyrite? Pale green alteration haloes around actinolite altered pebbles and also evident as diffuse zones encompassing fractures. Good recovery + 95%.</p> |

033

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page SEVEN

| From | To | Code | Description | mineralization in bold type |
|-------|--------|------|--|-----------------------------|
| 88.80 | 90.15 | | SHEAR ZONE. | |
| | | | Moderately sheared (heavily slickensided) and brecciated chlorite actinolite carbonate altered pebbly mudstone. | |
| 90.15 | 92.80 | | WEAKLY ALTERED PEBBLY MUDSTONE. | |
| | | | Grey green purple, massive weakly actinolite pyrite minor carbonate altered pebbly mudstone. Minor cherry red hematite staining. Minor white cream carbonate reaction rims surrounding pebbles. Increasing brecciation downhole towards contact with major FAULT ZONE. Minor veining carbonate hematite infilled. Core relatively unbroken, possibly weakly hornfelsed. Good recoveries + 95%. | |
| 92.80 | 95.20 | | FAULT ZONE. | |
| | | | Heavily sheared, brecciated and weakly to moderately mylonitized carbonate chlorite pyrite epidote altered fault zone. | |
| 95.20 | 99.80 | | MODERATELY ALTERED SYENITE. | |
| | | | Medium to coarse grained, greeny grey moderately epidotitic and pyritic (minor hematite) altered massive weakly hematite chlorite veined (wkly slickensided) syenite. Pyrite up to 7% averaging 3-5% as fine grained disseminated clots. Core from 98.5 badly broken with poor recoveries \approx 80%. Remainder +95% | |
| 99.80 | 108.60 | | WEAKLY SHEARED PEBBLY MUDSTONE. | |
| | | | Grey massive pebbly mudstone with very few siliceous pebbles. Trace carbonate veining. Minor purple grey hornfelsing from upper contact to approx 102 metres then otherwise nil alteration. Lost water return at 102.80 metres. Ground strongly broken, a major proportion of fracture surfaces slickensided. Recovery +95% | |

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page EIGHT.

| From | To | Code | Description | mineralization in bold type |
|---------------------|--------|------|---|-----------------------------|
| 108.60 | 111.40 | | STRONGLY ALTERED VEINED MONZONITE | |
| | | | Strongly pyrite epidote moderately argillically altered (bleached cream) siliceous? massive in part weakly brecciated, weakly carbonate veined fine to medium grained monzonite. Large clots of yellow green epidote. Pyrite as fine grained disseminated clots up to 10% averaging 5-7%. Total loss of water at 111.40. Didn't get back water return. | |
| 111.40 | 112.05 | | TRACHYTIC TEXTURED PORPHYRITIC SYENITE | |
| | | | Porphyritic large zoned sanidine? crystals roughly aligned occur in a fine to medium grained grey weakly epidote pyrite altered syenite matrix. Good recovery in moderately broken ground + 95%. | |
| 112.05 | 118.80 | | HIGHLY PERMEABLE BROKEN PEBBLY MUDSTONE | |
| HQ → NQ 114.90m. | | | Grey to dark grey massive pebbly mudstone with minor carbonate filled fractures and thin veinlets. Majority of fractures very permeable (open) hence high water loss. Some clayey sections. HQ bit shattered downhole. Reamed NQ through HQ. Recoveries for this highly broken zone + 90%. | |
| 118.80 | 132.90 | | MODERATE TO STRONGLY ALTERED SYENOMONZONITE | |
| | | | Coarse grained moderately to strongly epidote actinolite pyrite minor argillic hematite altered massive, hard grey speckled green yellow syenomonzonite. Minor cross cutting thin carbonate pyrite actinolite filled veins occasionally argillically altered (bleached cream coloured feldspars). Very uniform composition and texture. Core silicified - very hard. Smear pyrite evidenced on fracture surfaces. | |
| | | | END OF HOLE | |

assays

| Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page ONE | | | | | | | | | | | | |
|---|------|----|-----|------|------|------|-----|--------|----------|---|--|--|
| Sample | From | To | Cu | Pb | Zn | Ag | As | Au | Au Check | | | |
| 224752 | 0 | 4 | 35 | 40 | 250 | <0.5 | 15 | 0.085 | | ✓ | | |
| 224750 - 751 | 4 | 6 | 20 | 15 | 265 | <0.5 | 23 | 0.225 | | ✓ | | |
| 224748 - 749 | 6 | 8 | 20 | 10 | 700 | <0.5 | 10 | 0.275 | | ✓ | | |
| 224746 - 747 | 8 | 10 | 85 | 540 | 1350 | <0.5 | 19 | 0.020 | | | | |
| 224744 - 745 | 10 | 12 | 25 | 110 | 800 | <0.5 | 13 | <0.005 | <0.005 | | | |
| 224742 - 743 | 12 | 14 | 50 | 40 | 510 | <0.5 | 11 | 0.080 | | ✓ | | |
| 22470 - 741 | 14 | 16 | 15 | 80 | 520 | <0.5 | 12 | 0.065 | 0.075 | ✓ | | |
| 224738 - 739 | 16 | 18 | 125 | 4900 | 765 | 9.5 | 290 | 1.170 | 1.020 | ✓ | | |
| 224736 - 737 | 18 | 20 | 65 | <5 | 340 | <0.5 | 14 | 0.050 | | ✓ | | |
| 224734 - 735 | 20 | 22 | 40 | <5 | 310 | <0.5 | 15 | 0.030 | | | | |
| 224732 - 733 | 22 | 24 | 50 | <5 | 335 | <0.5 | 21 | 0.200 | | ✓ | | |
| 224730 - 731 | 24 | 26 | 25 | <5 | 300 | <0.5 | 18 | 0.280 | 0.245 | ✓ | | |
| 224728 - 729 | 26 | 28 | 15 | <5 | 360 | <0.5 | 12 | <0.005 | | | | |
| 224726 - 727 | 28 | 30 | 20 | <5 | 340 | <0.5 | 10 | <0.005 | | | | |
| 224724 - 725 | 30 | 32 | 35 | 5 | 270 | <0.5 | 16 | <0.005 | | | | |
| 224722 - 723 | 32 | 34 | 40 | <5 | 220 | <0.5 | 8 | <0.005 | | | | |
| 224720 - 721 | 34 | 36 | 35 | 10 | 560 | <0.5 | 9 | 0.015 | | | | |
| 224718 - 719 | 36 | 38 | 30 | <5 | 740 | <0.5 | 6 | 0.025 | | | | |
| 224716 - 717 | 38 | 40 | 30 | 10 | 1200 | <0.5 | 11 | 0.290 | | ✓ | | |
| 224714 - 715 | 40 | 42 | 55 | 705 | 1550 | <0.5 | 32 | 0.170 | | ✓ | | |
| 224712 - 713 | 42 | 44 | 50 | 155 | 1350 | <0.5 | 6 | 0.005 | 0.020 | | | |
| 224710 - 711 | 44 | 46 | 50 | 850 | 1900 | 0.5 | 8 | 0.170 | 0.170 | ✓ | | |
| 224708 - 709 | 46 | 48 | 115 | 1100 | 3350 | 1.0 | 41 | 0.900 | 0.790 | ✓ | | |
| 224706 - 707 | 48 | 50 | 60 | 125 | 1350 | <0.5 | 12 | 0.380 | | ✓ | | |
| 224704 - 705 | 50 | 52 | 65 | 45 | 900 | <0.5 | 11 | 0.085 | | ✓ | | |
| 224702 - 703 | 52 | 54 | 30 | 10 | 580 | <0.5 | 4 | 0.038 | | | | |
| 224700 - 701 | 54 | 56 | 30 | 10 | 560 | <0.5 | 5 | 0.040 | | | | |
| 224698 - 699 | 56 | 58 | 20 | 15 | 625 | <0.5 | 12 | 0.045 | | | | |
| 224696 - 697 | 58 | 60 | 35 | 5 | 340 | <0.5 | 17 | 0.035 | | | | |
| 224694 - 695 | 60 | 62 | 20 | <5 | 425 | <0.5 | 18 | 0.015 | 0.010 | | | |

assays

Project CYGNET Prospect MOUNT MARY Hole CT-87-19 Page TWO

| Sample | From | To | Cu | Pb | Zn | Ag | As | Au | Au Check. | | | |
|----------------|------|-----|-----|----|-----|------|----|--------|-----------|---|--|--|
| 224692 -693 | 62 | 64 | 40 | 10 | 285 | <0.5 | 14 | 0.025 | | | | |
| 224690 -691 | 64 | 66 | 25 | 10 | 280 | <0.5 | 13 | 0.020 | 0.020 | | | |
| 224688 -689 | 66 | 68 | 10 | 20 | 135 | <0.5 | 6 | 0.010 | | | | |
| 224686 -687 | 68 | 70 | 5 | 30 | 125 | <0.5 | 5 | 0.090 | | ✓ | | |
| 224684 -685 | 70 | 72 | 10 | 40 | 145 | <0.5 | 4 | <0.005 | | | | |
| 224682 -683 | 72 | 74 | 15 | 30 | 260 | <0.5 | 5 | 0.015 | | | | |
| 224680 -681 | 74 | 76 | 40 | 35 | 300 | <0.5 | 5 | 0.040 | | | | |
| 224678 -679 | 76 | 78 | 25 | 35 | 385 | <0.5 | 16 | 0.010 | | | | |
| 224664 -665 | 79 | 81 | 15 | 5 | 135 | <0.5 | 6 | 0.010 | | | | |
| 224676 -677 | 82 | 84 | 30 | 15 | 225 | <0.5 | 6 | 0.130 | | ✓ | | |
| 224674 -675 | 84 | 86 | 30 | 20 | 200 | <0.5 | 15 | 0.060 | | ✓ | | |
| 224672 -673 | 86 | 88 | 40 | <5 | 260 | <0.5 | 10 | 0.030 | | | | |
| 224670 -671 | 88 | 90 | 25 | <5 | 130 | <0.5 | 4 | 0.210 | | ✓ | | |
| 224668 -669 | 90 | 92 | 15 | <5 | 110 | <0.5 | 5 | 0.055 | | ✓ | | |
| | 92 | 94 | | | | | | | | | | |
| 224660 -661 | 94 | 96 | 50 | 35 | 180 | 0.5 | 8 | 0.015 | | | | |
| 224658 -659 | 96 | 98 | 35 | 30 | 125 | <0.5 | 19 | 0.035 | | | | |
| 224656 -657 | 98 | 100 | 120 | 30 | 280 | 0.5 | 32 | 0.045 | | | | |
| 224654 -655 | 100 | 102 | 45 | 10 | 255 | <0.5 | 22 | 0.050 | | | | |
| 224652 -653 | 102 | 104 | 35 | 5 | 175 | <0.5 | 31 | 0.030 | | | | |
| 224650 -651 | 104 | 106 | 30 | 10 | 200 | <0.5 | 25 | 0.010 | | | | |
| 224648 -649 | 106 | 108 | 20 | <5 | 195 | <0.5 | 25 | 0.025 | | | | |
| 224646 -647 | 108 | 110 | 45 | <5 | 115 | <0.5 | 21 | 0.045 | | | | |
| 224644 -645 | 110 | 112 | 65 | 15 | 65 | <0.5 | 9 | 0.020 | | | | |
| 224642 -643 | 112 | 114 | 20 | <5 | 110 | <0.5 | 34 | 0.015 | | | | |
| 224640 -641 | 114 | 116 | 20 | 10 | 100 | 0.5 | 22 | 0.380 | | ✓ | | |
| 224638 -639 | 116 | 118 | 30 | 5 | 105 | <0.5 | 56 | 0.005 | | | | |
| 224636 -637 | 118 | 120 | 30 | 10 | 60 | 2.0 | 12 | 0.010 | | | | |
| 224634 -635 | 120 | 122 | 5 | 5 | 30 | <0.5 | 10 | 0.040 | | | | |
| 224632 -633 | 122 | 124 | 5 | 5 | 35 | 1.0 | 7 | 0.015 | | | | |

drill log cover sheet

| | | |
|---------------------------------------|-----------------------------|----------------------|
| Project CYGNET | Prospect MOUNT MARY | Hole CT-87-20 |
| Co-ordinates 10100 mN 10300 mE | Logged by P.A. JONES | |

| | |
|--------------------------|--------------------|
| AMG reference | |
| County | |
| Parish | |
| Portion | |
| Elevation | |
| Declination | 45° G.S. |
| Direction | G M T |
| Commenced | |
| Completed | |
| Total depth | 130 metres. |
| Drilling company | F ORTNER |
| Rig type | MINDRILL |
| Drilling type | DIAMOND |
| Hole size | HQ ³ |
| Core size | |
| Depth of casing | PVC TO 3.5 metres. |
| Assay sample type | 1/2 Core. |
| Water table depth | |
| Water yields | |

| Bore Hole Survey | | | Type | | | | | | | | |
|------------------|-----|------|-------|-----|------|-------|-----|------|-------|-----|------|
| Depth | Dip | Brg. | Depth | Dip | Brg. | Depth | Dip | Brg. | Depth | Dip | Brg. |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Notes

geological log

| Project | | Prospect | | Hole | | Page | |
|---------|-------|------------|--------------------------------------|--|--|------|--|
| CYGNET | | MOUNT MARY | | CT-87-20 | | ONE | |
| From | To | Code | Description | mineralization in bold type | | | |
| 0.00 | 4.10 | | OXIDISED PEBBLY MUDSTONE | Heavily weathered and oxidised orange grey coloured, massive sticky clays and pebbly mudstone. Fracture faces on less weathered portions are limonite goerthite stained. Good recovery with no tube or barrel. + 90%. | | | |
| 4.10 | 5.60 | | INTRUSIVE | Strongly oxidised orange yellow, broken, weakly porphyritic syenite, intrusive. Numerous clay sections. Poor recoveries of approximately 25%. | | | |
| 5.60 | 14.30 | | WEAKLY ALTERED PEBBLY MUDSTONE. | Light to dark grey massive very gritty and pebbly - comprised predominantly of angular to rounded quartz, quartzite, felsic volcanic, minor schistose material, mudstone. Core very blocky with fracture faces weakly limonite / goerthite and pink clay altered. Minor green epidote on some of fracture faces. Many of pebbles being selectively altered also to iron oxides and epidote. Oxidation less obvious below roughly 7 metres. Recovery good +95%. | | | |
| 14.30 | 18.30 | | EPIDOTE ALTERED PORPHYRITIC SYENITE. | Grey green medium grained sanidine porphyritic - weakly aligned, moderately spotty (pervasive clots throughout matrix) epidote altered biotite rich syenite. The adjacent mudstone contacts are heavily sheared and broken. Weak limonite staining on fractures. | | | |

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-20 Page TWO

| From | To | Code | Description | mineralization in bold type |
|-------|-------|------|--|-----------------------------|
| 18.30 | 25.00 | | WEAKLY ALTERED PEBBLY MUDSTONE Grey, massive, pebbly to gritty mudstone. Majority of pebbles (other than siliceous ones) are extensively sericite epidote altered. Weak argillic / carbonate veining and weak clay carbonate epidote alteration located on fracture surfaces. Good recoveries + 95% | |
| 25.00 | 40.00 | | MODERATELY ALTERED PEBBLY MUDSTONE (gradational contact) An equivalent mudstone to that above excepting that a diffuse alteration style (argillic) pervades the host mudstone giving a two tone grey to grey brown colouration. Alteration fluids have been channeled through numerous small fractures and veinlets. Core is very broken, moderately veined - clay epidote iron oxide filled. Fracture faces also coated to varying degrees by iron oxides epidote and minor carbonate. Core recovery good + 95%. | |
| 40.00 | 40.60 | | EQUIGRANULAR LAMPROPHYRE. Grey with speckled dark grey to black, fine to medium grained mafic intrusive - lamprophyre. Massive but heavily fractured, abundant iron oxides on fracture faces and also minor goethite veining. Possible minor very small xenoliths of darker grey colour. Mafic minerals altered to hematite and epidote. Poor recovery of approximately 80%. | |
| 40.60 | 44.80 | | WEAKLY ALTERED PEBBLY MUDSTONE. Dark grey to grey fractured pebbly mudstone weak to moderately limonitic and epidotitic as smears on fracture surfaces, little to no veining. Good recovery + 95%. | |

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-20 Page THREE

| From | To | Code | Description | mineralization in bold type |
|-------|-------|------|---|-----------------------------|
| 44.80 | 45.70 | | CRUSHED PORPHYRITIC SYENITE. Orange yellow oxidised strongly crushed and possibly sheared sanidine porphyritic syenite. Matrix is fine to medium grained orange lemon olive green colour. Fracture surfaces heavily oxidised. Pale lemon colouration due to argillic? alteration. Good recovery +95%. | |
| 45.70 | 49.20 | | MODERATELY TO STRONGLY ALTERED PEBBLY MUDSTONE. Moderately to strongly hematite veined, veinletted bleached and epidote altered massive pebbly mudstone. Major hematite filled veinlets at approx. 30 to 50° to c.a. @ 47.3 metres. Sections of core bleached white through argillic alteration. The host is generally grey to dark grey. Alteration has channelled up through numerous fractures and spread out pervasively into host mudstone. | |
| 49.20 | 52.45 | | MODERATELY ALTERED SANIDINE PORPHYRITIC SYENITE. Coarsely porphyritic (sanidine tabular crystals set in a fine to medium grained grey matrix) syenite. Portions of matrix show clotty epidote alteration (after feldspar) and majority of ferro-magnesium minerals are altered to hematite? and have an iron oxide halo. Core is moderately broken. Good recovery +95%. | |
| 52.45 | 54.35 | | FERRUGINOUS PEBBLY MUDSTONE Moderately to Strongly broken heavily iron oxide stained (predominantly on fractures) weakly epidote altered (on fractures also) and iron oxide veined pebbly mudstone | |

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-20 Page FOUR

| From | To | Code | Description | mineralization in bold type |
|-------|-------|------|--|-----------------------------|
| 54.35 | 54.95 | | <p>PORPHYRITIC SYENITE.</p> <p>Strongly broken (fracture faces heavily stained with iron oxides) grey sanidine porphyritic syenite dyke. Margins heavily crushed. Good recoveries +95%.</p> | |
| 54.95 | 58.90 | | <p>WEAKLY ALTERED PEBBLY MUDSTONE.</p> <p>Massive grey gritty to pebbly mudstones becoming increasingly carbonate clay veined downhole, trace epidote alteration. Core weakly broken, good recoveries +95%. Minor iron oxide on fracture surfaces.</p> | |
| 58.90 | 64.30 | | <p>STRONGLY ALTERED VEINED PEBBLY MUDSTONE.</p> <p>As before except the clay carbonate veining (weakly stockworked) is very strong to locally intense associated with epidote and cherry red hematite. Mudstone at dyke contact 64.30 m shows hornfelsing / silicification. Good recoveries +95% in badly broken ground.</p> | |
| 64.30 | 64.90 | | <p>VEINED SYENITE.</p> <p>Speckled fine to medium grained syenite containing fine black speckled biotite set in a fine to medium grained grey beige matrix. Calcic? feldspars showing argillic alteration. Minor epidote and carbonate veining. Very minor large porphyritic sanidine crystals. Good recoveries +95% Core moderately broken.</p> | |
| 64.90 | 69.40 | | <p>STRONGLY ALTERED WEAKLY STOCKWORKED PEBBLY MUDSTONE.</p> <p>Dark grey pebbly mudstone showing very strong actinolite epidote hematite carbonate minor pyrite alteration located along and diffusing away from fractures and veinletting. Numerous pebbles</p> | |

043

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-20 Page FIVE

| From | To | Code | Description mineralization in bold type |
|-------|--------|-------|---|
| 64.90 | 69.40 | CON'T | Show actinolite and minor pyrite replacement. Portions of core show weak stockworking where veining is very abundant. Mudstone weakly silicified. Core extensively broken but good recoveries + 95%. |
| 69.40 | 77.85 | | BLEACHED MODERATELY ALTERED SYENOMONZONITE. Coarse grained, bleach cream to cream grey slightly oxidised moderately carbonate hematite veined and argillic epidote pyrite altered biotite hornblende syenomonzonite. Some large epidote clots, pyrite occurs as fine grained disseminations and fine clots; occasionally oxidised to hematite. Core overall weakly broken except for some narrow extensively crushed sections. Sections from 73.5 to 77.85 show strong argillic alteration with portions of core being very soft. Good recoveries + 95%. |
| 77.85 | 83.40 | | SHEARED WEAKLY ALTERED PEBBLY MUDSTONE Dark grey weakly to moderately hematite carbonate veinletted, weak clotty actinolite (replacing pebbles), sheared (slickensided) altered massive gritty to pebbly mudstone. Tectonic breccia at 82.30 metres. Slickensided material comprised of actinolite and carbonate. Good recoveries + 95% |
| 83.40 | 105.10 | | MODERATELY ALTERED SYENOMONZONITE. Grey green coarse grained occasionally sanidine porphyritic (zoned) moderately pyritic epidotitic carbonitic minor actinolite altered syenomonzonite. Pyrite variable (mainly as disseminations) up to 7.5% and is often oxidised to hematite. Unit weakly carbonate occasionally hematite veined. Calcic feldspars? and some biotite clots altered to epidote. Trace to minor open space filled with drusy |

geological log

Project CYGNET Prospect MOUNT MARY Hole CT-87-20 Page SIX

| From | To | Code | Description | mineralization in bold type |
|--------|--------|------|--|-----------------------------|
| 83.40 | 105.10 | CONT | quartz. (vugh and vein filling). Core weakly stockworked from 83.4 to 95.0 metres. Less veining to 105.10. Twenty centimetre wide zone of massive hematite veining at 87.3 metres. A thin zone of pebbly mudstone present @ 91.8 to 92.30. Syenomonzonite weakly xenolithic. Relatively unbroken core. Good recovery +95%. | |
| 105.10 | 114.60 | | WEAKLY ALTERED GRITTY MUDSTONE Dark grey to grey weakly carbonate pyrite altered massive gritty mudstone - Absence of siliceous pebbles. Minor slickensiding on fractures. Good recovery +95%. | |
| 114.60 | 116.70 | | WEAKLY VEINED LAMPROPHYRE. Brownish grey fine to medium grained mafic rich (hornblende laths) weakly pyrite altered and weakly carbonate veined lamprophyre? Possible rounded xenoliths altered to chlorite. Pyrite as fine disseminations locally up to 5%. | |
| 116.70 | 123.70 | | MODERATELY ALTERED MONZONITE. Coarse grained mottled grey cream epidote carbonate pyrite (minor hematite) altered monzonite. A high percentage of feldspars argillically altered hence core has high proportion of soft material, very broken very veined. Veins comprised of drussy carbonate and minor pyrite generally < 3mm in width. Core from approximately 119 to 123.7m very soft and highly weathered due to presence of fault zone (mylonitized breccia zone) to end of hole. | |
| 123.70 | 130.00 | | MYLONITIZED BRECCIA ZONE Upper contact (123.7) to approximately 126 m is comprised of | |

046

assays

| Project | | CYGNET | | Prospect | | MOUNT MARY | | Hole | | CT-87-20 | | Page | | ONE | |
|----------------|------|--------|----|----------|-----|------------|-----|--------|----------|----------|--|------|--|-----|--|
| Sample | From | To | Cu | Pb | Zn | Ag | As | Au | Au check | | | | | | |
| 224881 -882 | 0 | 2 | 15 | 85 | 160 | <0.5 | 11 | 0.070 | | | | | | | |
| 224879 -880 | 2 | 4 | 35 | 75 | 270 | <0.5 | 11 | 0.045 | | | | | | | |
| 224877 -878 | 4 | 6 | 40 | 220 | 305 | <0.5 | 12 | 0.180 | | ✓ | | | | | |
| 224875 -876 | 6 | 8 | 30 | 130 | 280 | 0.5 | 7 | 0.050 | | | | | | | |
| 224873 -874 | 8 | 10 | 25 | 20 | 280 | <0.5 | 2 | <0.005 | | | | | | | |
| 224871 -872 | 10 | 12 | 30 | 20 | 315 | <0.5 | 2 | <0.005 | | | | | | | |
| 224869 -870 | 12 | 14 | 45 | 85 | 480 | <0.5 | 3 | 0.110 | | ✓ | | | | | |
| 224867 -868 | 14 | 16 | 55 | 85 | 280 | <0.5 | 3 | 0.075 | | ✓ | | | | | |
| 224865 -866 | 16 | 18 | 65 | 70 | 300 | <0.5 | 3 | 0.090 | 0.085 | ✓ | | | | | |
| 224863 -864 | 18 | 20 | 40 | 60 | 280 | <0.5 | 4 | 0.205 | | ✓ | | | | | |
| 224861 -862 | 20 | 22 | 30 | 15 | 330 | <0.5 | 3 | <0.005 | | | | | | | |
| 224859 -860 | 22 | 24 | 30 | 15 | 340 | <0.5 | 2 | <0.005 | | | | | | | |
| 224857 -858 | 24 | 26 | 30 | 15 | 350 | <0.5 | 3 | <0.005 | | | | | | | |
| 224855 -856 | 26 | 28 | 25 | 20 | 330 | <0.5 | 3 | <0.005 | | | | | | | |
| 224853 -854 | 28 | 30 | 25 | 20 | 400 | <0.5 | 3 | <0.005 | | | | | | | |
| 224851 -852 | 30 | 32 | 25 | 40 | 500 | <0.5 | 4 | <0.005 | | | | | | | |
| 224849 -850 | 32 | 34 | 30 | 30 | 750 | <0.5 | 4 | 0.030 | | | | | | | |
| 224847 -848 | 34 | 36 | 30 | 30 | 845 | <0.5 | 3 | <0.005 | | | | | | | |
| 224845 -846 | 36 | 38 | 30 | 45 | 720 | <0.5 | 3 | 0.010 | | | | | | | |
| 224843 -844 | 38 | 40 | 35 | 40 | 525 | <0.5 | 6 | 0.130 | | ✓ | | | | | |
| 224841 -842 | 40 | 42 | 35 | 35 | 515 | <0.5 | 7 | 0.135 | 0.150 | ✓ | | | | | |
| 224839 -840 | 42 | 44 | 30 | 25 | 450 | <0.5 | 7 | <0.005 | | | | | | | |
| 224837 -838 | 44 | 46 | 40 | 120 | 410 | <0.5 | 15 | 0.040 | 0.045 | | | | | | |
| 224835 -836 | 46 | 48 | 95 | 4050 | 960 | 5.0 | 105 | 0.800 | | ✓ | | | | | |
| 224833 -834 | 48 | 50 | 25 | 490 | 510 | 0.5 | 18 | 0.055 | | | | | | | |
| 224831 -832 | 50 | 52 | 15 | 100 | 400 | <0.5 | 9 | 0.050 | | | | | | | |
| 224829 -830 | 52 | 54 | 30 | 65 | 565 | 0.5 | 13 | 0.090 | | | | | | | |
| 224827 -828 | 54 | 56 | 35 | 80 | 580 | 0.5 | 16 | 0.040 | | | | | | | |
| 224825 -826 | 56 | 58 | 20 | 30 | 590 | <0.5 | 3 | 0.015 | | | | | | | |
| 224823 -824 | 58 | 60 | 30 | 40 | 840 | <0.5 | 3 | 0.005 | | | | | | | |

assays

Project CYGNET Prospect MOUNT MARY Hole CT-87-20 Page TWO

| Sample | From | To | Cu | Pb | Zn | Ag | As | Au | Au check | | | |
|----------------|------|-----|-----|-----|------|------|----|--------|-------------|--|---|--|
| 224821 -822 | 60 | 62 | 35 | 10 | 800 | <0.5 | 4 | 0.035 | | | | |
| 224819 -820 | 62 | 64 | 35 | 15 | 650 | <0.5 | 2 | 0.040 | 0.050 | | | |
| 224817 -818 | 64 | 66 | 35 | 15 | 480 | <0.5 | 3 | 0.030 | | | | |
| 224815 -816 | 66 | 68 | 25 | 15 | 550 | <0.5 | 4 | 0.030 | | | | |
| 224813 -814 | 68 | 70 | 30 | 10 | 510 | <0.5 | 3 | 0.020 | | | | |
| 224811 -812 | 70 | 72 | 10 | 15 | 480 | <0.5 | 2 | 0.015 | | | | |
| 224809 -810 | 72 | 74 | 10 | 20 | 465 | <0.5 | 4 | 0.050 | | | | |
| 224807 -808 | 74 | 76 | 10 | 30 | 490 | <0.5 | 3 | 0.025 | | | | |
| 224805 -806 | 76 | 78 | 20 | 135 | 900 | <0.5 | 6 | 0.050 | | | | |
| 224803 -804 | 78 | 80 | 20 | <5 | 695 | <0.5 | 2 | <0.005 | | | | |
| 224801 -802 | 80 | 82 | 30 | <5 | 490 | <0.5 | 6 | <0.005 | | | | |
| 224799 -790 | 82 | 84 | 40 | <5 | 375 | <0.5 | 5 | 0.020 | | | | |
| 224797 -798 | 84 | 86 | 15 | 5 | 375 | <0.5 | 7 | 0.030 | | | | |
| 224795 -796 | 86 | 88 | 15 | 5 | 320 | <0.5 | 17 | 0.135 | | | ✓ | |
| 224793 -794 | 88 | 90 | 165 | 875 | 1350 | 6.0 | 51 | 3.390 | 2.740 | | ✓ | |
| 224791 -792 | 90 | 92 | 50 | 70 | 500 | <0.5 | 6 | 0.045 | | | | |
| 224789 -790 | 92 | 94 | 30 | <5 | 450 | <0.5 | 3 | 0.005 | | | | |
| 224787 -788 | 94 | 96 | 30 | <5 | 450 | <0.5 | 3 | 0.005 | | | | |
| 224785 -786 | 96 | 98 | 45 | <5 | 310 | <0.5 | 3 | 0.010 | | | | |
| 224783 -784 | 98 | 100 | 30 | <5 | 285 | <0.5 | 4 | 0.010 | | | | |
| 224781 -782 | 100 | 102 | 85 | <5 | 305 | <0.5 | 8 | 0.015 | | | | |
| 224779 -780 | 102 | 104 | 40 | <5 | 390 | <0.5 | 6 | 0.040 | | | | |
| 224777 -778 | 104 | 106 | 30 | <5 | 335 | <0.5 | 13 | 0.105 | 0.105 | | ✓ | |
| 224775 -776 | 106 | 108 | 20 | 5 | 700 | <0.5 | 23 | 0.005 | | | | |
| 224773 -774 | 108 | 110 | 30 | 20 | 685 | <0.5 | 8 | 0.005 | | | | |
| 224771 -772 | 110 | 112 | 30 | 85 | 735 | <0.5 | 7 | 0.035 | | | | |
| 224769 -770 | 112 | 114 | 30 | 5 | 1750 | <0.5 | 43 | 0.080 | | | | |
| 224767 -768 | 114 | 116 | 55 | 10 | 440 | <0.5 | 7 | <0.005 | | | | |
| 224765 -766 | 116 | 118 | 35 | <5 | 440 | <0.5 | 8 | 0.025 | 0.020 | | | |
| 224763 -764 | 118 | 120 | 65 | 5 | 1800 | <0.5 | 22 | 0.165 | 0.210 | | | |

APPENDIX 2

ANALYTICAL RESULT SHEETS

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05058

03/02/88

E18787 DN 2711

OF 10

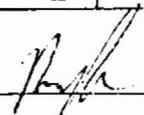
| TUBE No. | SAMPLE No. | interval | Y | La | Ce | Pr | Nd | Sm | Eu | Gd |
|----------|------------|----------------|----|----|----|-----|----|----|----|-----|
| 1 | 224048 | CT-87-4 0-3 | 13 | 30 | 62 | <20 | 21 | <5 | 1 | <10 |
| 2 | 224050 | 4-5 | 10 | 47 | 97 | <20 | 35 | 5 | 1 | <10 |
| 3 | 224053 | 7-8 | 16 | 40 | 90 | <20 | 39 | 6 | 2 | <10 |
| 4 | 224056 | 10-11 | 16 | 33 | 72 | <20 | 28 | <5 | 2 | <10 |
| 5 | 224058 | 12-13 | 19 | 46 | 93 | <20 | 36 | 6 | 2 | <10 |
| 6 | 224061 | 15-16 | 21 | 26 | 54 | <20 | 25 | <5 | 2 | <10 |
| 7 | 224064 | 18-19 | 21 | 30 | 72 | <20 | 30 | 5 | 2 | <10 |
| 8 | 224067 | 21-22 | 19 | 55 | 95 | <20 | 35 | 5 | 2 | <10 |
| 9 | 224070 | 24-25 | 24 | 46 | 93 | <20 | 36 | 5 | 2 | <10 |
| 10 | 224073 | 27-28 | 22 | 36 | 74 | <20 | 30 | <5 | 2 | <10 |
| 11 | 224075 | 29-30 | 29 | 29 | 57 | <20 | 37 | 6 | 2 | <10 |
| 12 | 224078 | 32-33 | 32 | 38 | 75 | <20 | 32 | 7 | 2 | <10 |
| 13 | 224081 | 35-36 | 37 | 35 | 67 | <20 | 30 | 5 | 2 | <10 |
| 14 | 224084 | 38-39 | 34 | 32 | 65 | <20 | 28 | 6 | 1 | <10 |
| 15 | 224087 | 41-42 | 38 | 39 | 76 | <20 | 36 | 8 | 2 | <10 |
| 16 | 224090 | 44-45 | 29 | 33 | 68 | <20 | 29 | 5 | 1 | <10 |
| 17 | 224093 | 47-48 | 32 | 37 | 73 | <20 | 32 | 7 | 2 | <10 |
| 18 | 224096 | 50-51 | 27 | 36 | 71 | <20 | 29 | 5 | 1 | <10 |
| 19 | 224099 | 53-54 | 37 | 35 | 76 | <20 | 38 | 8 | 2 | <10 |
| 20 | 224102 | 56-57 | 28 | 34 | 83 | <20 | 40 | 7 | 2 | <10 |
| 21 | 224105 | 59-60 | 18 | 27 | 66 | <20 | 27 | <5 | 2 | <10 |
| 22 | 224108 | 62-63 | 20 | 34 | 76 | <20 | 30 | <5 | 2 | <10 |
| 23 | 224111 | 65-66 | 20 | 32 | 73 | <20 | 27 | <5 | 2 | <10 |
| 24 | 224114 | 68-69 | 19 | 30 | 73 | <20 | 31 | 6 | 2 | <10 |
| 25 | 224117 | 71-72 | 21 | 36 | 80 | <20 | 32 | 5 | 2 | <10 |

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

-- = element not determined

AUTHORISED
OFFICER


052

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05058

03/02/88

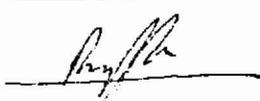
E18787

DN 2712

OF 10

| TUBE No. | SAMPLE No. | interval | Y | La | Ce | Pr | Nd | Sm | Eu | Gd |
|----------|------------|------------------|----|----|-----|-----|----|----|----|-----|
| 1 | 224120 | 74-75 | 23 | 54 | 94 | <20 | 35 | 5 | 2 | <10 |
| 2 | 224121 | 75-75.6 | 30 | 40 | 76 | <20 | 32 | 7 | 1 | <10 |
| 3 | 224384 | CTR-87-10 4-6 | 30 | 44 | 87 | <20 | 37 | 7 | 1 | <10 |
| 4 | 224386 | 8-10 | 33 | 44 | 88 | <20 | 39 | 8 | 1 | <10 |
| 5 | 224388 | 12-14 | 21 | 43 | 88 | <20 | 35 | 7 | 1 | <10 |
| 6 | 224390 | 16-18 | 18 | 36 | 80 | <20 | 32 | 6 | 2 | <10 |
| 7 | 224392 | 20-22 | 28 | 43 | 87 | <20 | 37 | 8 | 1 | <10 |
| 8 | 224394 | 24-26 | 29 | 44 | 91 | <20 | 40 | 9 | 2 | <10 |
| 9 | 224396 | 28-30 | 28 | 42 | 86 | <20 | 37 | 8 | 1 | <10 |
| 10 | 224398 | 32-34 | 32 | 45 | 88 | <20 | 39 | 8 | 1 | <10 |
| 11 | 224400 | 36-38 | 28 | 45 | 90 | <20 | 38 | 8 | 1 | <10 |
| 12 | 224402 | 40-42 | 28 | 46 | 91 | <20 | 39 | 8 | 1 | <10 |
| 13 | 224404 | 44-46 | 26 | 45 | 90 | <20 | 38 | 8 | 1 | <10 |
| 14 | 224406 | 48-50 | 27 | 44 | 88 | <20 | 37 | 7 | 1 | <10 |
| 15 | 224466 | CTR-87-13 4-6 | 45 | 43 | 84 | <20 | 41 | 9 | 2 | <10 |
| | 224468 | 8-10 | 35 | 37 | 79 | <20 | 35 | 7 | 1 | <10 |
| 17 | 224470 | 12-14 | 53 | 70 | 153 | <20 | 75 | 16 | 4 | <10 |
| 18 | 224472 | 16-18 | 37 | 41 | 87 | <20 | 39 | 9 | 1 | <10 |
| 19 | 224474 | 20-22 | 33 | 40 | 87 | <20 | 39 | 9 | 1 | <10 |
| 20 | 224476 | 24-26 | 34 | 50 | 99 | <20 | 44 | 10 | 2 | <10 |
| 21 | 224478 | 28-30 | 36 | 41 | 85 | <20 | 37 | 8 | 1 | <10 |
| 22 | 224480 | 32-34 | 34 | 43 | 90 | <20 | 41 | 9 | 1 | <10 |
| 23 | 224482 | 36-38 | 34 | 55 | 122 | <20 | 54 | 10 | 3 | <10 |
| 24 | 224484 | 40-42 | 30 | 49 | 112 | <20 | 52 | 11 | 3 | <10 |
| 25 | 224486 | 44-46 | 33 | 41 | 84 | <20 | 37 | 7 | 1 | <10 |

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 - = element not determined

 AUTHORISED
 OFFICER
 

053

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

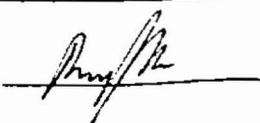
REPORT DATE

CLIENT ORDER No.

PAGE

| | | | | 7.5.08.05058 | | 03/02/88 | | E18787 DN 2713 | | OF 10 | |
|----------|------------|-----------------------------|----|--------------|-----|----------|-----|----------------|----|-------|---|
| TUBE No. | SAMPLE No. | interval | Y | La | Ce | Pr | Nd | Sm | Eu | Gd | |
| 1 | 224488 | 48-50 | 33 | 42 | 84 | <20 | 35 | 7 | 1 | <10 | |
| 2 | 224491 | ^{CTR-87-14} 4-6 | 80 | 128 | 292 | 36 | 141 | 29 | 7 | <10 | X |
| 3 | 224493 | 8-10 | 41 | 60 | 130 | <20 | 59 | 11 | 3 | <10 | |
| 4 | 224495 | 12-14 | 41 | 69 | 144 | <20 | 59 | 13 | 3 | <10 | |
| 5 | 224497 | 16-18 | 20 | 50 | 95 | <20 | 36 | 8 | 1 | <10 | |
| 6 | 224499 | 20-22 | 32 | 42 | 90 | <20 | 39 | 9 | 1 | <10 | |
| 7 | 224501 | 24-26 | 37 | 47 | 97 | <20 | 43 | 10 | 2 | <10 | |
| 8 | 224503 | 28-30 | 35 | 45 | 92 | <20 | 40 | 9 | 2 | <10 | |
| 9 | 224505 | 32-34 | 33 | 41 | 88 | <20 | 40 | 18 | 2 | <10 | |
| 10 | 224507 | 36-38 | 34 | 44 | 90 | <20 | 38 | 8 | 1 | <10 | |
| 11 | 224509 | 40-42 | 34 | 44 | 90 | <20 | 40 | 18 | 2 | <10 | |
| 12 | 224511 | 44-46 | 33 | 42 | 87 | <20 | 36 | 8 | 2 | <10 | |
| 13 | 224513 | 48-50 | 34 | 45 | 93 | <20 | 41 | 9 | 2 | <10 | |
| 14 | 224516 | ^{CTR-87-15} 4-6 | 41 | 51 | 112 | <20 | 51 | 11 | 2 | <10 | |
| 15 | 224518 | 8-10 | 35 | 39 | 85 | <20 | 38 | 9 | 1 | <10 | |
| 16 | 224520 | 12-14 | 33 | 43 | 90 | <20 | 40 | 8 | 2 | <10 | |
| 17 | 224522 | 16-18 | 36 | 43 | 89 | <20 | 37 | 8 | 1 | <10 | |
| 18 | 224524 | 20-22 | 35 | 41 | 78 | <20 | 31 | 6 | 1 | <10 | |
| 19 | 224526 | 24-26 | 35 | 40 | 77 | <20 | 29 | 5 | 1 | <10 | |
| 20 | 224528 | 28-30 | 35 | 41 | 79 | <20 | 30 | 5 | 1 | <10 | |
| 21 | 224530 | 32-34 | 34 | 39 | 74 | <20 | 27 | 5 | 1 | <10 | |
| 22 | 224532 | 36-38 | 34 | 40 | 77 | <20 | 29 | 5 | 1 | <10 | |
| 23 | 224534 | 40-42 | 34 | 41 | 80 | <20 | 31 | 6 | 1 | <10 | |
| 24 | 224536 | 44-46 | 29 | 44 | 86 | <20 | 37 | 8 | 1 | <10 | |
| 25 | 224538 | 48-50 | 34 | 43 | 78 | <20 | 29 | 5 | 1 | <10 | |

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 -- = element not determined

 AUTHORISED
 OFFICER
 

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

| | | | 7.5.08.05058 | | | 03/02/88 | | E18787 DN 2714 | | OF 10 | |
|----------|------------|---------------------|--------------|----|-----|----------|-----|----------------|----|-------|--|
| TUBE No. | SAMPLE No. | interval | Y | La | Ce | Pr | Nd | Sm | Eu | Gd | |
| 1 | 224625.626 | CT-87-19 130-132 | 20 | 30 | 55 | <20 | 25 | 5 | 2 | <10 | |
| 2 | 224630.631 | 124-126 | 18 | 28 | 53 | <20 | 23 | <5 | 1 | <10 | |
| 3 | 224636.637 | 118-120 | 20 | 33 | 61 | <20 | 26 | <5 | 1 | <10 | |
| 4 | 224642.643 | 112-114 | 21 | 42 | 82 | <20 | 34 | 7 | 1 | <10 | |
| 5 | 224648.649 | 106-108 | 22 | 43 | 85 | <20 | 36 | 8 | 1 | <10 | |
| 6 | 224654.655 | 100-102 | 27 | 46 | 89 | <20 | 38 | 8 | 1 | <10 | |
| 7 | 224660.661 | 94-96 | 31 | 55 | 97 | <20 | 43 | 8 | 2 | <10 | |
| 8 | 224668.669 | 90-92 | 33 | 41 | 79 | <20 | 33 | 8 | 1 | <10 | |
| 9 | 224672.673 | 86-88 | 29 | 41 | 74 | <20 | 28 | 5 | 1 | <10 | |
| 10 | 224678.679 | 76-78 | 24 | 48 | 91 | <20 | 43 | 10 | 2 | <10 | |
| 11 | 224684.685 | 70-72 | 23 | 38 | 73 | <20 | 34 | 7 | 2 | <10 | |
| 12 | 224690.691 | 64-66 | 28 | 42 | 79 | <20 | 33 | 6 | 1 | <10 | |
| 13 | 224696.697 | 58-60 | 32 | 42 | 80 | <20 | 32 | 7 | 1 | <10 | |
| 14 | 224702.703 | 52-54 | 28 | 36 | 69 | <20 | 31 | 8 | 1 | <10 | |
| 15 | 224708.709 | 46-48 | 29 | 49 | 94 | <20 | 44 | 9 | 2 | <10 | |
| 16 | 224714.715 | 40-42 | 29 | 43 | 80 | <20 | 33 | 6 | 1 | <10 | |
| 17 | 224720.721 | 34-36 | 33 | 42 | 82 | <20 | 36 | 8 | 1 | <10 | |
| 18 | 224726.727 | 28-30 | 33 | 41 | 79 | <20 | 33 | 7 | 1 | <10 | |
| 19 | 224732.733 | 22-24 | 30 | 53 | 99 | <20 | 48 | 11 | 2 | <10 | |
| 20 | 224738.739 | 16-18 | 15 | 32 | 59 | <20 | 24 | 5 | 1 | <10 | |
| 21 | 224744.745 | 10-12 | 28 | 52 | 111 | <20 | 52 | 12 | 3 | <10 | |
| 22 | 224750.751 | CT-87-19 4-6 | 33 | 44 | 83 | <20 | 36 | 8 | 1 | <10 | |
| 23 | 224753.754 | CT-87-20 128-130 | 22 | 41 | 80 | <20 | 33 | 6 | 1 | <10 | |
| 24 | 224757.758 | 124-126 | 12 | 19 | 36 | <20 | <20 | <5 | <1 | <10 | |
| 25 | 224763.764 | 118-120 | 16 | 28 | 51 | <20 | 21 | <5 | 1 | <10 | |

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 - = element not determined

 AUTHORISED
 OFFICER
 

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05058

03/02/88

E18787 DN 27

15 OF 10

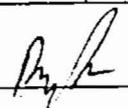
| TUBE No. | SAMPLE No. | interval | Y | La | Ce | Pr | Nd | Sm | Eu | Gd |
|----------|-------------------------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 224769.770 | 112-114 | 26 | 38 | 75 | <20 | 30 | 5 | 1 | <10 |
| 2 | 224775.776 | 106-108 | 25 | 39 | 77 | <20 | 33 | 7 | 1 | <10 |
| 3 | 224781.782 | 100-102 | 25 | 40 | 80 | <20 | 38 | 9 | 2 | <10 |
| 4 | 224787.788 | 94-96 | 20 | 34 | 64 | <20 | 28 | 5 | 1 | <10 |
| 5 | 224793.794 | 88-90 | 19 | 38 | 73 | <20 | 33 | 7 | 2 | <10 |
| 6 | 224799.800 | 82-84 | 22 | 39 | 79 | <20 | 34 | 8 | 1 | <10 |
| 7 | 224805.806 | 76-78 | 21 | 38 | 77 | <20 | 34 | 7 | 2 | <10 |
| 8 | 224811.812 | 70-72 | 17 | 35 | 69 | <20 | 30 | 6 | 1 | <10 |
| 9 | 224817.818 | 64-66 | 25 | 38 | 74 | <20 | 30 | 5 | 1 | <10 |
| 10 | 224823.824 | 58-60 | 22 | 42 | 82 | <20 | 33 | 7 | 1 | <10 |
| 11 | 224829.830 | 52-54 | 24 | 49 | 96 | <20 | 42 | 8 | 1 | <10 |
| 12 | 224835.836 | 46-48 | 15 | 27 | 49 | <20 | <20 | <5 | <1 | <10 |
| 13 | 224839.840 | 42-44 | 24 | 39 | 70 | <20 | 30 | 5 | 1 | <10 |
| 14 | 224845.846 | 36-38 | 25 | 36 | 69 | <20 | 32 | 7 | 1 | <10 |
| 15 | 224851.852 | 30-32 | 26 | 35 | 70 | <20 | 28 | 6 | 1 | <10 |
| 16 | 224857.858 | 24-26 | 25 | 33 | 64 | <20 | 28 | 6 | 1 | <10 |
| 17 | 224863.864 | 18-20 | 23 | 34 | 70 | <20 | 33 | 7 | 1 | <10 |
| 18 | 224869.870 | 12-14 | 65 | 40 | 77 | <20 | 39 | 11 | 2 | <10 |
| 19 | 224875.876 | 6-8 | 28 | 52 | 100 | <20 | 42 | 8 | 1 | <10 |
| 20 | 224881.882 | 0-2 | 12 | 23 | 44 | <20 | <20 | <5 | 1 | <10 |
| 21 | | | | | | | | | | |
| 22 | NOTE: Unable to Assay for Pm. | | | | | | | | | |
| 23 | DETECTION | | 1 | 5 | 15 | 20 | 20 | 5 | 1 | 10 |
| 24 | UNITS | | PPM |
| 25 | METHOD | | 201 | 201 | 201 | 201 | 201 | 201 | 201 | 201 |

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

-- = element not determined

AUTHORISED
OFFICER


ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05058

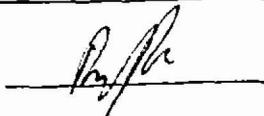
03/02/88

E18787 DN 2716

OF 10

| BE No. | SAMPLE No. | Interval | Tb | Dy | Ho | Er | Tm | Yb | Lu |
|--------|------------|----------------|----|----|-----|----|----|----|----|
| 1 | 224048 | CT-87-4 0-3 | <5 | <5 | <20 | <2 | <2 | 2 | <2 |
| 2 | 224050 | 4-5 | <5 | <5 | <20 | <2 | <2 | 2 | <2 |
| 3 | 224053 | 7-8 | <5 | <5 | <20 | <2 | <2 | 2 | <2 |
| 4 | 224056 | 10-11 | <5 | <5 | <20 | <2 | <2 | 2 | <2 |
| 5 | 224058 | 12-13 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |
| 6 | 224061 | 15-16 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |
| 7 | 224064 | 18-19 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |
| 8 | 224067 | 21-22 | <5 | <5 | <20 | <2 | <2 | 2 | <2 |
| 9 | 224070 | 24-25 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |
| 10 | 224073 | 27-28 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |
| 11 | 224075 | 29-30 | <5 | 5 | <20 | 3 | <2 | 4 | <2 |
| 12 | 224078 | 32-33 | <5 | 5 | <20 | 3 | <2 | 4 | <2 |
| 13 | 224081 | 35-36 | <5 | 5 | <20 | 2 | <2 | 4 | <2 |
| 14 | 224084 | 38-39 | <5 | 5 | <20 | 2 | <2 | 4 | <2 |
| 15 | 224087 | 41-42 | <5 | 6 | <20 | 3 | <2 | 4 | <2 |
| | 224090 | 44-45 | <5 | <5 | <20 | 2 | <2 | 3 | <2 |
| 17 | 224093 | 47-48 | <5 | 5 | <20 | 3 | <2 | 3 | <2 |
| 18 | 224096 | 50-51 | <5 | <5 | <20 | 2 | <2 | 3 | <2 |
| 19 | 224099 | 53-54 | <5 | 6 | <20 | 3 | <2 | 4 | <2 |
| 20 | 224102 | 56-57 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |
| 21 | 224105 | 59-60 | <5 | <5 | <20 | <2 | <2 | 2 | <2 |
| 22 | 224108 | 62-63 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |
| 23 | 224111 | 65-66 | <5 | <5 | <20 | <2 | <2 | 2 | <2 |
| 24 | 224114 | 68-69 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |
| 25 | 224117 | 71-72 | <5 | <5 | <20 | <2 | <2 | 3 | <2 |

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 - = element not determined

 AUTHORISED
 OFFICER
 

057

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

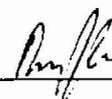
| | | | 7.5.08.05058 | | | 03/02/88 | | E18787 DN 2717 | | OF 10 | |
|----------|------------|------------------|--------------|----|-----|----------|----|----------------|----|-------|--|
| TUBE No. | SAMPLE No. | interval | Tb | Dy | Ho | Er | Tm | Yb | Lu | | |
| 1 | 224120 | 7A-75 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | | |
| 2 | 224121 | 75-75.6 | <5 | <5 | <20 | 3 | <2 | 4 | <2 | | |
| 3 | 224384 | CTR-87-10 4-6 | <5 | 5 | <20 | 2 | <2 | 3 | <2 | | |
| 4 | 224386 | 8-10 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 5 | 224388 | 12-14 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | | |
| 6 | 224390 | 16-18 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | | |
| 7 | 224392 | 20-22 | <5 | 5 | <20 | 2 | <2 | 3 | <2 | | |
| 8 | 224394 | 24-26 | <5 | 5 | <20 | 3 | <2 | 3 | 2 | | |
| 9 | 224396 | 28-30 | <5 | 5 | <20 | 3 | <2 | 3 | <2 | | |
| 10 | 224398 | 32-34 | <5 | 5 | <20 | 3 | <2 | 3 | <2 | | |
| 11 | 224400 | 36-38 | <5 | 5 | <20 | 2 | <2 | 3 | <2 | | |
| 12 | 224402 | 40-42 | <5 | 5 | <20 | 3 | <2 | 3 | <2 | | |
| 13 | 224404 | 44-46 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | | |
| 14 | 224406 | 48-50 | <5 | 5 | <20 | 2 | <2 | 3 | <2 | | |
| 15 | 224466 | CTR-87-13 4-6 | <5 | 7 | <20 | 4 | <2 | 5 | <2 | | |
| 3 | 224468 | 8-10 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 17 | 224470 | 12-14 | <5 | 9 | <20 | 5 | <2 | 6 | <2 | | |
| 18 | 224472 | 16-18 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 19 | 224474 | 20-22 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 20 | 224476 | 24-26 | <5 | 6 | <20 | 4 | <2 | 4 | <2 | | |
| 21 | 224478 | 28-30 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 22 | 224480 | 32-34 | <5 | 6 | <20 | 4 | <2 | 4 | <2 | | |
| 23 | 224482 | 36-38 | <5 | 5 | <20 | 2 | <2 | 4 | <2 | | |
| 24 | 224484 | 40-42 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 25 | 224486 | 44-46 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED
OFFICER

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

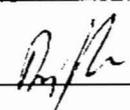
REPORT DATE

CLIENT ORDER No.

PAGE

| | | 7.5.08.05058 | | | | 03/02/88 | | E18787 DN 2718 | | OF 10 | |
|----------|------------|------------------|----|----|-----|----------|----|----------------|----|-------|--|
| TUBE No. | SAMPLE No. | Interval | Tb | Dy | Ho | Er | Tm | Yb | Lu | | |
| 1 | 224488 | 48-50 | <5 | 5 | <20 | 3 | <2 | 4 | <2 | | |
| 2 | 224491 | CTR-87-14 4-6 | <5 | 16 | <20 | 7 | <2 | 8 | <2 | | |
| 3 | 224493 | 8-10 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 4 | 224495 | 12-14 | <5 | 7 | <20 | 4 | <2 | 5 | <2 | | |
| 5 | 224497 | 16-18 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | | |
| 6 | 224499 | 20-22 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 7 | 224501 | 24-26 | <5 | 7 | <20 | 4 | <2 | 4 | <2 | | |
| 8 | 224503 | 28-30 | <5 | 6 | <20 | 4 | <2 | 4 | <2 | | |
| 9 | 224505 | 32-34 | <5 | 7 | <20 | 4 | <2 | 4 | <2 | | |
| 10 | 224507 | 36-38 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 11 | 224509 | 40-42 | <5 | 6 | <20 | 4 | <2 | 4 | <2 | | |
| 12 | 224511 | 44-46 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 13 | 224513 | 48-50 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 14 | 224516 | CTR-87-15 4-6 | <5 | 7 | <20 | 3 | <2 | 5 | <2 | | |
| 15 | 224518 | 8-10 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 16 | 224520 | 12-14 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 17 | 224522 | 16-18 | <5 | 6 | <20 | 3 | <2 | 4 | <2 | | |
| 18 | 224524 | 20-22 | <5 | 5 | <20 | <2 | <2 | 4 | <2 | | |
| 19 | 224526 | 24-26 | <5 | <5 | <20 | <2 | <2 | 4 | <2 | | |
| 20 | 224528 | 28-30 | <5 | <5 | <20 | <2 | <2 | 4 | <2 | | |
| 21 | 224530 | 32-34 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | | |
| 22 | 224532 | 36-38 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | | |
| 23 | 224534 | 40-42 | <5 | <5 | <20 | 2 | <2 | 4 | <2 | | |
| 24 | 224536 | 44-46 | <5 | 5 | <20 | 2 | <2 | 3 | <2 | | |
| 25 | 224538 | 48-50 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | | |

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 - = element not determined

 AUTHORISED
 OFFICER
 

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05058

03/02/88

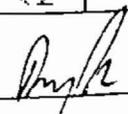
E18787 DN 27

19 OF 10

| TUBE No. | SAMPLE No. | Interval | Tb | Dy | Ho | Er | Tm | Yb | Lu | |
|----------|------------|---------------------|----|----|-----|----|----|----|----|--|
| 1 | 224625.626 | CT-87-19 130-132 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 2 | 224630.631 | 124-126 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 3 | 224636.637 | 118-120 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 4 | 224642.643 | 112-114 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 5 | 224648.649 | 106-108 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 6 | 224654.655 | 100-102 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 7 | 224660.661 | 94-96 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 8 | 224668.669 | 90-92 | <5 | 5 | <20 | 3 | <2 | 4 | <2 | |
| 9 | 224672.673 | 86-88 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 10 | 224678.679 | 76-78 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 11 | 224684.685 | 70-72 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 12 | 224690.691 | 64-66 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 13 | 224696.697 | 58-60 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 14 | 224702.703 | 52-54 | <5 | <5 | <20 | 3 | <2 | 3 | <2 | |
| 15 | 224708.709 | 46-48 | <5 | <5 | <20 | <2 | <2 | 4 | <2 | |
| | 224714.715 | 40-42 | <5 | <5 | <20 | 2 | <2 | 4 | <2 | |
| 17 | 224720.721 | 34-36 | <5 | 5 | <20 | 3 | <2 | 4 | <2 | |
| 18 | 224726.727 | 28-30 | <5 | 5 | <20 | 2 | <2 | 4 | <2 | |
| 19 | 224732.733 | 22-24 | <5 | 5 | <20 | 2 | <2 | 3 | <2 | |
| 20 | 224738.739 | 16-18 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 21 | 224744.745 | 10-12 | <5 | 5 | <20 | 2 | <2 | 3 | <2 | |
| 22 | 224750.751 | 4-6 | <5 | 5 | <20 | 2 | <2 | 4 | <2 | |
| 23 | 224753.754 | CT-87-20 128-130 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 24 | 224757.758 | 124-126 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 25 | 224763.764 | 118-120 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 - = element not determined

 AUTHORISED
 OFFICER



ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05058

03/02/88

E18787

DN 27

110 OF 10

| TUBE No. | SAMPLE No. | interval | Tb | Dy | Ho | Er | Tm | Yb | Lu | |
|----------|-------------------------------|----------|-----|-----|-----|-----|-----|-----|-----|--|
| 1 | 224769.770 | 112-114 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 2 | 224775.776 | 106-108 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 3 | 224781.782 | 100-102 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 4 | 224787.788 | 94-96 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 5 | 224793.794 | 88-90 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 6 | 224799.800 | 82-84 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 7 | 224805.806 | 76-78 | <5 | <5 | <20 | 2 | <2 | 2 | <2 | |
| 8 | 224811.812 | 70-72 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 9 | 224817.818 | 64-66 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 10 | 224823.824 | 58-60 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 11 | 224829.830 | 52-54 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 12 | 224835.836 | 46-48 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 13 | 224839.840 | 42-44 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| 14 | 224845.846 | 36-38 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 15 | 224851.852 | 30-32 | <5 | <5 | <20 | <2 | <2 | 3 | <2 | |
| | 224857.858 | 24-26 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 17 | 224863.864 | 18-20 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 18 | 224869.870 | 12-14 | <5 | 9 | <20 | 5 | <2 | 6 | <2 | |
| 19 | 224875.876 | 6-8 | <5 | <5 | <20 | 2 | <2 | 3 | <2 | |
| 20 | 224881.882 | 0-2 | <5 | <5 | <20 | <2 | <2 | 2 | <2 | |
| 21 | | | | | | | | | | |
| 22 | NOTE: Unable to Assay for Pm. | | | | | | | | | |
| 23 | DETECTION | | 5 | 5 | 20 | 2 | 2 | 2 | 2 | |
| 24 | UNITS | | PPM | |
| 25 | METHOD | | 201 | 201 | 201 | 201 | 201 | 201 | 201 | |

Results in ppm unless otherwise specified
 T = element present, but concentration too low to measure
 X = element concentration is below detection limit
 -- = element not determined

 AUTHORISED
 OFFICER
 