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Phil Jones and Associates Pty. Ltd.

Geotechnical Personnel

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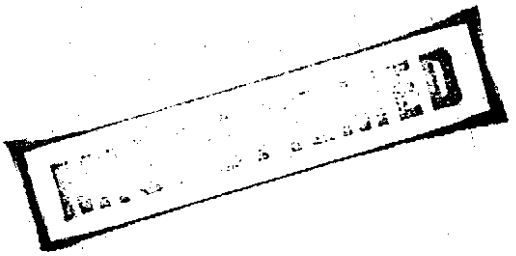
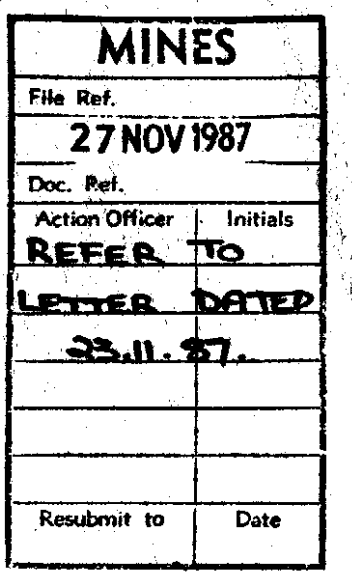
PROJECT A-84-111





PROGRESS REPORT

OCTOBER 1986 TO OCTOBER 1987

CYGNET EL 36/82

TASMANIA

P A JONES
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FOR CYPRUS MINERALS

OCTOBER 1987

REPORT 546

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SUMMARY AND CONCLUSIONS

Exploration Licence 36/82 was granted to Amoco Minerals Australia Company (now Cyprus Minerals) on October 26, 1984. The licence is renewable for a further twelve months subject to Mines Department approval.

The licence lies approximately 36 kilometres south-southwest of Hobart, is centred on the township of Cygnet and is well situated with respect to potential mine infrastructure.

The targets of exploration are stratabound gold deposits similar to the Carlin deposits of Nevada and disseminated stockwork deposits associated with high level intrusives.

Previous mining and recent exploration were concentrated on the two major areas of Black Jack and Mount Mary.

The tenement is underlain by Permo-Triassic sediments through which have been intruded Cretaceous alkali igneous rocks and Jurassic dolerites. The intrusion has domed the sediments into shallow dipping sequences 10-15 deg. away from an epicentre near the Mount Mary group of workings.

The 1986-87 program was designed to detail anomalies outlined by costeaning during 1985-1986. Infill trenching at Black Jack and Mount Mary allowed numerous drill targets to be identified, the majority of which were both diamond and percussion drilled. Three diamond holes completed on the Black Jack prospect returned weakly anomalous gold associated with highly ferruginous and fossiliferous flat lying mudstones. Thirteen percussion holes and three diamond holes were completed at Mount Mary outlining three mineralized zones. The main or central zone, assaying up to 1.06 g/t Au over 12 m lies co-incident with the line of old workings. The second zone occurs as an oblique trend north of the central zone and ranges up to 0.6 g/t over 10 metres. A third horizon south of the central zone appears to be related to a major shear zone and assays up to 1.0 g/t Au over 17 metres. One percussion hole was completed at Kings Hill returning one 1 metre anomalous value of 0.4 g/t Au at the base of the hole.

Further deeper drilling is required to delineate the three zones of mineralization outlined at Mount Mary. A second deeper hole is also required at Kings Hill. Further studies need to be conducted at Black Jack prior to conducting further drilling surveys.

RECOMMENDATIONS

Cyprus should undertake additional drilling surveys to further define mineralized zones outlined during the 1986-87 program, both at Mount Mary and Kings Hill. Additional surveys including petrography and investigations into salinity, temperature and mode of emplacement of mineralization at Black Jack should be conducted prior to further drilling.

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.

DESCRIPTION OF THE PROPERTY AND OWNERSHIP

Amoco Minerals Australia Company (now Cyprus) applied for a 100 square kilometre 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.

A joint venture has been negotiated whereby Poseidon may earn a 50% interest in EL 36/82 and Cyprus may earn a 50% interest in

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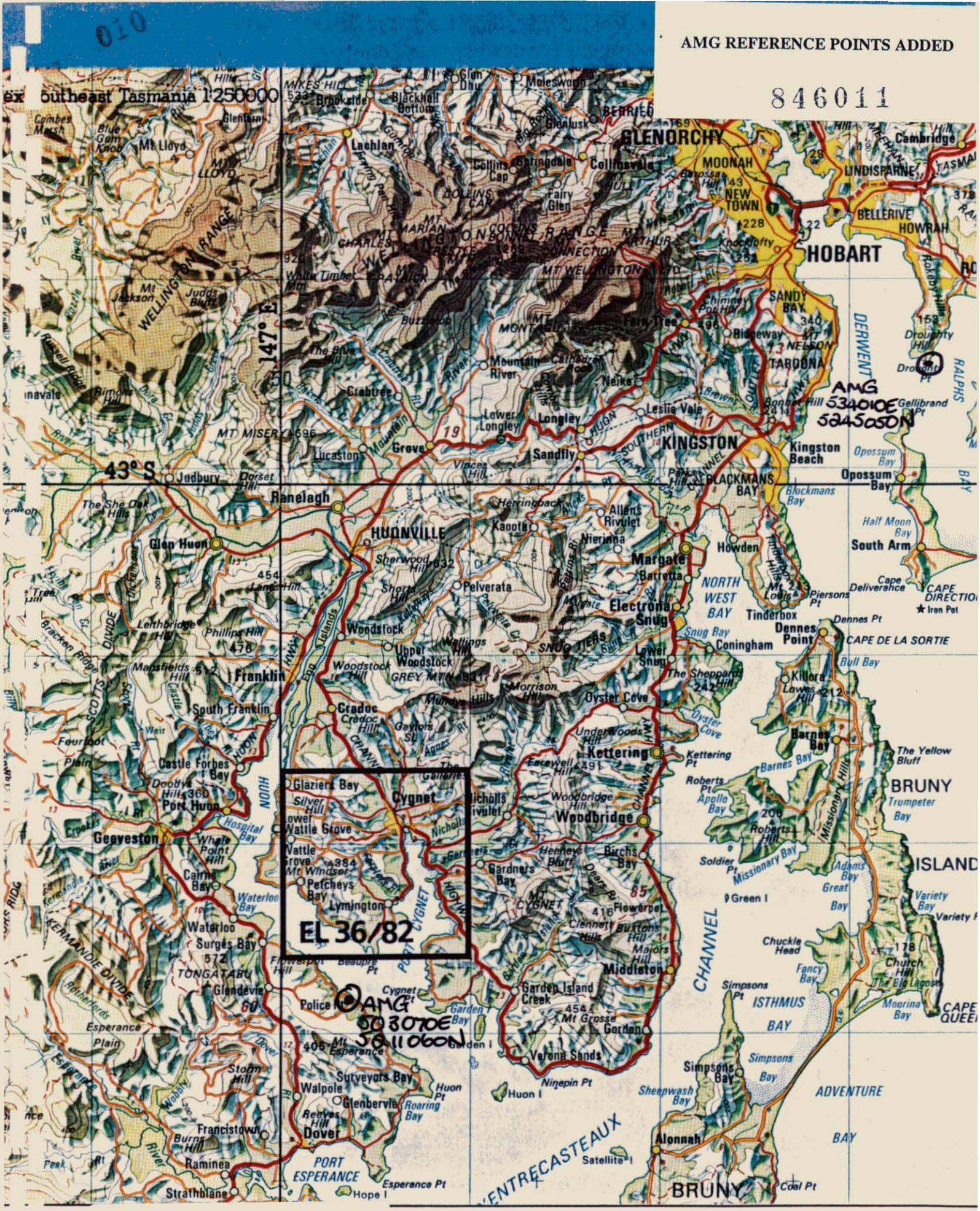

FIGURE 1

Cygnet EL 36/82

the adjacent EL 23/83 (129 square kilometres) held by Poseidon Minerals Limited with Cyprus managing the program.

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) (Report 459 - Enclosure 1). These are both stone and mineral leases.

LOCATION AND ACCESS

The tenement lies approximately 36 kilometres south-southwest of Hobart and is centred 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 centimetres in the lower lying areas and 125 centimetres in the higher areas.

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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.

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 dyke swarm. The alkali intrusive belt is approximately 25 kilometres long by 10 kilometres wide and extends from just south of Snug to Surges

Bay on the west bank of the Huon River. Recent fluviatile 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 [88]) coupled with follow-up roadside mapping.

The sedimentary units within the licence range in age from Permian (850 metres thick) to Triassic (450 metres thick). The basal Permian unit is the Truro Tillite which has a thickness in excess of 300 metres. 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 centred west of Cygnet with dips of 5-10 deg. 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 dykes. 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 is 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 grades of the gold mineralization. Eleven metres of core from 74-85 metres 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 that 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 dykes, sills etc. along shear zones and other zones of structural weakness.

WORK CONDUCTED BY CYPRUS

During the period infill costeaning surveys were completed over anomalous zones at Black Jack Ridge and Mount Mary to better define possible drill targets.

Numerous anomalous zones were delineated and the majority of these were either diamond or percussion drilled to shallow depths. A shallow percussion hole was also drilled to test the geologically anomalous breccia pipe at Kings Hill. An additional two deeper diamond holes were later completed over the Mount Mary Prospect.

Work completed on the Cygnet EL in 1986-87 is summarised in Table 1.

TABLE 1 WORK COMPLETED 1986-87

	Black Jack		Mount Mary		Kings Hill	
		Agg. metreage		Agg. metreage		Agg. metreage
Costeaning	6 trenches	245	9 trenches	484	-	-
Diamond Drilling	3 holes	226.10	3 holes	334.20	-	-
Percussion Drilling	-	-	13 holes	698	1 hole	60
Site Preparation	3 drill pads track upgrading		16 drill pads track upgrading		1 drill pad	

Costeaning: (Table 2) An additional fifteen trenches totalling 729 metres were excavated across previously defined bedrock anomalies at Black Jack Ridge and Mount Mary to determine the best possible drill site locations.

TABLE 2 **COSTEAN DETAILS**

Black Jack Ridge (Figs. 5 to 10)				Mount Mary (Figs. 15 to 23)			
9845N	9992 –	10003E	11m	9980E	10030 –	10066N	36m
9900N	9990	10030E	40m	10250E	9990	10050N	60m
	10107	10137E	30m	10300E	9980	10070N	90m
9920N	9964	9980E	16m	Trench 6	0	14	14m
9987N	9922	9990E	68m	10350E	9946	10042N	96m
10100N	9970	10050E	80m	10400E	10100	10148N	48m
				10450E	10000	10060N	60m
				10450E	10150	10180N	30m
				10500E	9775	9825N	50m
Total			245m	Total			484m

The trenches were excavated with a Mitsubishi MS180 hydraulic excavator operated by Hazell Bros of Margate, Tasmania, using a 1 metre bucket. Trenches were mapped at a scale of 1:100 and sampled at 2 metre intervals.

Two metre channel samples of approximately 3-4 kilograms each were processed at the laboratories of Analabs in Burnie, Tasmania. Processing included drying, crushing, coarse pulverizing, splitting and finally fine pulverizing prior to a split being taken sufficient to assay for the following elements:

Copper lead zinc silver	– by AAS
Arsenic	– by Hydride
Gold	– by AAS (0.01 ppm detection)
	– Fire Assay (checks on gold > 0.5 g/t AAS)

Depths to recognisable bedrock were typically 0.5 to 2.0 metres although occasionally no bedrock was encountered.

Black Jack

Six trenches were sited to further define anomalous gold geochemistry outlined during previous surveys (Fig. 3). An interbedded sequence of highly fossiliferous often highly pyritic and generally strongly altered mudstones and siltstones (Bundella Mudstone) were further exposed (Fig. 2). Weakly to strongly altered syenitic to monzonitic intrusives were also cut, the majority of which are traceable from one trench to the next. Most of the intrusives cut the predominantly flat lying sediments at a high angle and contact zones show moderate to intense crushing and shearing.

The majority of trenches returned intervals grading greater than 0.1 g/t gold, and the gold predominantly occurs within the fossiliferous Bundella Mudstone and to a lesser extent within sections of the intrusive. Significant results are listed in Table 3.

TABLE 3 COSTEANING - SIGNIFICANT RESULTS

Trench	From	To	Width (m)	Lead * (%)	Zinc * (%)	Au (g/t)	
Black Jack Ridge							
9845N	9992	10003E	11	-	-	0.26	0.13% As
9900N	10000	10008E	8	-	-	0.03	0.09% As
9987N	9928	9930E	2	-	-	0.10	
	9942	9950E	8	-	-	0.30	
	9952	9958E	6	-	-	0.12	
	9964	9966E	2	-	-	0.15	
10100N	10004	10008E	4	-	-	0.17	
	10010	10028E	18	-	-	0.20	
	10030	10038E	8	-	-	0.17	
	10042	10044E	2	-	-	0.16	
	10048	10050E	2	-	-	0.12	
Mount Mary							
9980E	10048	10050N	2	0.23	0.09	0.53	
10250E	10020	10024N	4	-	0.02	0.16	
10300E	9986	9994N	8	-	0.05	0.16	
	10000	10002N	2	-	0.06	0.15	
	10004	10054N	50	0.03	0.07	0.25	
inc.	10008	10018N	10	0.04	0.09	0.54	
	10058	10062N	4	-	0.02	0.11	
	10064	10070N	6	-	0.01	0.14	
Costean 6	2	14	12	0.05	0.11	0.84	
inc.	4	10	6	0.08	0.11	1.54	
10350E	9978	9986N	8	0.05	0.11	0.55	
	9998	10022N	24	0.01	0.11	0.21	
inc.	10014	10018N	4	0.04	0.16	0.60	
	10024	10026N	2	-	0.04	0.14	

* NB Basemetal values at Black Jack very low

TABLE 3 (Continued)

Trench	From	To	Width (m)	Lead (%)	Zinc (%)	Au (g/t)
Mount Mary (Continued)						
	10030	10032N	2	-	0.03	0.10
10400E	10110	10114N	4	0.03	0.14	0.16
	10134	10136N	2	0.01	0.08	0.18
	10138	10142N	4	0.02	0.10	0.18
10450E(i)	10004	10008N	4	-	0.07	0.19
	10038	10046N	8	0.08	0.07	0.36
inc.	10042	10044N	2	0.23	0.12	1.12
	10056	10060N	4	0.02	0.05	0.15
(ii)	10172	10176N	4	0.02	0.03	0.12
10500E	9806	9808N	2	-	0.01	0.12

Moderately to strongly anomalous arsenic values were delineated on lines 9845N and 9900N associated with weakly anomalous gold. This association appears to be hosted by or immediately adjacent to moderately stockworked pyritic monzonite intrusives. The intrusive rocks cut a brecciated and heavily ferruginous fossiliferous mudstone which assayed up to 0.35 g/t Au. The zone remains open to the east due to steep topography precluding trenching. A 26 metre wide zone of anomalous gold averaging approximately 0.20 g/t was also cut during the program on line 10100N. The gold is associated with heavily ferruginous (iron oxide rich) occasionally pyritic, leached, highly fossiliferous mudstone. More massive less fossiliferous interbeds returned nil gold values.

Mount Mary

Nine trenches were excavated at Mount Mary to delineate further the anomalous zones outlined during previous surveys (Fig. 12). A massive sequence of variably altered pebbly mudstones (Truro Tillite) and hornfels cut by both syenitic and monzonitic

intrusives, was further exposed (Fig. 11). In general the mudstones are very soft, however, where major hornfelsing has occurred the host sediment becomes cherty and breaks with a conchoidal fracture. Importantly, not all the sediments show hornfelsing effects from the intruding dykes and sills, possibly due to varying widths of the intrusives. The majority of intrusives are traceable from one trench to the next indicating their persistence in aerial extent. Most of the intrusives cut the predominantly flat lying sediments at a high angle and contact zones generally show moderate to intense crushing and shearing. This would indicate that the dyke-like bodies may have been intruded along preordained structural weaknesses which may also have acted as channel ways for hydrothermal solutions. Major fault zones encountered in the last round of deeper drilling would seem to confirm this theory.

All trenches returned intervals grading greater than 0.1 g/t Au, however, values were not confined to a particular lithology or host. Anomalous gold was delineated in both the sediments and intrusives as well as from structural zones including shear zones. Significant results are listed in Table 3.

Two moderate to strongly anomalous trends were outlined from this program. The main trend, 225 m by up to 80 m wide, coincides with the strike of the old workings and is open to the northeast. The second trend appears to be an oblique offset to the first and is coincident with previously defined gold (Fig. 14) soil geochemistry.

The main zone averaging greater than 0.1 g/t Au, and from 10 to 20 metres in width dramatically increases to 80 metres in width on line 10300E. The zone would appear to be a composite one including altered sediments and a major shear/breccia zone within a porphyritic intrusive. Stockworking and epidote/hematite/carbonate/chlorite/pyrite alteration is abundant.

The second 'oblique' zone with widths from four to six metres has weak gold mineralization in the range 0.12 to 0.18 g/t Au

associated with ferruginous shear zones within pebbly mudstones. Alteration is predominantly weak in comparison to the main zone.

Drilling

Initially some 1500 metres of reverse circulation (R.C.) drilling was planned for both the Black Jack and Mount Mary prospects. Problems with steep topography at Black Jack meant that the R.C. program was changed to a more expensive diamond program. The shallow R.C. program at Mount Mary was also changed to straight percussion after the contractor was unable to get his rig to perform to adequate standards. Follow-up deeper (below level of oxidation) diamond drilling was conducted at Mt Mary to assess anomalous values obtained during the percussion drilling program.

The HQ diamond core was half sawn and despatched to Analabs for preparation and assaying. The preparation included drying, coarse crushing, coarse pulverizing, splitting and fine pulverizing prior to an assay split being taken. The percussion samples were 1/8 split on site and also despatched to Analabs prior to drying, coarse pulverizing, splitting and fine pulverizing prior to an assay split being taken. The bulk percussion samples are located at the drill sites. All the final splits were assayed for basemetals but not arsenic. All gold assaying was by Fire Assay using a 50 gm charge, AAS finish.

Black Jack

F.L. Ortner Diamond Drilling was contracted to drill three holes totalling 226.10 metres, details of which are set out in Table 4. Drillhole locations are shown on Fig. 4.

TABLE 4 DRILLING DATA - BLACK JACK RIDGE

Hole No.	Co-ords.		Declination	Azimuth	Depth
CT-87-2	10100N	10000E	50 deg.	GE	73.2
CT-87-3	10030N	9970E	60 deg.	GW	77.3
CT-87-4	9845N	9975E	60 deg.	GE	75.6

Sections included as Enclosures 1 to 3, drill logs as Appendix 1 and analytical result sheets also in Appendix 1.

A Mindrill F52 rig was used and the holes were completed in HQ sized core. The drill rig was positioned on site and supplied with a water reticulation sump by a Mitsubishi MS 180 hydraulic excavator. This was also used to provide drill pads and upgrade access tracks to the drill sites as well as being used to rehabilitate the sites after completion of the holes.

Hole CT-87-2 was drilled to test beneath a 26 metre wide zone of moderately anomalous gold (averaging approx. 0.2 g/t) located within strongly altered fossiliferous sediments on line 10100N. Minor gold - best being 2 metres @ 0.38 g/t Au, was intersected from within pyritic fossiliferous mudstones to approximately 16 metres downhole. The remaining portion of the hole is comprised of massive weakly altered porphyritic syenite and massive barren siltstones.

Hole CT-87-3 was collared to test beneath a 28 metre (open to both the east and west) zone grading 0.39 g/t Au on line 10030N. A thickly interbedded sequence of highly fossiliferous, ferruginous mudstone and massive unfossiliferous siltstone was encountered, cut by a 10 metre thick syenite intrusive. Anomalous gold values were returned over narrow intervals averaging from 0.1 to 0.3 g/t. A one metre interval grading 1.06 g/t Au was also intersected near the top of the hole. The majority of anomalous values are from the more fossiliferous and ferruginous mudstones.

Hole CT-87-4 was drilled to intersect coincident gold/arsenic costean geochemistry (11 m @ 0.26 g/t Au) at approximately 35 metres depth. Variably altered and weakly mineralized intrusives, including *monzosyenite*, *monzonite* and *sanidine* porphyry, were encountered to approximately 28 metres - best assays being 7 m @ 0.34 g/t Au - followed by an interbedded sequence of pyritic fossiliferous mudstones, hornfelsed mudstones and a further 18 metres of porphyritic syenite. Narrow (1 - 5 metre) zones of gold mineralization ranging from 0.12 g/t to 0.36 g/t were returned from the prominent fossiliferous mudstone. Arsenic values early on in the hole and within a stockworked monzonite intrusive proved moderately anomalous. A massive pyrite zone within fossiliferous mudstones, at the base of the hole also returned moderately anomalous - 2 m @ 0.21 g/t Au values.

Mount Mary

F.L. Ortner Diamond Drilling also completed a shallow HQ sized hole (CT-87-1) to 71.30 metres on line 10400E during the same program. The hole was followed by 13 percussion holes totalling 698 metres drilled by H. Stackpoole Drilling. A mobile rotary percussion rig using a 112 mm downhole hammer was used to drill 50 to 60 metre deep holes at angles varying from 50 to 60 deg. A reverse circulation programme was aborted after the rig failed to meet the necessary requirements - that is a good sample extracted through the centre of the drill stem and not up the outside of the hole.

Details of the percussion and diamond holes are set out in Table 5. Locations are shown on Fig. 13, drill sections included as Enclosures 4 to 15 and drill logs and assay results as Appendix 1.

TABLE 5 DRILLING DATA - MOUNT MARY

Hole No.	Co-ords.		Declination	Azimuth	Depth
Diamond:					
CT-87-1	10400E	10050N	60 deg.	GS	71.3 m
CT-87-19	10350E	10070N	50 deg.	GS	132.9 m
CT-87-20	10300E	10100N	45 deg.	GS	130.0 m
Percussion:					
CTR-87-5	10300E	10030N	60 deg.	GS	72 m
CTR-87-6	10350E	10030N	50 deg.	GS	50 m
CTR-87-7	10350E	9994N	50 deg.	GS	50 m
CTR-87-8	10250E	10030N	50 deg.	GS	50 m
CTR-87-9	9945E	10020N	50 deg.	GN	50 m
CTR-87-10	9982E	10030N	50 deg.	GN	50 m
CTR-87-11	10300E	10065N	50 deg.	GS	66 m
CTR-87-12	10275E	10021N	50 deg.	GS	50 m
CTR-87-13	10530E	10075N	50 deg.	112 deg.M	50 m
CTR-87-14	10450E	10030N	50 deg.	GN	50 m
CTR-87-15	10400E	10150N	50 deg.	GS	50 m
CTR-87-16	10450E	10155N	50 deg.	GN	50 m
CTR-87-17	10325E	10035N	50 deg.	113 deg.M	60 m

CT-87-1 was sited to test the downward projection of gold mineralization cut by earlier costeaning surveys - 12 metres @ 1.23 g/t Au. A wide, mylonitized and oxidised fault zone was intersected early on in the hole (19.5 to 23.9 metres) which assayed up to 1.30 g/t Au, averaging 0.58 g/t over 5 metres. Numerous weakly anomalous gold values to 0.26 g/t were returned from both altered pebbly mudstones and altered intrusives throughout the remainder of the hole.

Hole CTR-87-5 was drilled to test beneath a stockworked pebbly mudstone assaying 12 m @ 0.49 adjacent to a syenite dyke. The hole cut a variably altered sequence of pebbly mudstones and alkali intrusives, with wide zones of weakly anomalous gold in

the range 0.1 to 0.3 g/t Au being recorded. A highly encouraging zone assaying 1.0 g/t Au over 17 metres was intersected from 55 metres to the end of the hole. Within this zone 3 metres assayed 4.1 g/t Au.

CTR-87-6 was sited to test beneath workings and a wide zone of moderately anomalous gold geochemistry assaying 0.21 g/t over 24 metres. This hole was sampled at 4.0 metre intervals due to an error by the drilling contractor. A 12 metre wide zone of 0.21 g/t Au was cut hosted by weakly to moderately altered pebbly mudstones.

Hole CTR-87-7 was planned to intersect a mineralized (8 m @ 0.55 g/t) brecciated fault? zone within weakly altered porphyritic syenites. A zone sixteen metres wide, assaying 0.43 g/t was intersected corresponding to strongly altered brecciated? intrusives. Within this zone a further 6 metres assayed 0.85 g/t Au.

Drill hole CTR-87-8 was designed to close off the bulbous geochemical trend to the west. This was the case, with only weakly altered pebbly mudstones being intersected returning weakly anomalous gold values ranging up to 0.18 g/t over 4 metres.

CTR-87-9 was collared to test beneath minor workings from which rock chip samples assayed up to 10.6 g/t Au. No values greater than 0.1 g/t Au were returned from the weakly altered pebbly mudstones cut by moderately altered alkali intrusives.

Drillhole CTR-87-10, sited some 37 metres grid east of CTR-87-9 was designed to test beneath further shallow workings and a narrow, strongly anomalous geochemical zone assaying 2 m @ 0.53 g/t Au. Weakly to moderately anomalous gold - 4 m @ 0.35 g/t Au, was intersected coincident with a contact zone between altered pebbly mudstones and an altered alkali? intrusive.

Hole CTR-87-11 was designed to test the remaining thickness of the bulbous geochemical trend on line 10300E (same section as CTR-87-5 and CT-87-20). A moderately to strongly altered pebbly

mudstone sequence assaying up to 0.85 g/t Au (averaged 20 m @ 0.34 g/t Au) was intersected to 44 metres downhole. This was followed by a ferruginous alkali intrusive unit returning weakly anomalous values to 0.2 g/t. The last four metres proved moderately anomalous for silver, averaging 5.5 g/t, and weakly anomalous in gold averaging 0.15 g/t Au.

Drillhole CTR-87-12 was sited 25 metres grid west of the highly encouraging (17 m @ 1.0 g/t Au) mineralized zone intersected in CTR-87-5. Moderately anomalous gold values to 0.43 g/t were intersected in altered pebbly mudstones and altered alkali intrusives. Best interval for this hole was 6 metres assaying 0.27 g/t Au.

Hole CTR-87-13 was designed to test beneath a minor working from which mineralized ironstone chips were sampled from the dump. The hole was aligned at an angle of 113 deg. Magnetic and was designed to intersect the projected target at approximately 30 metres depth. A ferruginous altered mudstone was intersected early on in the hole (10 to 16 metres) grading 0.48 g/t Au. The remainder of the hole is comprised of pebbly mudstones and a six metre wide altered mixture of alkali intrusive and mudstone.

CTR-87-14 was planned to test beneath the main mineralized zone on line 10450E. The moderate width costean results of 8 metres @ 0.36 g/t Au, showed up as a narrow intercept at depth, with best results being 2 m @ 1.27 g/t Au from 16 metres. This interval is coincident with a ferruginous altered pebbly mudstone.

Drillhole CT-87-15 was sited to test beneath a portion of the weakly anomalous - best result 4 metres @ 0.18 g/t Au - oblique mineralized zone. Moderately anomalous gold values - 10 metres assaying 0.6 g/t Au, were intersected at the contact between an altered alkali intrusive and weakly ferruginous pebbly mudstones.

CTR-87-16 was sited 50 metres to the north of CTR-87-15 along the same mineralized zone - 'oblique zone'. Costean assays were

weakly anomalous returning an interval 4 metres in width assaying 0.12 g/t Au. Drilling failed to intersect a similar zone at depth, however two wide spaced, 2 metre wide, weakly anomalous intervals, assaying 0.21 and 0.29 g/t Au were delineated within a predominantly altered mudstone sequence.

The final percussion hole, CTR-87-17, was sited 25 metres grid east of the highly encouraging (17 m @ 1.0 g/t Au) mineralized zone intersected in CTR-87-5. The hole was aligned at an angle of 112 deg. Magnetic and was also designed to intersect highly anomalous geochemistry (12 m @ 0.84 and 7 m @ 0.24 g/t Au) located in trenches 6 and 5. Moderately to strongly anomalous gold values were returned over the entire length of the hole. The best interval returned was 12 metres assaying 1.09 g/t Au from which a six metre zone assayed 1.97 g/t Au. The encouraging values occur within an altered mudstone containing ferruginous chips. The remaining moderately anomalous values occur within both altered alkali intrusives and mudstones. Values greater than 0.1 g/t Au were recorded to the base of the hole.

Following the percussion program a decision was made to test, at a depth below the level of oxidation, the encouraging mineralized zone (17 m @ 1.0 g/t Au) on line 10300E and the two moderately mineralized (best 8 m @ 0.55 g/t Au) zones located on line 10350E. The holes, totalling 262.9 metres, were drilled by F.L. Ortner Diamond Drilling and were completed using HQ triple tube to minimise core loss. HQ triple tube drilling from CT-87-19 was abandoned after a bit failure downhole at 114.7 metres. The failure was exacerbated by nil water returns during drilling due to a large fault zone being highly permeable. The hole was completed in NQ after drilling through the failed bit. Details of the holes are set out in Table 5. However, analytical results are not yet to hand and will be included in the next annual report.

Drillhole CT-87-19, located on the same section as CTR-87-6 and 7, was designed to intersect moderately anomalous geochemistry

(24 m @ 0.21 g/t) within altered mudstones as well as strongly anomalous gold (8 m @ 0.55 g/t) located within a ferruginous breccia zone, hosted by porphyritic syenite. The hole intersected moderately to strongly altered, pebbly mudstones and alkali intrusives interbedded with less altered, pebbly sediments and intrusives. A significant fault/shear zone was encountered from 89 to 95 metres which may be an equivalent feature to the breccia zone observed during trenching surveys at approximately 9985N. Assays from this zone (CTR-87-7) ranged up to 1.63 g/t over 2 metres.

Hole CT-87-20 drilled on the same section as CTR-87-5 and 11 was planned to test approximately 50 metres below the main mineralized zone, assaying 17 m @ 1.0 g/t Au, encountered in CTR-87-5. Variably altered pebbly mudstones and alkali intrusives were cut as well as a major fault zone from 123.7 metres to the end of the hole. Geological boundaries show wide variabilities especially those of the alkali intrusives where thicknesses dramatically change from one hole to the next. A realistic interpretation is not possible due to poor geological control from the percussion chips.

Kings Hill

CTR-87-18

A percussion hole was designed to investigate the geologically anomalous and weakly outcropping hydrothermally altered breccia pipe (Fig. 24) on line 10000E. The hole was drilled by H. Stackpoole on the completion of the Mount Mary program and was completed to 60 metres at a declination of 55 deg. on a bearing of 190 deg. Magnetic (Enclosure 16, Appendix 1). Minor earthworks were needed to position the drill rig, however, no upgrading was necessary for the access track. Alkali intrusives were intersected to 11.5 metres, followed by 11.5 metres of pyritic hydrothermal breccia (averaging approximately 30% pyrite). A further 37 metres of variably altered alkali intrusives were cut to the end of the hole. The hanging wall and footwall sections of the breccia pipe were found to be

highly anomalous in copper (0.12% and 0.11% respectively). However, no anomalous gold values were recorded. The remaining portion of the hole showed very weakly anomalous gold values ranging up to 0.09 g/t with the exception of the last 2 metre split. Here a weakly ferruginous alkali intrusive returned moderately to strongly anomalous gold to 0.40 g/t coincident with highly anomalous lead (0.2%), zinc (0.2%) and silver (1.5 g/t).

DISCUSSION

Diamond drilling at Black Jack has shown the flat lying very ferruginous and highly fossiliferous Bundella Mudstone to be weakly anomalous in gold (maximum values being 1.06 g/t over 1 m) with sporadic values in the range 0.1 to 0.3 g/t occurring throughout the unit. However, the more massive, unfossiliferous and therefore less reactive mudstone interbeds appear to be barren. The gold system in this area appears to have no coincident basemetal response, however, a significant arsenic response was partially drill tested. Values of 0.1% As returned from costeaning surveys were not encountered during the drilling of CT-87-4. Maximum values intersected were an order of magnitude less - ranging up to 690 ppm and generally averaging from 75 to 300 ppm. These still strongly anomalous values are associated with ferruginous and weakly stockworked

porphyritic intrusives - predominantly syenomonzonites and monzonites, encountered early on in the hole.

Three mineralized zones assaying >0.1 g/t Au have been delineated by drilling surveys at Mount Mary. The main zone coincident with the main geochemical trend and manifest by numerous shallow workings has dimensions of 275 metres by an average of 5 to 20 metres. Assays from this zone varied from 4 m @ 0.17 g/t to 12 m @ 1.06 g/t Au and generally showed a coincident strong lead-zinc response. Anomalous silver values were generally only recorded below the level of oxidation. The second mineralized zone lying obliquely north of the main zone has been partially tested by two holes - CTR-87-15 and 16 with variable results. A moderately anomalous 10 metre section assaying 0.6 g/t Au was intersected in CTR-87-15. However, 50 metres to the north-east in CTR-87-16 only two wide spaced 2 metre weakly anomalous intervals assaying 0.21 g/t and 0.29 g/t Au were returned. This zone shows nil to very weak lead-zinc anomalism in comparison to the main zone. Alteration levels from this zone would also appear to be weaker than that observed from the main zone. The third mineralized horizon lying immediately grid south of the main zone appears related to a major zone of shearing and faulting. Best assays from this zone are 17 metres @ 1.0 g/t Au. Sheared mudstone occurs in the hanging wall portion of the mineralized zone and is followed by moderately porphyritic altered syenite. A further major mylonitized fault zone was cut from 123.7 metres to the end of the hole.

Both diamond holes showed evidence of strong carbonate/epidote/clay/pyrite/hematite alteration in conjunction with weak to moderate veining and occasionally minor stockworking. Sections of core are cut by thin - generally less than 20 cm in width, foliated ironstone zones which are occasionally partly epidote/carbonate altered. Alteration assemblages generally are stronger the closer the units are to some of the intrusive dykes. The host pebbly mudstones are also significantly sheared and/or brecciated in close proximity to many of the intrusives.

EXPLORATION POTENTIAL

The tenement is considered to have excellent 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.

There is possibly secondary potential for Shear Zone deposits, low grade porphyry style gold deposits as well as possible hydrothermal breccia pipe type gold deposits within the alkali intrusive.

PROPOSED PROGRAM

Additional drilling surveys are required to further delineate the three mineralized zones outlined at Mount Mary. A deeper hole is also required on the Kings Hill prospect to evaluate the anomalous, 0.4 g/t Au, interval at the base of the only percussion hole drilled on that prospect. Drillholes should aim at cutting the projected mineralized zones at approximately 100 metres depth.

Petrographic and additional studies into salinity, temperature and mode of emplacement of mineralization should be conducted on available core from Black Jack prior to further drilling surveys.

Minor follow-up surveys will be conducted on isolated geochemical highs delineated previously including Langdons Hill

and the headwaters of Galleries Creek (near Tobys Hill). These more regional reconnaissance surveys are aimed at locating further anomalous zones and refining the geologic data base.

Signed P.A. Jones of Phil Jones & Associates for Cyprus Minerals

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CYPRUS MINERALS AUSTRALIA COMPANY

EXPENDITURE FOR THE 12 MONTHS ENDED 31 OCTOBER 1987

EXPLORATION LICENCE CYGNET EL 36/82

Salaries & Wages	11,811.21
Benefits	1,803.64
Drafting	1,407.91
Cookery	2,414.14
Field Office Rent	36.93
Field Supplies - General	4,087.01
Communications	1,131.30
Freight	3,409.48
Travel	2,594.70
Assays	20,943.37
Geophysics	(11,075.00)
Consulting Fees	5,054.00
Drilling	68,323.13
Contract Geological	26,812.48
Other Contractors	7,368.38
Equipment Rental	9,221.70
Property Payments	1,374.30
Equipment Operation & Maintenance	5,501.27
	162,219.95
Overhead @ 10%	16,222.00
Total	$178,441.95

M BASS
ACCOUNTANT

APPENDIX - DRILLHOLE LOGS AND ANALYTICAL RESULT SHEETS

846043

Amoco Minerals Australia Company

drill log cover sheet

Project	CYGNET	**Prospect**	MOUNT MARY	**Hole**	CT-87-1
Co-ordinates	10050 mN	10400 mE		**Logged by**	P.A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	60° G.S
Direction	G M T
Commenced	
Completed	
Total depth	71.30 metres.
Drilling company	F. ORTNER
Rig type	MINDRILL
Drilling type	DIAMOND
Hole size	HQ
Core size	
Depth of casing	6 metres PVC
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

043

846044

Amoco Minerals Australia Company

geological log

Project CYGNET **Prospect** MT. MARY **Hole** CT-87-1 **Page** ONE

From	To	Code	Description mineralization in bold type
0.00	5.90		MUDSTONE - Highly to completely weathered orange brown to beige, massive, textureless mudstones and claystones. Relict breccia texture @ 0.80 metres. Core sericitic, weakly veinleted.
5.90	9.00		PEBBLY MUDSTONE - Grey, pebbly (various lithologies, sub angular to rounded) mudstone (tillite?) cut by weakly clay filled veinlets, minor nontronite (green clay) alteration predominantly along fractures. Massive unit, no observable bedding.
9.00	9.20		SYENITE DYKE - Kaolinitic, white orange cream coloured, coarse grained, feldspathic syenite dyke. Core highly weathered, broken and soft.
9.20	11.00		PEBBLY MUDSTONE - Highly weathered, goerthite veined grey pebbly mudstone. Clay altered? very soft.
11.00	14.00		ALTERED PORPHYRITIC SYENOMONZONITE - Oxidised orange beige, coarse grained porphyritic, K-spar altered, weakly epidotitic ferruginous syenomonzonite. Core cut by thin goerthitic veinlets. Ironstone zone @ 13.8 - 14.0 m. Ferruginous clots after mafic minerals and/or after pyrite. Core highly weathered and broken.
14.00	17.00		FAULT ZONE - sheared, brecciated mylonitized, yellow green clay altered, veined, highly weathered to completely weathered Syenite and Pebbly Mudstone.

044

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Amoco Minerals Australia Company

geological log

Project CYGNET **Prospect** MT MARY **Hole** CT-87-1 **Page** TWO

From	To	Code	Description mineralization in bold type
17.00	19.50		ALTERED PORPHYRITIC SYENITE - Porphyritic (tabular Sanidine crystals to 3.5 cm in length) extensively altered (epidotitic, K-spar, nontronitic?) fractured veined and weakly brecciated syenite. Veining and fractures goerthite clay filled. Core highly oxidised, leached, grey orange in colour.
19.50	23.90		FAULT ZONE - Mylonitized in part ferruginous, nontronitic altered clay filled fault zone. Angular to sub rounded (to 5 cm in length) fragments at random orientations are set in white to orange and grey to green mylonitic clay matrix. Relict granular sand sized quartz grains weakly limonite stained. Evidence of pyrite through hematite clots found sporadically throughout.
23.90	32.00		PEBBLY MUDSTONE - Dark grey to black, gritty and pebbly (all lithologies, ranging up to 3 cm in length, rounded to sub rounded) weakly goerthitic / carbonate veined (generally < 2mm in width) especially from 29-32 metres, mudstone. Green yellow clay alteration along fractures. Minor monzonitic dyke @ 30.90 to 31.40 m, fine grained, goerthite/clay veined and fractured.
32.00	34.30		ALTERED VEINED MONZOSYENITE - Grey beige oxidised and weakly leached, very altered (epidotitic after feldspars, sericite and K-spar) moderately pyritic (partially leached, av 2-3% as dissem's and clots) veined (extensively goerthite/clay filled, stockworked, no pyrite) coarse grained non porphyritic monzosyenite. Bleached reaction rims and zones adjacent to veining. Py. assoc. with nontronite clots.

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geological log

Project CYGNET **Prospect** MT. MARY **Hole** CT-87-1 **Page** THREE

From	To	Code	Description — mineralization in bold type
34.30	41.50		PEBBLY MUDSTONE - Dark grey to black, pebbly and gritty fractured and broken, weakly veined, trace pyritic, weakly altered mudstone. Moderately bedded (interbedded muds and gritty mudstones : bedding 40° to c.a. @ 40.8 m. Mudstone moderately veined and brecciated near upper contact with intrusive. Hair fracture surfaces and veins are goerthite / hematite / clay filled. Mudstone towards base of unit becomes progressively more broken.
41.50	44.90		ALTERED INTRUSIVE - Weakly porphyritic, coarse grained, grey beige, moderately to strongly altered, (epidote 3-4% as clots, yellow green clay - along fractures, K-spar, possibly sericite) veined (goerthite (pyrite) clay, generally < 2 mm in width and showing bleached reaction zones away from vein) Syenite. Syenite weakly pyritic (av 1-3%) Major veinin orientation from 30 to 35° to c.a.
44.90	56.00		PEBBLY MUDSTONE - Actinolitic, purple grey, very pebbly to cobbly weakly carbonate / actinolite veined mudstone. Fibrous actinolite replaces some of pebbles as does pyrite on occasions, possibly fine grained pyrrhotite. Bedding 50° to c.a. @ 45.4 m. in a sandy interbed. Cobble size to 23 cm in width. Core moderately fractured and broken.
56.00	71.30		PORPHYRITIC ALTERED SYENITE - Coarse grained, weakly porphyritic (sanidine) very altered (epidotitic, K-spar, sericite) homogeneous syenite. Sections of core showing oxidation and leaching (68.8 - 70.2 m) through permeable zone, coloured orange cream. Moderate ferruginous veining. Prominent fractures av from 40 - 50° to c.a. (goerthite filled) Trace to minor Pyrite (<3%)
			END OF HOLE.

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Amoco Minerals Australia Company

assays

Project CYGNET **Prospect** MOUNT MARY **Hole** CT-87-1 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE	Au after reprepared		
169808	0.6	1.0	30	85	415	<0.5	29	0.14	-		✓	
169809	1	2	40	65	655	<0.5	33	0.10	-		✓	
169810	2	3	40	50	805	<0.5	40	0.04	-			
169811	3	4	30	35	680	<0.5	11	0.03	-			
169812	4	5	35	15	585	<0.5	16	0.03	-			
169813	5	6	40	<5	410	<0.5	36	0.05	-			
169814	6	7	35	20	390	<0.5	13	0.03	-			
169815	7	8	30	<5	450	<0.5	6	0.03	-			
169816	8	9	35	<5	540	<0.5	3	0.12	-		✓	
169817	9	10	95	20	720	<0.5	11	0.03	-			
169818	10	11	100	10	535	<0.5	72	0.13	-		✓	
169819	11	12	50	25	470	<0.5	13	0.09	-			
169820	12	13	55	45	650	<0.5	33	0.19	-		✓	
169821	13	14	150	155	1015	<0.5	92	0.02	-			
169822	14	15	135	150	1850	<0.5	28	0.03	-			
169823	15	16	110	410	1600	<0.5	16	<0.01	-			
169824	16	17	75	85	960	<0.5	13	0.04	-			
169825	17	18	80	580	1300	<0.5	17	0.06	-			
169826	18	19	55	445	910	<0.5	9	0.06	-	0.07		
169827	19	20	75	1375	1850	2.0	16	1.30	1.28	0.98	✓	
169828	20	21	75	2875	3150	<0.5	9	0.50	0.49	I/S	✓	
169829	21	22	200	8800	6900	13	90	1.12	1.01	0.99	✓	
169830	22	23	65	295	2800	<0.5	8	0.59	0.68	0.70	✓	
169831	23	24	160	7600	8200	5	13	0.76	0.73	0.07	✓	
169832	24	25	40	100	1350	<0.5	5	<0.01	-	0.01		
169833	25	26	30	170	1150	<0.5	5	<0.01	-			
169834	26	27	35	40	950	<0.5	3	<0.01	-			
169835	27	28	30	30	975	<0.5	1	<0.01	-			
169836	28	29	30	20	710	<0.5	6	<0.01	-			
169837	29	30	25	<5	470	<0.5	7	0.03	-			

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Amoco Minerals Australia Company

assays

Project CYGNET **Prospect** MOUNT MARY **Hole** CT-87-1 **Page** TWO

Sample	From	To	Cu	Pb	Zn	Ag	As	Au. AAB	Au FIRE	Au FIRE CHECK		
169838	30	31	25	10	335	<0.5	9	<0.01	-			
169839	31	32	30	10	270	<0.5	14	0.03	<0.005			
169840	32	33	60	30	210	<0.5	9	0.05	0.065	0.050		
169841	33	34	80	25	305	<0.5	20	0.07	0.060			
169842	34	35	25	5	350	<0.5	12	0.10	0.11			
169843	35	36	15	30	350	<0.5	6	<0.01	<0.005			
169844	36	37	10	<5	170	<0.5	3	<0.01	<0.005			
169845	37	38	20	<5	225	<0.5	17	<0.01	-			
169846	38	39	15	<5	400	<0.5	17	<0.01	-			
169847	39	40	20	<5	200	<0.5	5	<0.01	-			
169848	40	41	30	<5	200	<0.5	6	<0.01	-			
169849	41	42	10	<5	115	<0.5	3	<0.01	0.065			
169850	42	43	10	<5	115	<0.5	2	<0.01	0.025			
169906	43	44	5	<5	70	<0.5	10	0.12	0.135		✓	
169907	44	45	5	<5	55	<0.5	4	0.02	0.100			
169908	45	46	15	<5	180	<0.5	7	<0.01	0.050			
169909	46	47	35	<5	50	<0.5	3	0.04	0.075			
169910	47	48	25	<5	50	<0.5	4	0.05	0.035	0.020		
169911	48	49	25	<5	50	<0.5	2	0.19	0.140	0.240	✓	
169912	49	50	45	<5	50	<0.5	2	0.07	0.110	0.140	✓	
169913	50	51	15	<5	40	<0.5	2	0.11	0.075		✓	
169914	51	52	20	<5	50	<0.5	2	1.07	0.31	0.06	✓	
169915	52	53	35	<5	50	<0.5	1	0.08	0.165	0.205	✓	
169916	53	54	15	<5	55	<0.5	3	<0.01	0.015			
169917	54	55	15	<5	55	<0.5	2	<0.01	0.025			
169918	55	56	10	<5	45	<0.5	2	0.07	0.030			
169919	56	57	40	<5	40	<0.5	1	0.08	0.260			
169920	57	58	35	<5	55	<0.5	2	<0.01	-			
169921	58	59	15	<5	80	<0.5	3	<0.01	-			
169922	59	60	10	<5	55	<0.5	3	<0.01	0.030	0.030		

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assays

Project CYGNET **Prospect** MOUNT MARY **Hole** CT-87-1 **Page** THREE

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE			
169923	60	61	10	<5	45	<0.5	2	<0.01	-			
169924	61	62	10	<5	60	<0.5	3	0.11	-			
169925	62	63	10	<5	50	<0.5	2	<0.01	0.015			
169926	63	64	15	<5	50	<0.5	2	0.17	-			
169927	64	65	15	<5	55	<0.5	3	0.04	-			
169928	65	66	10	<5	45	<0.5	1	0.02	0.005			
169929	66	67	10	<5	80	<0.5	5	<0.01	-			
169930	67	68	5	<5	55	<0.5	3	<0.01	-			
169931	68	69	10	<5	60	<0.5	3	<0.01	0.005			
169932	69	70	25	<5	170	<0.5	22	0.03	-			
169933	70	71.3	15	<5	140	<0.5	7	<0.01	0.025			

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846050

Amoco Minerals Australia Company

drill log cover sheet

Project	CYGNET	Prospect	BLACK JACK	Hole	CT-87-2
Co-ordinates	10100 mN	10000 mE		Logged by	P.A. JONES.

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° G.E.
Direction	G M T
Commenced	
Completed	
Total depth	73.2 metres
Drilling company	F. ORTNER
Rig type	MINDRILL
Drilling type	DIAMOND
Hole size	HQ
Core size	
Depth of casing	PVC TO 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

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Amoco Minerals Australia Company

geological log

Project CYGNET Prospect BLACK JACK Hole CT-87-2 Page ONE

From	To	Code	Description mineralization in bold type
0.00	6.60		MUDSTONE, MINOR SANDSTONE - Oxidised and leached orange yellow white, fossiliferous (casts filled with goerthite/hematite) minor green clay altered (nontronite?- as clots and as smears on fracture surfaces) MUDSTONES with minor SANDSTONE at 4.6 metres. Minor quartz infilling of open spaces in fossil casts. Core moderately GOERTHITE veinleted.
6.60	10.70		SYENITE? - Coarse grained, weakly porphyritic, oxidised, leached orange yellow minor grey feldspathic intrusive - SYENITE? Moderate goerthite veining generally < 1.5mm width. Moderately clay altered. Disseminated pyrite in section of less oxidised material. Foliation cuts core axis @ 55°.
10.70	15.80		PYRITIC FOSSILIFEROUS MUDSTONE - Oxidised cream orange to fresh grey, very pyritic (averaging 5-7%, as fossil infillings, clots, and as very fine grained disseminations) K-spar altered, very fossiliferous (shell fragments and tubular sponge like orgauisms) MUDSTONE. Minor goerthite veining, locally intense @ 11.30 to 11.70 metres, bleaching into country rock occurs adjacent to veining and also to pyritization. Bedding approximately 35° to c.a. @ 13.00 metres.
15.80	18.00		FINE GRAINED DYKE? - Fine to medium grained, grey to dark grey when fresh (15%) orange when oxidised (85%) homogeneous, feldspathic intrusive - syenomonzonite DYKE. Pyritic, averaging approximately 2-3% generally as disseminations and minor aggregates. Contact @ 15.80 metres very ferruginous, oxidised and trace pyrite in goerthite. Minor veining.

AMOCO 051

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geological log

Project CYGNET Prospect BLACK JACK Hole CT-87-2 Page TWO

From	To	Code	Description mineralization in bold type
18.00	29.15		MASSIVE SILTSTONE - Cream beige grey, massive, textureless unfossiliferous, dendritic altered (manganese - akin to moss agate) weakly limonite veined, trace pyritic (as veinlets and very fine disseminations) < 2%, SILTSTONE. Good core recovery, relatively unbroken ground.
29.15	54.30		XENOLITHIC PORPHYRITIC SYENITE - Coarsely porphyritic, Sanidine crystals to 5cm in length, set in a coarse grained K-spar altered, manganiferous, weakly to moderately pyritic (2-5% variable) grey, moderately xenolithic (pred. angular sediment fragments) SYENITE. Minor goerthite (pyrite) veining, green alteration of some feldspars (nontronite clay) and green yellow alteration of zones surrounding pyritic veinlets and fractures. Good core recoveries in sound rock.
54.30	58.25		MASSIVE SILTSTONE - Dark grey, weakly veined (bleached country rock adjacent to veins) manganese? dendritic altered, textureless, massive, unbedded siltstone.
58.25	64.40		FOSSILIFEROUS PYRITIC MUDSTONE - Purple brown to altered cream beige highly fossiliferous (shelly, nodular?, and minor tubular sponge like organisms) pyritic (5-7% average - selectively replacing fossiliferous material) minor hematitic and weakly silicified MUDSTONE. Bleached reaction rims surround pyritized material as well as veinlets. Unit well bedded with alternating fossil poor interbeds: bedding 40° to c.a. @ 63.10 metres.

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geological log

Project CYGNET Prospect BLACK JACK Hole CT-87-2 Page THREE

From	To	Code	Description mineralization in bold type
64.40	73.20		MASSIVE SILTSTONE - Purple brown to grey weakly veined manganese dendritic altered, textureless, massive to weakly interbedded siltstone/mudstone. Minor thin interbeds < 10 cm width of poorly fossiliferous moderately pyritic mudstone material akin to unit above.
			END OF HOLE.

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assays

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-2 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE			
169934	0	3	35	<5	15	<0.5	2	0.03				
169935	3	4	45	<5	50	<0.5	3	0.30		✓	X	
169936	4	5	145	<5	25	<0.5	10	0.04				
169937	5	6	90	<5	15	<0.5	2	0.04				
169938	6	7	75	<5	15	<0.5	3	<0.01				
169939	7	8	95	<5	30	<0.6	1	<0.01				
169940	8	9	80	<5	75	<0.5	20	<0.01				
169941	9	10	70	<5	105	<0.5	17	<0.01				
169942	10	11	160	<5	65	<0.5	1	<0.01	<0.005			
169943	11	12	155	<5	40	<0.5	7	0.06	0.060			
169944	12	13	205	<5	25	<0.5	5	0.04	0.005			
169945	13	14	270	<5	30	<0.5	5	0.04	0.030			
169946	14	15	115	<5	55	<0.5	5	0.07	0.600	✓?	X	
169947	15	16	200	<5	30	<0.5	13	<0.01	0.170	?	X	
169948	16	17	250	<5	20	<0.5	10	0.08	0.070			
169949	17	18	145	<5	15	<0.5	10	0.04	0.045			
169950	18	19	55	<5	15	<0.5	5	<0.01				
169951	19	20	55	<5	15	<0.5	3	<0.01				
169952	20	21	95	<5	65	<0.5	5	<0.01				
169953	21	22	80	<5	20	<0.5	3	<0.01				
169954	22	23	70	<5	10	<0.5	2	<0.01				
169955	23	24	45	<5	20	<0.5	2	<0.01				
169956	24	25	65	<5	10	<0.5	2	<0.01				
169957	25	26	45	<5	25	<0.5	2	<0.01				
224001	26	27	30	<5	15	<0.5	<1	<0.01				
224002	27	28	15	<5	15	<0.5	<1	<0.01				
224003	28	29	35	<5	15	<0.5	1	<0.01				
224004	29	30	205	<5	10	<0.5	1	<0.01	<0.005			
224005	30	31	170	<5	5	<0.5	1	<0.01				
224006	31	32	125	<5	10	<0.5	1	<0.01	<0.005			

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assays

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-2 **Page** TWO

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE			
224007	32	33	100	<5	10	<0.5	<1	<0.01				
224008	33	34	155	<5	10	<0.5	<1	<0.01				
224009	34	35	265	<5	10	<0.5	<1	<0.01	<0.005			
224010	35	36	95	<5	15	<0.5	1	<0.01				
224011	36	37	90	<5	10	<0.5	1	<0.01				
224012	37	38	120	<5	10	<0.5	<1	<0.01	<0.005			
224013	38	39	85	<5	30	<0.5	1	<0.01				
224014	39	40	75	<5	25	<0.5	1	<0.01				
224015	40	41	70	<5	15	<0.5	<1	<0.01	<0.005			
224016	41	42	75	<5	25	<0.5	1	<0.01				
224017	42	43	75	<5	20	<0.5	<1	<0.01				
224018	43	44	55	<5	15	<0.5	<1	<0.01	0.050			
224019	44	45	80	<5	15	<0.5	<1	<0.01				
224020	45	46	85	<5	15	<0.5	1	<0.01				
224021	46	47	80	<5	15	<0.5	1	<0.01	<0.005			
224022	47	48	130	<5	10	<0.5	<1	<0.01				
224023	48	49	100	<5	15	<0.5	<1	<0.01				
224024	49	50	80	<5	15	<0.5	<1	<0.01	0.100			
224025	50	51	85	<5	15	<0.5	<1	<0.01				
224026	51	52	50	<5	15	<0.5	<1	<0.01				
224027	52	53	45	<5	50	<0.5	1	<0.01	<0.005			
224028	53	54	40	<5	15	<0.5	2	<0.01				
224029	54	55	85	<5	20	<0.5	1	<0.01				
224030	55	56	20	<5	15	<0.5	1	<0.01				
224031	56	57	30	<5	15	<0.5	1	<0.01				
224032	57	58	15	<5	15	<0.5	1	<0.01				
224033	58	59	90	<5	45	<0.5	1	<0.01	<0.005			
224034	59	60	55	<5	50	<0.5	2	<0.01	<0.005			
224035	60	61	130	<5	35	<0.5	4	0.02	0.010			
224036	61	62	115	<5	30	<0.5	6	0.02	0.010			

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assays

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-2 **Page** THREE.

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE			
224037	62	63	170	<5	25	<0.5	9	0.04	0.045			
224038	63	64	295	<5	20	<0.5	3	<0.01	<0.005			
224039	64	65	50	<5	15	<0.5	1	<0.01	<0.005			
224040	65	66	20	<5	15	<0.5	1	<0.01				
224041	66	67	30	<5	10	<0.5	1	<0.01				
224042	67	68	30	<5	10	<0.5	<1	<0.01				
224043	68	69	25	<5	40	<0.5	1	<0.01				
224044	69	70	35	<5	15	<0.5	1	<0.01				
224045	70	71	15	<5	20	<0.5	1	<0.01				
224046	71	72	50	<5	10	<0.5	1	<0.01				
224047	72	73.2	20	<5	15	<0.5	<1	<0.01				

AMOCO 056

846057

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drill log cover sheet

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-3

Co-ordinates 10030 mN 9970 mE **Logged by** P. A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	60° G.W.
Direction	G M T
Commenced	
Completed	
Total depth	77.3 metres
Drilling company	F ORTNER
Rig type	MINDRILL
Drilling type	DIAMOND
Hole size	HQ
Core size	
Depth of casing	PVC TO 5 metres.
Assay sample type	
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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846058

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geological log

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-3 **Page** ONE

From	To	Code	Description — mineralization in bold type
0.00	16.00		FOSSILIFEROUS FERRUGINOUS MUDSTONE - Oxidised, leached cream orange brown, bedded highly fossiliferous (shells, tubular sponge like organisms, nodules?) very ferruginous (casts partially or completely goerthite hematite filled, minor relict pyrite from 14.5 m) green clay altered (nontronite - filling fossil casts, or as haloes surrounding pyritic filled casts, averaging 1-5% from 7.5 - 14.5m) mudstone, and gritty mudstone. Bedding 42° to ca @ 11.6 m. Possible zones of silicification or very fine K spar alteration, foliated, trace to minor veining.
16.00	27.75		MASSIVE SILTSTONE, MINOR FOSSILIFEROUS SILTSTONE - Oxidised orange to fresh grey, manganese dendritic textured, massive, moderately goerthite veined (generally < 0.5 mm up to 1.5 mm) weakly pyritic siltstone and gritty siltstone. Minor thin interbeds of weakly to moderately fossiliferous (strongly pyritic, infilling casts) siltstone and mudstone. Core weakly brecciated: 17.8 m - ferruginous breccia, or fault. 19.55 - 19.80 m. is a pyritic nontronitic brecciated sandstone. Ironstone @ 22.6 m approximately 10 cm wide. Sections of core shows weak nontronitic alteration - predominantly along fracture surfaces.
27.75	28.55		PYRITIC ALTERED FINE SANDSTONE - Ferruginous orange brown to cream coloured (hematite stained) very pyritic (av 15 - 17% as disseminations, aggregates and vein infillings) veined fine grained sandstone.
28.55	31.30		GRITTY MASSIVE SILTSTONE - Grey brown to orange brown massive gritty siltstone. Core moderately to strongly veined, some goerthite (pyrite) infilling, remainder of network veins show

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geological log

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-3 **Page** TWO

From	To	Code	Description mineralization in bold type
28.55	31.30		CON'T - limonite diffusing into host rock adjacent to veins and fractures. Core weakly pyritic 1-2% generally as fine disseminations and minor aggregates.
31.30	34.85		FOSSILIFEROUS PYRITIC MUDSTONE - Grey to oxidised orange, pyritic (5-6%) dendritic textured, weakly to moderately fossiliferous (predominantly tubular sponge like organisms, pyrite replaced 2-3% average) veined (goerthite and pyrite infilled) mudstone. Trace nontronite surrounding pyrite infilled casts. Sections of pyritic core leached to goerthite / hematite. Core K-spar or silic altered. Overall pyrite content 10-15%, quite variable. Bedding 50° to c.a. @ 33.70 metres.
34.85	39.65		MASSIVE SILTSTONE - Grey to oxidised brown weakly veined and fractured, minor nontronite on fracture surfaces, occaissionally dendritic textured (very fine pyrite and/or manganese) weakly pyritic 1-2% (narrow sections of <10 cm up to 10% py) altered massive siltstone.
39.65	40.60		FOSSILIFEROUS MUDSTONE - Grey, K-spar and/or silic altered moderately fossiliferous weakly pyritic mudstone. Chlorite infilling of some of fossil casts, others remain open spaces - leached of carbonate?
40.60	42.60		BROWN FELDSPATHIC INTRUSIVE DYKE - Fine to medium grained, brown, massive and homogeneous, mafic rich (chlorite altered hornblende laths and clots) feldspathic intrusive dyke? Minor feldspar laths altered to sericite. Possible latite dyke?

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geological log

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-3 **Page** THREE

From	To	Code	Description — mineralization in bold type
42.60	45.50		FOSSILIFEROUS PYRITIC MUDSTONE - Grey purple brown to oxidised orange brown, chloritic, K spar altered, variably pyritic averaging 3-15%, pyrite being noticeably leached replaced by goerthite, fossiliferous (sponge like tubules) mudstone. Bleached, cream coloured alteration? rims surround pyritic and chloritic fossil casts, fossiliferous horizons and to a lesser extent some of the veins. Bedding 40° to ca @ 44.2 metres.
45.50	48.50		MASSIVE SILTSTONE - Beige, dendritic textured trace pyritic, massive siltstone. Weak pyrite veining.
48.50	57.10		FOSSILIFEROUS PYRITIC MUDSTONE - Cream grey purple, altered (K-spar, chloritic) very fossiliferous (predominantly spongelike tubules) pyritic (av 7-10% as fossil infillings, most are leached or altered to goerthite) mudstone. Casts after fossils contain abundant pyrite and chlorite and are surrounded by bleached reaction rims. Core cut by a number of goerthite (pyrite) veins. Bedding 40° to ca @ 54.60 metres.
57.10	61.40		MASSIVE SILTSTONE - Massive oxidised orange to grey dendritic textured moderately pyritic, 3-5% (as disseminations) homogeneous siltstone. Minor to moderate pyrite (goerthite) veining.
61.40	62.70		FOSSILIFEROUS PYRITIC MUDSTONE - Moderately pyritic 3-5% black to altered cream white, fossiliferous mudstone. Minor nontronitic alteration associated with pyritic partial infilling of fossil casts, others remain open spaces. Pyrite partially

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geological log

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-3 **Page** FOUR

From	To	Code	Description mineralization in bold type
61.40	62.70		CON'T : leached / altered to goerthite. Core moderately goerthite veined and fractured.
62.70	72.40		PORPHYRITIC SYENITE - Yellow grey to oxidised orange cream coarse grained feldspathic intrusive containing large porphyritic, zoned sanidine crystals. Unit weakly xenolithic (predominantly sediment fragments), weakly to locally strongly goerthite (pyrite) veined and veinleted, possible fine grained magnetite disseminated throughout, weakly pyritic < 2%, locally up to 5-7%.
72.40	76.00		PYRITIC FOSSILIFEROUS MUDSTONE - locally extremely pyritic (up to 35% pyrite - averaging 10-15%) oxidising to hematite, fossiliferous (tubules pyritized) minor silica infilling of fossil casts, dendritic textured, veined (pyrite and goerthite) K spar altered mudstone. Reaction rims surround pyritic infilled casts and intensely fossilized horizons.
76.00	77.30		MASSIVE SILTSTONE - Pink grey massive dendritic textured weakly veined (goerthite - pyrite) siltstone. Minor oxidised orange brown areas adjacent to veining. Core strongly broken.
			END OF HOLE.

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assays

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-3 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE			
169958	0	3	55	<5	20	<0.5	19	0.02				
169959	3	4	45	15	20	<0.5	5	0.03				
169960	4	5	75	<5	15	<0.5	16	0.05				
169961	5	6	155	<5	15	<0.5	13	0.05				
169962	6	7	115	<5	25	<0.5	19	0.10			X	
169963	7	8	200	<5	20	<0.5	9	1.15	1.060		X	
169964	8	9	170	<5	15	<0.5	3	0.02				
169965	9	10	130	<5	15	<0.5	3	0.03				
169966	10	11	115	<5	20	<0.5	5	<0.01				
169967	11	12	70	<5	15	<0.5	2	<0.01				
169968	12	13	55	<5	20	<0.5	2	0.07				
169969	13	14	60	<5	15	<0.5	2	0.21	0.010		X	
169970	14	15	85	<5	10	<0.5	2	0.05	0.015			
169971	15	16	300	<5	5	<0.5	3	0.19	0.120		X	
169972	16	17	190	<5	10	<0.5	8	0.02	0.025			
169973	17	18	35	<5	10	<0.5	8	<0.01				
169974	18	19	105	<5	15	<0.5	20	<0.01				
169975	19	20	195	<5	10	<0.5	6	0.16	0.070		X	
169976	20	21	55	<5	20	<0.5	3	<0.01				
169977	21	22	20	<5	15	<0.5	5	<0.01				
169978	22	23	105	<5	15	<0.5	20	<0.01				
169979	23	24	100	<5	10	<0.5	9	<0.01				
169980	24	25	45	<5	10	<0.5	5	<0.01				
169981	25	26	40	<5	10	<0.5	3	<0.01				
169982	26	27	40	<5	10	<0.5	2	<0.01				
169983	27	28	225	<5	15	<0.5	16	<0.01	<0.005			
169984	28	29	190	<5	20	<0.5	19	<0.01	0.030			
169985	29	30	40	<5	20	<0.5	4	0.02	0.015			
169986	30	31	65	<5	15	<0.5	2	0.04	0.035			
169987	31	32	215	<5	15	<0.5	10	0.07	0.055			

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assays

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-3 **Page** TWO

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE	Au FIRE CHECK		
169988	32	33	260	<5	10	<0.5	4	0.04	0.110		✓	
169989	33	34	140	<5	15	<0.5	6	0.03	0.030			
169990	34	35	155	<5	20	<0.5	15	0.04	0.025			
169991	35	36	65	<5	15	<0.5	3	<0.01				
169992	36	37	135	<5	15	<0.5	2	<0.01				
169993	37	38	115	<5	20	<0.5	2	<0.01				
169994	38	39	35	<5	20	<0.5	2	<0.01				
169995	39	40	60	<5	20	<0.5	1	0.04	0.015			
169996	40	41	105	<5	130	<0.5	1	0.42	0.34	0.085	✓	
169997	41	42	125	<5	125	<0.5	1	0.02	<0.005			
169998	42	43	90	<5	105	<0.5	1	<0.01	0.005			
169999	43	44	110	<5	35	<0.5	4	0.09	0.030			
170000	44	45	60	<5	25	<0.5	1	0.06	0.055			
161642	45	46	55	<5	25	<0.5	1	<0.01	0.010			
161643	46	47	45	<5	25	<0.5	1	0.02				
161644	47	48	20	<5	10	<0.5	1	<0.01				
161645	48	49	50	<5	15	<0.5	1	<0.01	0.005			
161646	49	50	50	<5	35	<0.5	1	0.18	0.310			
161647	50	51	60	<5	25	<0.5	1	0.08	0.095			
161648	51	52	45	<5	20	<0.5	1	0.05	0.035			
161649	52	53	50	<5	20	<0.5	1	0.13	0.125			
161650	53	54	65	<5	35	<0.5	1	0.20	0.260			
171025	54	55	70	<5	20	<0.5	4	<0.01	<0.005			
171026	55	56	40	<5	25	<0.5	1	0.06	<0.005			
171027	56	57	160	<5	10	<0.5	35	<0.01	<0.005			
171028	57	58	40	<5	10	<0.5	17	<0.01	<0.005			
171029	58	59	40	<5	15	<0.5	7	<0.01	<0.005			
171030	59	60	50	<5	15	<0.5	6	<0.01	<0.005			
171031	60	61	60	<5	15	<0.5	4	<0.01	<0.005			
171032	61	62	70	<5	35	<0.5	4	<0.01	0.005			

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assays

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-3 **Page** THREE.

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE			
171033	62	63	65	<5	35	<0.5	2	0.02	<0.005			
171034	63	64	30	<5	25	<0.5	1	<0.01	0.010			
171035	64	65	90	<5	35	<0.5	23	<0.01	<0.005			
171036	65	66	85	<5	15	<0.5	6	0.02	0.005			
171037	66	67	110	<5	30	<0.5	16	0.05	0.030			
171038	67	68	75	<5	20	<0.5	2	0.17	0.115		✓	
171039	68	69	70	<5	25	<0.5	2	0.14	0.105		✓	
171040	69	70	100	<5	25	<0.5	6	0.06	0.050	0.030	✓	
171041	70	71	70	<5	20	<0.5	15	0.04	0.020			
171042	71	72	50	<5	15	<0.5	3	0.03	0.010			
171043	72	73	240	<5	15	<0.5	13	<0.01	0.010			
171044	73	74	130	<5	20	<0.5	11	<0.01	<0.005			
171045	74	75	485	<5	10	<0.5	10	<0.01	<0.005			
171046	75	76	160	<5	25	<0.5	10	<0.01	<0.005			
171047	76	77.3	55	<5	20	<0.5	6	<0.01				

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drill log cover sheet

Project	CYGNET	Prospect	BLACK JACK	Hole	CT-87-4
Co-ordinates	9845 mN	9975 mE		Logged by	P.A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	60° G.E
Direction	G M T
Commenced	
Completed	
Total depth	75.60 metres
Drilling company	F. ORTNER
Rig type	MINDRILL
Drilling type	DIAMOND
Hole size	HQ
Core size	
Depth of casing	PVC 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

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geological log

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-4 **Page** ONE

From	To	Code	Description mineralization in bold type
0.00	13.10		PORPHYRITIC MONZOSYENITE - Coarse grained, minor xenoliths present to 3cm diametre, predominant K-spar and limonite altered feldspars and larger translucent sanidine crystals, cream grey to orange brown, weakly chloritic, trace biotite, variably stockworked - goerthite and minor pyrite infilled, minor disseminated very fine pyrite in matrix. Stockworking varies from 5 veinlets per 20 cm's to 10-15 vienlets per cm, most vienlets are goerthite clay filled, a small percentage contain relict pyrite. Most are less than 0.5 mm in width. A number of ferruginous veins coalesce into one to two cm wide ironstone zones, occaisionally gossanous (after pyrite). Rock heavily leached, core moderately to strongly broken.
13.10	15.30		PYRITIC MONZONITE - Fine grained, extremely pyritic (±15%) grey cream, very weakly veined, moderately to strongly leached, with fractures and veinlets, limonite/goerthite filled, minor leisgang rings highlighting fractures, massive unit. The contact with the underlying unit is heavily oxidised very ferruginous including a 5 cm wide layered ironstone (incorporating heavily ferruginous country rock) @ 15.00 m.
15.30	16.20		SANIDINE PORPHYRY - Coarsely porphyritic, cream coloured sanidine crystals set in a grey coarse to medium grained feldspathic syenite matrix. A goerthitic overprint has masked most of the textures via network veining and subsequent goerthite infusion (oxidised pyrite). Trace pyrite as disseminations in matrix, usually oxidised or partially leached.
16.20	27.65		PYRITIC STOCKWORKED SANIDINE PORPHYRY - Fresher equivalent to interval above with large porphyritic sanidine

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Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-4 **Page** TWO

From	To	Code	Description — mineralization in bold type
16.20	27.65		CON'T - crystals, cream to grey, translucent coloured set in a brecciated? coarse grained pyritic, biotitic, K-spar altered, feldspathic matrix. Sections of core stained orange pink due to oxidation of pyrite. Pyrite occurs as fine grained disseminations throughout matrix and as network veins and accummulations locally reaching 15% py. Veins tend to be from 0.5mm to 2.0mm width, up to 1cm @ 22.45 m. Finer dendritic veinlets occur throughout (pyritic) Locally xenolithic fragments are prominent, having ghosted boundaries and range up to 5-7 cm accross. Core relatively unbroken, good drilling.
27.65	33.40		HORNFELSED? PYRITIC FOSSILIFEROUS MUDSTONE - Grey pink to grey green, moderately to strongly (patchy) fossiliferous: majority of fossils pyritized (2-5% py), weakly pyrite veinleted (1-2% py) with chlorite occurring as dendrites and as fine grained dark colourations within the rock. Sections of mudstone are quartz gritty and occaissionally core grades into siltstones and possibly fine sandstone. Unit well bedded approx. 35° to c.a. @ 31 m, 32° to ca @ 32.4 m. Predominant fossil is a sponge like tube invariably lying parallel to the bedding plane. Most are partially or completely pyritized with associated chlorite. Minor large syenite fragments occur in the sediment - thin dykes? < 20 cm in width, no clear cut contacts, more diffuse. The contact@ 27.65 m quite abrupt, no indication of baking! Core quite hard, broken giving short runs.
33.40	35.00		BRECCIATED PYRITIC MUDSTONE - A highly brecciated, porous (open spaces occaissionally pyrite filled) equivalent to 27.65 to 33.40 m. Core bleached cream, K-spar altered?

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geological log

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-4 **Page** THREE

From	To	Code	Description mineralization in bold type
33.40	35.00		CON'T - Brecciation orientation predominantly 15-20° to ca (sub // to core).
35.00	42.65		HORNFELSED? PYRITIC FOSSILIFEROUS MUDSTONE - Interbedded grey pink and cream coloured, moderately (patchy) fossiliferous pyritic, averaging 3-4% (as disseminations, replacements of fossils and as veinlets and dendrites) bedded mudstones - 25° to ca @ 40.6 m, gritty mudstones, minor sandstone (39.3 m partially pyritized). Core very broken, very poor drilling, overall poor recoveries.
42.65	43.20		SANIDINE PORPHYRY DYKE - grey coarse grained, coarsely porphyritic - large sanidine crystals to 1.5 cm diam., syenite. Trace to minor pyrite as clots in matrix (<1%) abundant chlorite alteration of mafic minerals, weakly xenolithic. Contacts brecciated and fragments of sediment host incorporated in dyke.
43.20	53.90		PURPLE BROWN PYRITIC FOSSILIFEROUS MUDSTONE - Predominantly purple brown with minor cream coloured, fossiliferous (cream mudstone has higher % of fossils) pyritic (as veinlets, disseminations in more gritty portions of the sequence and as replacements of tubular shaped sponge like fossils) mudstones, gritty to pebbly mudstones minor sandstone. Core hard, weakly to moderately veined (occaissionally pyrite filled, more often showing bleached, hydrothermal altered contacts) poorly bedded. Cream colouration due to alteration as are cream coloured reaction rims surrounding pyritic fossils and veins. Breccia zone 51.5 - 51.7 m, very limonitic, brecciated, permeable. Core from 52 m becomes progressively more altered and bleached towards porphyry contact.

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geological log

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-4 **Page** FOUR

From	To	Code	Description mineralization in bold type
53.90	54.20		PYRITIC SANIDINE PORPHYRY DYKE - Coarse grained K-spar and kaolinitic altered very pyritic (5% -dissemin) porphyritic (sanidine crystals) syenite dyke, cream coloured.
54.20	54.90		PYRITIC FOSSILIFEROUS MUDSTONE - Pink cream, weakly fossiliferous highly pyritic (5-10%) weakly to moderately veinleted (bleached zones) mudstone. Abrupt contacts, possible 1-2 mm wide contact zone showing thermal metamorphism.
54.90	72.95		PORPHYRITIC SYENITE - Cream to grey green, coarsely porphyritic - large sanidine crystals to 2cm in length, zoned, set in a matrix of coarse to medium grained feldspathic material, sections of which are altered green (nontronitic? clays). Pyrite content varies (averaging 3-5%, locally up to 10-15% @ 67.0 m' associated with network veining), minor to weak goerthite veining prominent, generally <0.5 mm wide (after pyrite?), possible weak sericite alteration of tiny lath shaped feldspars. Core less porphyritic towards basal contact. The upper contact is quite green clay altered (nontronite?) for approximately 1.5 metres.
72.95	75.60		PYRITIC SHELLY ALTERED MUDSTONE - Cream to grey green chloritic, weakly silicic extremely pyritic (to 35%, averaging 10-15% py) fossiliferous - predominantly pyritized and silicified shelly debris with minor tubular sponge like material, mudstone. Core moderately veined, wkly brecciated, hard, broken. Minor goerthite / hematite colouration due to oxidation of pyrite. Dark green chlorite enhances fossil definition occurring also with pyrite. No obvious bedding, possible bedding lineation 40° tca
			END OF HOLE.

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assays

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-4 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE	Au FIRE CHECK		
224048	0	3	170	<5	10	<0.5	4	0.06	0.035			
224049	3	4	40	<5	5	<0.5	95	0.06	0.040			
224050	4	5	80	<5	20	<0.5	310	0.17	0.135			
224051	5	6	110	<5	15	<0.5	290	<0.01	0.13			
224052	6	7	185	<5	15	<0.5	300	<0.01	0.25			
224053	7	8	225	<5	30	<0.5	77	<0.01	0.135			
224054	8	9	65	<5	10	<0.5	92	<0.01	0.13			
224055	9	10	75	<5	10	<0.5	99	0.02	0.035			
224056	10	11	60	<5	10	<0.5	68	<0.01				
224057	11	12	60	<5	154	<0.5	320	0.13	0.285			
224058	12	13	150	<5	15	<0.5	81	<0.01	0.29			
224059	13	14	50	<5	15	<0.5	55	<0.01	0.015			
224060	14	15	100	<5	50	<0.5	690	<0.01	0.025			
224061	15	16	75	<5	55	<0.5	92	0.07	0.055	0.050		
224062	16	17	235	<5	35	<0.5	33	<0.01	0.010			
224063	17	18	210	<5	25	<0.5	29	0.06	0.120		✓	
224064	18	19	100	<5	85	<0.5	6	<0.01	0.020			
224065	19	20	95	<5	110	<0.5	38	<0.01	0.020			
224066	20	21	110	<5	25	<0.5	2	0.18	0.170		✓	
224067	21	22	135	<5	20	<0.5	<1	0.05	0.070		✓	
224068	22	23	170	<5	20	<0.5	16	<0.01	0.015			
224069	23	24	145	<5	20	<0.5	<1	<0.01	0.010			
224070	24	25	125	<5	25	<0.5	14	<0.01	0.020			
224071	25	26	140	<5	90	<0.5	25	<0.01	0.010			
224072	26	27	85	<5	80	<0.5	15	0.05	0.050			
224073	27	28	180	<5	40	<0.5	13	0.08	0.110		✓	
224074	28	29	130	<5	30	<0.5	25	<0.01	0.070			
224075	29	30	180	<5	20	<0.5	19	0.88	0.865		✓	
224076	30	31	165	<5	65	<0.5	20	0.43	0.32		✓	
224077	31	32	145	<5	65	<0.5	49	0.20	0.30		✓	

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Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-4 **Page** TWO

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE	Au CHECK		
224078	32	33	90	<5	20	<0.5	14	0.21	0.36		✓	
224079	33	34	115	<5	30	<0.5	16	0.09	0.125		✓	
224080	34	35	100	<5	60	<0.5	8	0.06	0.095		✓	
224081	35	36	140	<5	210	<0.5	35	0.40	0.30		✓	
224082	36	37	35	<5	75	<0.5	21	<0.01	<0.005			
224083	37	38	160	10	135	<0.5	47	<0.01	0.050			
224084	38	39	105	<5	25	<0.5	20	<0.01	0.040			
224085	39	40	95	45	135	<0.5	85	-	0.17		✓	
224086	40	41	75	15	50	<0.5	62	-	0.05		✓	
224087	41	42	120	25	125	<0.5	87	-	0.23		✓	
224088	42	43	120	35	95	<0.5	81	-	0.19		✓	
224089	43	44	115	20	35	<0.5	29	-	<0.008			
224090	44	45	120	15	30	<0.5	17	-	<0.008			
224091	45	46	60	20	30	<0.5	10	-	<0.008			
224092	46	47	135	15	30	<0.5	15	-	<0.008			
224093	47	48	75	20	30	<0.5	24	-	<0.008			
224094	48	49	80	15	20	<0.5	8	-	<0.008			
224095	49	50	75	20	20	<0.5	4	-	0.02			
224096	50	51	90	20	20	<0.5	7	-	<0.008			
224097	51	52	100	40	140	<0.5	89	-	<0.008	0.17		
224098	52	53	90	55	225	<0.5	77	-	<0.008	<0.008		
224099	53	54	120	50	270	<0.5	89	-	0.03			
224100	54	55	180	25	150	<0.5	62	-	<0.008			
224101	55	56	120	25	325	<0.5	89	-	<0.008			
224102	56	57	100	20	35	<0.5	90	-	<0.008			
224103	57	58	115	15	25	<0.5	56	-	<0.008			
224104	58	59	120	20	20	<0.5	43	-	<0.008			
224105	59	60	105	15	20	<0.5	7	-	<0.008			
224106	60	61	105	25	45	<0.5	12	-	<0.008			
224107	61	62	75	25	20	<0.5	8	-	<0.008			

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assays

Project CYGNET **Prospect** BLACK JACK **Hole** CT-87-4 **Page** THREE.

Sample	From	To	Cu	Pb	Zn	Ag	As	Au AAS	Au FIRE	Au CHECK		
224108	62	63	80	15	15	<0.5	13	-	<0.008	<0.008		
224109	63	64	165	10	15	<0.5	3	-	<0.008			
224110	64	65	105	10	15	<0.5	1	-	<0.008			
224111	65	66	100	15	15	<0.5	4	-	<0.008			
224112	66	67	90	20	15	<0.5	4	-	<0.008			
224113	67	68	110	15	15	<0.5	6	-	<0.008			
224114	68	69	125	15	15	<0.5	4	-	<0.008	<0.008		
224115	69	70	85	10	15	<0.5	4	-	<0.008			
224116	70	71	60	20	15	<0.5	3	-	<0.008			
224117	71	72	55	15	15	<0.5	4	-	<0.008			
224118	72	73	115	30	40	<0.5	13	-	<0.008	<0.008		
224119	73	74	765	10	15	<0.5	4	-	<0.008			
224120	74	75	300	20	30	<0.5	8	-	0.36		✓	
224121	75	75.6	103	15	15	<0.5	10	-	0.07			

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drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-5

Co-ordinates 10030 mN 510300 mE **Logged by** P.A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	60° G.S.
Direction	G M T
Commenced	
Completed	
Total depth	72 metres
Drilling company	STACKPOOLE DRILLING
Rig type	MOBILE
Drilling type	ROTARY PERCUSSION
Hole size	112 mm
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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geological log

Project CYGNET **Prospect** MT MARY **Hole** CT-87-5 **Page** ONE.

From	To	Code	Description mineralization in bold type
0.0	9.0		PEBBLY MUDSTONE - Buff brown to grey, pebbly (chips of quartzite, schist, siltstones etc) soft Mudstone. Mudstone is pulverized.
9.0	15.0		PEBBLY ALTERED MUDSTONE - Buff brown to grey, pebbly mudstone containing grey to apple green kaolinitic and nontronitic clays and fragments of ferruginous (pyritic) vein quartz.
15.0	18.0		PEBBLY MUDSTONE - Buff brown to grey pebbly mudstone
18.0	20.0		PEBBLY ALTERED MUDSTONE - Buff brown to grey, pebbly altered (nontronite clays) quartz veined mudstone.
20.0	21.0		PEBBLY MUDSTONE - Buff brown to grey pebbly mudstone
21.0	24.0		PEBBLY ALTERED MUDSTONE - Light grey to Buff grey, pebbly, altered (kaolinitic, minor epidote) quartz veined mudstone.
24.0	30.5		PEBBLY MUDSTONE - Buff grey, pebbly mudstone.
30.5	52.5		ALKALI INTRUSIVE - Pink orange, coarse grained, ferruginous feldspathic (alkali) intrusive - syenite?.
52.5	55.5		PEBBLY ALTERED MUDSTONE - Kaolinitic, grey to cream pebbly mudstone.
55.5	58.0		ALKALI INTRUSIVE - Orange brown, heavily oxidised, ferruginous feldspathic (alkali) intrusive - syenite?

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geological log

Project CYGNET **Prospect** MT MARY **Hole** CT-87-5 **Page** TWO

From	To	Code	Description mineralization in bold type
58.0	62.0		PEBBLY MUDSTONE - Grey brown, pebbly, carbonate veined? mudstone
62.0	63.4		ALKALI INTRUSIVE - Epidote altered, ferruginous, dark grey to green, coarse grained alkali intrusive - syenite.
63.4	72.0		PEBBLY MUDSTONE - Dark grey-brown, pebbly mudstone. Water table at approximately 69 metres.
			END OF HOLE.

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assays

Project CYGNET **Prospect** MT MARY **Hole** CT-87-5 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	Au. FIRE	CHECK Au FIRE				
224224	0.0	2.8	80	705	970	<0.5	0.30					
224225	2.8	5.7	75	1500	620	0.5	0.53					
224226	5.7	7.0	70	320	550	<0.5	0.19					
224227	7.0	8.0	55	35	765	<0.5	0.19					
224228	8.0	9.0	55	25	940	<0.5	0.15					
224229	9.0	10.0	50	25	765	<0.5	0.02					
224230	10.0	11.0	75	35	465	<0.5	0.30					
224231	11.0	12.0	45	35	460	<0.5	0.33					
224232	12.0	13.0	70	30	690	<0.5	0.34					
224233	13.0	14.0	60	75	665	<0.5	0.49	0.58				
224234	14.0	15.0	60	70	710	<0.5	0.31					
224235	15.0	16.0	55	20	615	<0.5	0.29					
224236	16.0	17.0	50	20	690	<0.5	0.09					
224237	17.0	18.0	50	10	625	<0.5	0.04					
224238	18.0	19.0	45	10	590	<0.5	0.02					
224239	19.0	20.0	70	20	400	<0.5	0.05					
224240	20.0	21.0	80	25	350	<0.5	0.03					
224241	21.0	22.0	50	15	430	<0.5	0.13					
224242	22.0	23.0	45	10	450	<0.5	0.13					
224243	23.0	24.0	45	5	380	<0.5	0.05					
224244	24.0	25.0	45	30	410	<0.5	0.04					
224245	25.0	26.0	60	30	455	<0.5	0.09					
224246	26.0	27.0	50	15	425	<0.5	0.03	0.03				
224247	27.0	28.0	45	25	370	<0.5	0.04					
224248	28.0	29.0	45	15	385	<0.5	0.03					
224249	29.0	30.0	40	25	270	<0.5	0.05					
224250	30.0	31.0	25	20	210	<0.5	0.05					
224251	31.0	32.0	30	25	280	<0.5	0.04					
224252	32.0	33.0	30	15	205	<0.5	0.03					
224253	33.0	34.0	25	15	190	<0.5	0.01	0.01				

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Project CYGNET **Prospect** MT MARY **Hole** CT-87-5 **Page** TWO

Sample	From	To	Cu	Pb	Zn	Ag	Au					
224254	34.0	35.0	30	10	165	<0.5	0.02					
224255	35.0	36.0	25	5	170	<0.5	0.02					
224256	36.0	37.0	45	25	315	<0.5	0.07					
224257	37.0	38.0	30	45	245	<0.5	0.01					
224258	38.0	39.0	25	25	1150	<0.5	0.03					
224259	39.0	40.0	35	40	535	<0.5	0.04					
224260	40.0	41.0	30	25	270	<0.5	0.12					
224261	41.0	42.0	35	20	350	<0.5	0.04					
224262	42.0	43.0	40	25	680	<0.5	0.06					
224263	43.0	44.0	40	15	620	<0.5	0.08	0.09				
224264	44.0	45.0	50	30	610	<0.5	0.05					
224265	45.0	46.0	45	15	565	<0.5	0.04					
224266	46.0	47.0	45	15	670	<0.5	0.16					
224267	47.0	48.0	60	35	930	<0.5	0.36					
224268	48.0	49.0	45	30	600	<0.5	0.10					
224269	49.0	50.0	55	45	370	<0.5	0.06					
224270	50.0	51.0	30	110	710	<0.5	0.06					
224271	51.0	52.0	40	100	1150	<0.5	0.11					
224272	52.0	53.0	180	65	705	1.5	0.11					
224273	53.0	54.0	45	100	1200	<0.5	0.04					
224274	54.0	55.0	50	1400	2000	9	0.07					
224275	55.0	56.0	215	155	3050	1.0	0.30					
224276	56.0	57.0	10	75	445	1.5	5.79	6.59				
224277	57.0	58.0	65	240	355	2.5	5.07	5.13				
224278	58.0	59.0	40	80	520	<0.5	1.05					
224279	59.0	60.0	45	65	450	<0.5	0.44	0.55				
224280	60.0	61.0	35	75	400	<0.5	0.48					
224281	61.0	62.0	30	70	395	<0.5	1.12	0.91				
224282	62.0	63.0	40	35	525	<0.5	0.15					
224283	63.0	64.0	70	50	540	<0.5	0.23					

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assays

Project CYGNET **Prospect** MT MARY **Hole** CT-87-5 **Page** THREE

Sample	From	To	Cu	Pb	Zn	Ag	Au.					
224284	64.0	65.0	50	30	615	<0.5	0.09					
224285	65.0	66.0	25	35	595	<0.5	0.11					
224286	66.0	67.0	105	25	640	<0.5	0.09					
224287	67.0	68.0	35	30	600	<0.5	0.17					
224288	68.0	69.0	55	30	540	<0.5	0.35					
224289	69.0	70.0	40	25	510	<0.5	0.22					
224290	70.0	71.0	50	45	700	<0.5	0.17					
224291	71.0	72.0	45	40	690	<0.5	0.21	0.09				

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drill log cover sheet

Project	CYGNET	**Prospect** MT. MARY	**Hole** CTR-87-6
Co-ordinates	10030 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	50 metres
Drilling company	STACKPOOLE DRILLING
Rig type	MOBILE
Drilling type	ROTARY PERCUSSION.
Hole size	112 mm
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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geological log

Project CYGNET Prospect MOUNT MARY Hole CTR-87-6 Page ONE

From	To	Code	Description mineralization in bold type
0.0	44.0		PEBBLY MUDSTONE - Dark grey, hornfelsed gritty pebbly mudstone. Minor to moderate epidote alteration, minor interbeds of beige mudstone? also moderate percentage of ferruginous chips. Minor syenite intrusive chips - as thin dykes.
44.0	47.0		PEBBLY MUDSTONE / SYENITE INTRUSIVE - Mixture of epidote altered grey gritty mudstone and minor orange coloured, highly weathered syenite intrusive (dykes).
47.0	50.0		SYENITE INTRUSIVE - Weathered, orange yellow cream coarse grained, weakly ferruginous, epidotitic syenitic intrusive.
			END OF HOLE.

080

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assays

Project CYGNET Prospect MT MARY. Hole CTR-87-6 Page ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au.
224292	2.5	4	90	25	300	<0.5	0.045	
224293	4	6	80	15	405	<0.5	0.215	
224294	6	10	50	20	785	<0.5	0.070	
224295	10	14	75	350	1400	<0.5	0.235	
224296	14	18	55	40	965	<0.5	0.270	
224297	18	22	70	120	1150	<0.5	0.110	0.110
224298	22	26	65	435	1750	<0.5	0.035	
224299	26	30	60	55	950	<0.5	0.075	
224300	30	34	55	15	625	<0.5	0.105	
224301	34	36	75	15	560	<0.5	0.090	
224302	36	38	60	15	520	<0.5	0.090	
224303	38	40	55	20	600	<0.5	0.055	
224304	40	42	50	10	660	<0.5	0.045	
224305	42	44	45	15	520	<0.5	0.050	
224306	44	46	40	10	565	<0.5	0.050	
224307	46	48	55	15	450	<0.5	0.080	
224308	48	50	40	20	360	<0.5	0.060	

081

846082

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drill log cover sheet

Project	CYGNET	**Prospect**	MOUNT MARY	**Hole**	CTR-87-7
Co-ordinates	9994 mN 10350 mE			**Logged by**	P.A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	60° GS.
Direction	G M T
Commenced	
Completed	
Total depth	50 metres.
Drilling company	Stackpoole Drilling
Rig type	Mobile
Drilling type	Rotary Percussion
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

082

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geological log

Project CYGNET Prospect MOUNT MARY Hole CTR-87-7 Page ONE

From	To	Code	Description mineralization in bold type
0.0	2.0		NO SAMPLE.
2.0	10.0		SYENITE INTRUSIVE - weathered orange-yellow coarse grained, K-spar altered, clayey syenite.
10.0	18.0		ALTERED SYENITE INTRUSIVE - weathered orange-yellow, coarse grained, strongly epidotitic, with numerous ferruginous red/pink chips.
18.0	32.0		SYENITE INTRUSIVE - Grey to cream, coarse grained, weakly clay altered, trace epidote syenite intrusive.
32.0	36.0		ALTERED SYENITE INTRUSIVE - Weathered ferrugmous orauge-yellow, epidotitic altered, coarse grained intrusive syenite.
36.0	50.0		PEBBLY MUDSTONE - Grey, weakly epidote altered, gritty (pebbly) hornfelsed (hard, massive chips) weakly sericitic mudstone.
			END OF HOLE.

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assays

Project CYGNET **Prospect** MT MARY **Hole** CTR-87-7 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224309	2.6	4	60	60	515	<0.5	0.110					
224310	4	6	45	30	555	<0.5	0.100					
224311	6	8	55	50	805	<0.5	0.135					
224312	8	10	80	40	1000	<0.5	0.190	0.220				
224313	10	12	105	875	1650	<0.5	0.520					
224314	12	14	110	360	2400	<0.5	1.560	1.580				
224315	14	16	80	50	1400	<0.5	0.460					
224316	16	18	85	65	1150	<0.5	0.340	0.330				
224317	18	20	60	230	760	<0.5	0.135					
224318	20	22	65	70	765	<0.5	0.050					
224319	22	24	80	60	695	<0.5	0.030					
224320	24	26	80	50	960	<0.5	<0.005	<0.005				
224321	26	28	60	45	435	<0.5	0.010					
224322	28	30	60	45	530	<0.5	0.020					
224323	30	32	60	50	415	<0.5	0.010					
224324	32	34	50	60	435	<0.5	0.020					
224325	34	36	40	60	315	<0.5	0.070					
224326	36	38	90	125	460	<0.5	0.025					
224327	38	40	60	60	340	<0.5	0.030					
224328	40	42	50	80	520	<0.5	0.035					
224329	42	44	50	15	510	<0.5	0.015					
224330	44	46	45	10	575	<0.5	0.010					
224331	46	48	35	10	500	<0.5	0.010					
224332	48	50	35	10	340	<0.5	0.030	0.020				

846085

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084

drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-8

Co-ordinates 10030 **mN** 10250 **mE** **Logged by** P.A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° G.S.
Direction	G M T
Commenced	
Completed	
Total depth	50 metres
Drilling company	Stackpoole Drilling
Rig type	Mobile
Drilling type	Rotary Percussion.
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

085

846086

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geological log

Project CYGNET Prospect MOUNT MARY Hole CTR-87-8 Page ONE.

From	To	Code	Description mineralization in bold type
0.0	2.6		NO SAMPLE
2.6	14.0		SYENITE INTRUSIVE - Weathered grey brown, coarse grained, possibly chloritic altered intrusive syenite. Minor limonitic chips.
14.0	21.0		ALTERED MUDSTONE - Dark grey, hornfelsed, gritty weakly epidote altered mudstone. Minor syenite intrusive chips. - possible thin dykes.
21.0	26.0		ALTERED SYENITE INTRUSIVE - Grey brown, coarse grained, weakly epidote altered syenite intrusive. Minor mudstone chips.
26.0	36.0		ALTERED GRITTY MUDSTONE - Dark grey, weakly epidote altered, hornfelsed, gritty (pebbly) mudstone. Minor ferruginous chips, trace quartz chips, minor syenite chips.
36.0	44.0		ALTERED SYENITE INTRUSIVE - Weathered orange-cream, coarse grained, moderately epidote altered, limonitic stained syenite intrusive.
44.0	47.0		ALTERED PEBBLY MUDSTONE - Grey to dark grey, gritty pebbly? weakly epidote altered mudstone. Minor syenite intrusive chips.
47.0	50.0		SYENITE INTRUSIVE - Yellow-brown, coarse grained ferruginous, intrusive syenite. Minor ferruginous brown orange siliceous chips, minor grey mudstone chips.
			END OF HOLE.

086

846087

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assays

Project CYGNET Prospect MOUNT MARY Hole CTR-87-8 Page ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224333	2.6	4	90	35	310	1.0	0.010	0.025				
224334	4	6	85	5	365	0.5	0.015					
224335	6	8	105	15	445	1.5	0.070					
224336	8	10	105	15	540	1.5	0.140					
224337	10	12	145	90	765	0.5	0.015					
224338	12	14	125	140	430	1.5	<0.005					
224339	14	16	65	<5	265	0.5	0.020					
224340	16	18	50	<5	270	1.0	0.030					
224341	18	20	40	<5	210	1.0	0.015					
224342	20	22	70	<5	260	1.0	<0.005					
224343	22	24	75	10	195	1.0	0.005					
224344	24	26	75	15	220	1.5	0.045	0.045				
224345	26	28	45	<5	215	1.0	0.010					
224346	28	30	35	<5	170	1.5	0.075					
224347	30	32	30	<5	165	1.0	0.050					
224348	32	34	40	<5	165	0.5	0.050					
224349	34	36	35	<5	150	1.5	0.260					
224350	36	38	50	5	190	1.0	0.100					
224351	38	40	40	5	160	1.0	0.040					
224352	40	42	25	<5	125	1.5	0.010					
224353	42	44	25	10	110	<0.5	0.015					
224354	44	46	20	<5	100	<0.5	0.010					
224355	46	48	30	<5	170	1.5	0.030	0.030				
224356	48	50	30	<5	100	0.5	0.035					

087

846088

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drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY. **Hole** CTR-87-9

Co-ordinates 10020 mN 9945 mE **Logged by** P.A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° G.N.
Direction	G M T
Commenced	
Completed	
Total depth	50 metres.
Drilling company	Stackpoole Drilling
Rig type	Mobile
Drilling type	Rotary Percussion
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

088

846089

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geological log

Project CYGNET Prospect MOUNT MARY. Hole CTR-87-9 Page ONE

From	To	Code	Description mineralization in bold type
0.0	2.6		NO SAMPLE
2.6	4.0		PEBBLY MUDSTONE - Dark grey, hornfelsed gritty and pebbly mudstone, trace epidote.
4.0	20.0		ALTERED SYENITE INTRUSIVE - Weathered yellow-orange coarse grained, weakly pyritic, chloritic, epidotitic altered syenite intrusive.
20.0	22.0		ALTERED PEBBLY MUDSTONE - Dark grey, hornfelsed (very siliceous) gritty and pebbly mudstone. Weakly epidotitic.
22.0	34.0		ALTERED SYENITE INTRUSIVE - Weathered yellow-orange coarse grained clay altered intrusive syenite. Trace to minor pebbly mudstone fragments.
34.0	42.0		PYRITIC MUDSTONE / PYRITIC MONZONITE ? - Approximately 50/50 light to dark grey hornfelsed gritty pyritic mudstones and pyritic, fine grained, K-spar altered monzonite with minor syenite chips. Zone moderately to strongly pyritic (5-7% Py). Minor epidote alteration.
42.0	50.0		PYRITIC PEBBLY MUDSTONE - Dark grey, moderately to strongly pyritic gritty (pebbly) mudstone.
			END OF HOLE.

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assays

Project CYGNET Prospect MOUNT MARY Hole CTR-87-9 Page ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au.
224357	2.6	4	100	<5	785	1.0	0.015	
224358	4	6	380	5	1200	3.0	0.045	
224359	6	8	170	10	1100	0.5	0.030	
224360	8	10	70	5	910	<0.5	0.010	
224361	10	12	90	10	400	0.5	0.030	
224362	12	14	80	10	385	<0.5	0.015	
224363	14	16	80	<5	400	<0.5	0.030	
224364	16	18	110	5	375	1.0	0.065	
224365	18	20	105	<5	290	0.5	0.020	
224366	20	22	80	<5	340	0.5	0.020	
224367	22	24	180	<5	390	1.0	0.025	
224368	24	26	105	<5	290	1.5	0.040	
224369	26	28	125	5	315	0.5	0.020	
224370	28	30	90	<5	280	1.0	0.010	
224371	30	32	80	<5	265	0.5	0.010	
224372	32	34	65	<5	215	0.5	0.010	
224373	34	36	130	<5	400	<0.5	0.015	
224374	36	38	145	<5	285	0.5	0.025	
224375	38	40	145	<5	350	1.0	0.010	
224376	40	42	95	<5	450	<0.5	0.020	
224377	42	44	90	<5	495	0.5	0.010	
224378	44	46	95	<5	500	<0.5	0.030	0.030
224379	46	48	210	<5	280	<0.5	0.080	
224380	48	50	105	<5	335	0.5	0.025	0.020

090

846091

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drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-10

Co-ordinates 10030 mN 9982 mE **Logged by** P. A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° G.N.
Direction	G M T
Commenced	
Completed	
Total depth	50 metres
Drilling company	Stackpoole Drilling
Rig type	Mobile
Drilling type	Rotary Percussion
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

091

846092

Amoco Minerals Australia Company

geological log

Project CYGNET Prospect MOUNT MARY Hole CTR-87-10 Page ONE

From	To	Code	Description mineralization in bold type
0.0	14.5		ALTERED PEBBLY MUDSTONE - Dark grey purple, hornfelsed, epidote chlorite altered gritty (pebbly) mudstone.
14.5	18.0		ALTERED INTRUSIVE - Weathered. orange-yellow, clay altered, completely weathered intrusive (syenite?).
18.0	50.0		PEBBLY MUDSTONE - Dark grey - purple - olive grey, hornfelsed, weakly chlorite altered. gritty (pebbly) mudstone.
			END OF HOLE.

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846093

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assays

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-10 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224382	0	2.6	45	<5	1100	<0.5	0.030					
224383	2.6	4	80	<5	720	<0.5	0.085					
224384	4	6	75	<5	740	<0.5	0.090					
224385	6	8	40	<5	670	<0.5	0.030					
224386	8	10	50	<5	1250	<0.5	0.070					
224387	10	12	70	<5	840	0.5	0.095					
224388	12	14	175	1350	800	<0.5	0.290					
224389	14	16	210	925	1100	1.0	0.400					
224390	16	18	185	120	2450	<0.5	0.050					
224391	18	20	45	<5	1250	0.5	0.030					
224392	20	22	40	<5	1200	0.5	0.030					
224393	22	24	55	<5	1200	0.5	0.090					
224394	24	26	60	<5	1400	1.0	0.125					
224395	26	28	45	15	1650	0.5	0.060					
224396	28	30	25	<5	1700	1.0	0.030					
224397	30	32	25	<5	1700	0.5	0.030	0.030				
224398	32	34	25	<5	1650	<0.5	0.015					
224399	34	36	30	<5	870	<0.5	0.010					
224400	36	38	25	<5	855	0.5	0.020					
224401	38	40	25	<5	635	<0.5	0.020					
224402	40	42	25	<5	570	0.5	0.020					
224403	42	44	40	35	950	1.0	0.015					
224404	44	46	30	50	1150	<0.5	0.030					
224405	46	48	25	<5	390	0.5	0.010					
224406	48	50	45	<5	485	0.5	0.005	0.010				

093

846094

Amoco Minerals Australia Company

drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY. **Hole** CTR-87-11

Co-ordinates 10065 **mN** 10300 **mE** **Logged by** P A JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° G.S.
Direction	G M T
Commenced	
Completed	
Total depth	66 metres.
Drilling company	Stackpoole Drilling
Rig type	Mobile.
Drilling type	Rotary Percussion
Hole size	112 mm
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey **Type**

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

C94

846095

Amoco Minerals Australia Company

geological log

Project CYGNET. Prospect MOUNT MARY Hole CTR-87-11 Page ONE

From	To	Code	Description mineralization in bold type
0.0	2.6		NO SAMPLE
2.6	22.0		ALTERED PEBBLY MUDSTONE - Grey and dark grey, clay epidote nontronite altered gritty (pebbly) mudstone. Minor to moderate ferruginous fragments, minor quartz fragments. Nontronite observed at 18-20 metres.
22.0	34.0		FERRUGINOUS ALTERED MUDSTONE - Moderately ferruginous grey and dark grey, moderately ferruginous, gritty (pebbly) mudstone. Trace to minor epidote.
34.0	44.0		ALTERED PEBBLY MUDSTONE - Light grey to grey, clay altered, gritty (pebbly) mudstone. Trace to minor ferruginous chips, trace epidote.
44.0	66.0		SYENITE INTRUSIVE - Weathered orange yellow cream, coarse grained, moderately ferruginous intrusive syenite. Some 2 metre samples contain variable amounts of mudstone chips.
			END OF HOLE.

095

846096

Amoco Minerals Australia Company

assays

Project CYGNET Prospect MOUNT MARY Hole CTR-87-11 Page ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au.	CHECK Au.
224407	2.6	4	35	30	430	0.5	0.095	
224408	4	6	35	45	420	<0.5	0.090	
224409	6	8	35	20	375	0.5	0.090	
224410	8	10	40	<5	460	0.5	0.035	
224411	10	12	40	<5	405	<0.5	0.070	
224412	12	14	40	<5	575	0.5	0.010	
224413	14	16	45	10	680	1.0	0.035	
224414	16	18	50	<5	625	1.0	0.410	
224415	18	20	60	240	595	<0.5	0.320	
224416	20	22	65	1300	935	<0.5	0.110	
224417	22	24	155	2300	1500	<0.5	0.680	0.850
224418	24	26	55	190	605	<0.5	0.320	
224419	26	28	80	110	750	1.5	0.360	
224420	28	30	60	365	450	2.0	0.040	
224421	30	32	100	1800	840	<0.5	0.670	
224422	32	34	80	750	850	<0.5	0.290	
224423	34	36	60	55	710	2.0	0.120	
224424	36	38	55	<5	695	1.5	0.035	
224425	38	40	60	30	925	0.5	0.080	
224426	40	42	50	40	1200	0.5	0.170	
224427	42	44	45	105	585	<0.5	0.440	
224428	44	46	40	75	830	0.5	0.145	
224429	46	48	55	115	570	<0.5	0.075	
224430	48	50	45	70	620	<0.5	0.120	
224431	50	52	30	20	380	1.5	0.070	
224432	52	54	35	10	505	<0.5	0.040	0.040
224433	54	56	35	90	1200	1.5	0.095	
224434	56	58	50	20	710	<0.5	0.130	
224435	58	60	30	30	1250	<0.5	0.210	
224436	60	62	35	30	540	<0.5	0.070	

C96

846097

Amoco Minerals Australia Company

assays

Project CYGNET Prospect MOUNT MARY Hole CTR-87-11 Page TWO

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224437	62	64	40	10	420	4.5	0.220					
224438	64	66	30	10	465	6.5	0.095					

097

846098

Amoco Minerals Australia Company

drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-12

Co-ordinates 10021 **mN** 10275 **mE** **Logged by** P A JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° G.S.
Direction	G M T
Commenced	
Completed	
Total depth	50 metres
Drilling company	Stackpoole Drilling
Rig type	Mobile.
Drilling type	Rotary Percussion
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

C93

846099

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geological log

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-12 **Page** ONE.

From	To	Code	Description — mineralization in bold type
0	8.5		ALTERED SYENITE INTRUSIVE - Weathered cream-white, coarse grained, kaolinite epidote altered syenite intrusive. Minor dark grey mudstone chips
8.5	16.0		ALTERED PEBBLY MUDSTONE - Dark grey to grey clay epidote altered pebbly mudstone. Very few chips in soft ground. Minor ferruginous chips and minor hornfelsed (massive, hard, siliceous?) dark grey chips
16.0	26.0		ALTERED SYENITE INTRUSIVE - Brown, weakly epidote altered, coarse grained syenitic intrusive.
26.0	36.0		ALTERED SYENITE INTRUSIVE - Cream to brown, minor orange, sericite epidote altered syenite intrusive.
36.0	46.0		PEBBLY MUDSTONE - Grey, weakly clayey, gritty (pebbly) mudstone.
46.0	50.0		MUDSTONE / SYENITE - Mixture of gritty mudstone and light grey beige fine grained syenite? intrusive.
			END OF HOLE.

099

846100

Amoco Minerals Australia Company

assays

Project CYGNET Prospect MOUNT MARY Hole CTR-87-12 Page ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au.				
224439	0	2.6	20	100	280	<0.5	0.115					
224440	2.6	4	25	110	405	<0.5	0.060					
224441	4	6	35	15	525	<0.5	0.080					
224442	6	8	50	15	755	<0.5	0.095					
224443	8	10	55	15	575	<0.5	0.055					
224444	10	12	80	30	620	<0.5	0.050					
224445	12	14	55	10	1400	<0.5	0.050					
224446	14	16	35	10	1300	<0.5	0.180					
224447	16	18	55	5	2100	<0.5	0.430					
224448	18	20	80	10	1450	<0.5	0.200	0.150				
224449	20	22	65	10	1000	<0.5	0.090					
224450	22	24	25	10	335	<0.5	0.035	0.030				
224451	24	26	30	10	265	<0.5	0.050					
224452	26	28	30	5	290	<0.5	0.035					
224453	28	30	20	5	260	<0.5	0.060	0.075				
224454	30	32	20	5	240	<0.5	0.090					
224455	32	34	30	10	235	<0.5	0.060					
224456	34	36	20	<5	195	<0.5	0.030					
224457	36	38	40	40	380	<0.5	0.140					
224458	38	40	30	10	355	<0.5	0.020					
224459	40	42	30	25	615	<0.5	0.040					
224460	42	44	50	<5	350	<0.5	0.155					
224461	44	46	35	<5	270	<0.5	0.030					
224462	46	48	45	10	260	<0.5	0.015					
224463	48	50	45	<5	315	<0.5	0.010					

846101

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Amoco Minerals Australia Company

drill log cover sheet

Project	CYGNET	**Prospect** MOUNT MARY	**Hole** CTR-87-13
Co-ordinates	10075 mN 10530 mE		**Logged by** P A JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50°
Direction	G 112° M T
Commenced	
Completed	
Total depth	50 metres
Drilling company	Stackpoole Drilling
Rig type	Mobile
Drilling type	Rotary Percussion
Hole size	112 mm
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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geological log

Project CYGNET Prospect MOUNT MARY Hole CTR-87-13 Page ONE.

From	To	Code	Description mineralization in bold type
0.0	2.6		NO SAMPLE
2.6	10.0		GRITTY MUDSTONE - Dark grey, hornfelsed (hard, massive, siliceous?) gritty mudstone.
10.0	16.0		FERRUGINOUS ALTERED MUDSTONE - Ferruginous, brown to grey mixture of mudstone and gritty (pebbly) mudstone. Minor ironstone fragments and minor green clay (montronite) alteration. Possible thin syenite dykes - minor syenite intrusive chips.
16.0	36.0		PEBBLY MUDSTONE - Dark grey and grey gritty (pebbly) mudstone. Very hard, siliceous? massive - hornfelsed, with minor ferruginous chips. Moderately micaceous.
36.0	42.0		ALTERED SYENITE / MUDSTONE - A ferruginous mixture of altered (K-spar) orange brown beige, limonitic stained, medium to coarse grained chloritic syenite intrusive (70%) and ferruginous, clay epidote altered sediment. (30%).
42.0	50.0		PEBBLY MUDSTONE - Dark grey, gritty (pebbly) mudstone. Minor limonitic fragments and quartz chips (after pebbles). Little alteration.
			END OF HOLE

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assays

Project CYGNET Prospect MOUNT MARY Hole CTR-87-13 Page ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224464	0	2.6	20	75	500	<0.5	0.020					
224465	2.6	4	20	10	515	<0.5	0.050					
224466	4	6	20	<5	505	<0.5	0.015					
224467	6	8	20	<5	415	<0.5	0.010					
224468	8	10	15	<5	565	<0.5	0.015					
224469	10	12	140	2600	1750	2.5	0.620					
224470	12	14	165	705	1750	1.5	0.115					
224471	14	16	140	3975	800	3.5	0.700					
224472	16	18	35	100	475	0.5	0.030					
224473	18	20	20	75	375	0.5	0.015	0.015				
224474	20	22	15	50	320	0.5	0.060	0.025				
224475	22	24	20	50	230	0.5	0.030					
224476	24	26	20	35	175	0.5	0.015					
224477	26	28	20	30	220	0.5	0.040					
224478	28	30	20	45	255	2.0	0.045					
224479	30	32	15	20	170	1.5	0.005					
224480	32	34	15	<5	165	1.5	0.005					
224481	34	36	20	45	280	1.0	0.020					
224482	36	38	15	125	270	1.5	0.050					
224483	38	40	15	140	225	2.0	0.065					
224484	40	42	15	105	245	1.5	0.065					
224485	42	44	30	185	275	1.0	0.110					
224486	44	46	25	85	215	0.5	0.025					
224487	46	48	20	25	145	0.5	0.010					
224488	48	50	20	40	140	0.5	<0.005	<0.005				

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Amoco Minerals Australia Company

drill log cover sheet

Project	CYGNET	**Prospect**	MOUNT MARY	**Hole**	CTR-87-14
Co-ordinates	10030 mN	10450 mE		**Logged by**	P A JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° GN.
Direction	G M T
Commenced	
Completed	
Total depth	50 metres.
Drilling company	Stackpoole Drilling
Rig type	Mobile
Drilling type	Rotary Percussion
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 split of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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AMOCO

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geological log

Project CYGNET Prospect MOUNT MARY Hole CTR-87-14 Page ONE

From	To	Code	Description mineralization in bold type
0.0	12.0		SYENITE INTRUSIVE - Weathered buff grey beige, coarse grained, very weakly altered intrusive syenite. Potassic feldspars altered to kaolin.
12.0	14.0		ALTERED SYENITE / MUDSTONE - Fine grained syenite? Mixed with hornfelsed gritty mudstone. Minor epidote and green clay alteration.
14.0	18.00		ALTERED MUDSTONE - Moderately ferruginous, weakly epidote altered, orange brown gritty mudstone. Minor ironstone chips.
18.0	22.0		GRITTY MUDSTONE - Dark grey, sericitic, gritty mudstone.
22.0	24.0		SYENITE / MUDSTONE - A mixture of grey brown, ferruginous fine grained syenite dyke material and grey weakly altered mudstones. Minor to moderate quartz veining? (chips).
24.0	50.0		PEBBLY MUDSTONE - Dark grey, weakly micaceous, hornfelsed (hard, massive) gritty (pebbly) mudstone. Trace pyrite and minor quartz chips.
			END OF HOLE.

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assays

Project CYGNET Prospect MOUNT MARY Hole CTR-87-14 Page ONE.

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224489	0	2.6	10	<5	100	0.5	0.040					
224490	2.6	4	15	15	165	0.5	0.015					
224491	4	6	10	35	175	0.5	0.015					
224492	6	8	15	30	185	0.5	0.010					
224493	8	10	20	10	190	0.5	0.015					
224494	10	12	15	20	225	<0.5	0.025					
224495	12	14	65	55	815	0.5	0.045					
224496	14	16	90	145	1250	2.0	0.010					
224497	16	18	225	8600	1550	4.0	1.220	1.320				
224498	18	20	50	800	550	2.5	0.090	0.020				
224499	20	22	25	235	300	1.5	0.010					
224500	22	24	30	115	185	1.0	0.050					
224501	24	26	30	105	160	1.5	0.010					
224502	26	28	40	190	130	2.0	0.010	0.010				
224503	28	30	30	150	145	2.0	0.020					
224504	30	32	20	130	125	2.0	0.005					
224505	32	34	20	95	105	1.0	<0.005					
224506	34	36	45	95	125	2.0	0.010					
224507	36	38	25	120	105	1.0	0.235					
224508	38	40	20	70	110	1.5	0.010					
224509	40	42	45	60	105	1.5	<0.005					
224510	42	44	25	45	85	0.5	0.025					
224511	44	46	40	110	95	0.5	0.030					
224512	46	48	20	60	95	1.0	0.005					
224513	48	50	20	30	100	1.0	0.010	0.045				

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846107

Amoco Minerals Australia Company

drill log cover sheet

Project CYGNET. **Prospect** MOUNT MARY **Hole** CTR-87- 15

Co-ordinates IC 150 **mN** 10400 **mE** **Logged by** P A JONES.

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° GS.
Direction	G M T
Commenced	
Completed	
Total depth	50 metres.
Drilling company	Stackpoole Drilling
Rig type	Mobile.
Drilling type	Rotary Percussion.
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC.
Assay sample type	1/8 sample of chips.
Water table depth	
Water yields	

Bore Hole Survey **Type**

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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Amoco Minerals Australia Company

geological log

Project CYGNET Prospect MOUNT MARY Hole CTR-87-15 Page ONE.

From	To	Code	Description mineralization in bold type
0.0	10.0		PEBBLY MUDSTONE - Grey olive, gritty (pebbly) mudstone. Minor qtz and quartzite chips.
10.0	12.0		SYENITE / MUDSTONE - A mixture of dark grey pebbly mudstone and weathered orange-yellow coarse grained syenite intrusive.
12.0	50.0		PEBBLY MUDSTONE - Olive grey brown gritty (pebbly) mudstone containing minor ferruginous chips, and minor fragments of intrusive syenite. Trace pyrite and quartz. Little to no alteration products.
			END OF HOLE.

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Amoco Minerals Australia Company

assays

Project CYGNET Prospect MOUNT MARY Hole CTR-87-15 Page ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224514	0	2.6	45	20	300	0.5	0.010					
224515	2.6	4	25	<5	190	0.5	0.010					
224516	4	6	40	30	170	0.5	0.015					
224517	6	8	20	<5	175	0.5	<0.005	0.005				
224518	8	10	20	<5	265	1.0	<0.005					
224519	10	12	15	45	280	1.5	0.030					
224520	12	14	45	105	925	1.5	2.000	2.050				
224521	14	16	20	<5	455	0.5	0.230	0.200				
224522	16	18	40	50	430	1.0	0.330					
224523	18	20	30	10	330	0.5	0.130					
224524	20	22	90	715	440	1.0	0.290					
224525	22	24	60	20	195	1.0	0.075					
224526	24	26	60	<5	150	1.0	0.035					
224527	26	28	25	<5	125	0.5	0.020					
224528	28	30	30	<5	150	1.0	0.015					
224529	30	32	45	25	195	1.0	0.030					
224530	32	34	30	5	160	0.5	0.015					
224531	34	36	35	30	190	0.5	0.020					
224532	36	38	40	5	210	0.5	0.015					
224533	38	40	20	<5	225	0.5	0.010					
224534	40	42	35	20	155	0.5	0.030					
224535	42	44	40	<5	100	<0.5	0.025					
224536	44	46	50	185	390	0.5	0.040					
224537	46	48	70	175	270	1.5	0.045					
224538	48	50	30	5	150	1.0	0.030					

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846110

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drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-16

Co-ordinates 10155 **mN** 10450 **mE** **Logged by** P A JONES.

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50° GN.
Direction	G M T
Commenced	
Completed	
Total depth	50 metres.
Drilling company	Stackpoole Drilling
Rig type	Mobile.
Drilling type	Rotary Percussion.
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC.
Assay sample type	1/8 sample of chips.
Water table depth	
Water yields	

Bore Hole Survey **Type**

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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Amoco Minerals Australia Company

geological log

Project CYGNET. Prospect MOUNT MARY Hole CTR-87-16 Page ONE.

From	To	Code	Description mineralization in bold type
0.0	16.0		ALTERED PEBBLY MUDSTONE - Grey beige, limonitic stained, weakly epidote altered gritty (pebbly) mudstone.
16.0	18.00		MUDSTONE / SYENITE - As above with minor, coarse grained, weathered, white-orange, weakly ferruginous, syenite (as thin dykes).
18.0	28.0		ALTERED MUDSTONE - Dark grey, hornfelsed (hard, massive) epidote, sericite minor pyrite altered mudstone
28.0	36.0		ALTERED SILTY MUDSTONE - Olive grey, pulverized, clay altered silty mudstone.
36.0	50.0		PEBBLY MUDSTONE - Dark grey, hornfelsed, gritty (pebbly) mudstone with minor olive silty mudstone with trace to minor pyrite, minor ferruginous chips.
			END OF HOLE.

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846112

Amoco Minerals Australia Company

assays

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-16 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au
224539	0	2.6	95	35	240	<0.5	0.030	
224540	2.6	4	115	<5	300	<0.5	0.030	0.080
224541	4	6	105	<5	310	0.5	0.050	
224542	6	8	100	<5	325	0.5	0.100	
224543	8	10	115	<5	375	0.5	0.070	
224544	10	12	65	<5	500	1.0	0.050	
224545	12	14	50	<5	660	1.0	0.040	0.035
224546	14	16	55	20	795	1.0	0.065	
224547	16	18	55	<5	620	0.5	0.070	
224548	18	20	50	30	605	0.5	0.045	
224549	20	22	65	45	1350	0.5	0.210	
224550	22	24	40	<5	1300	0.5	0.035	
224551	24	26	35	<5	720	0.5	0.030	
224552	26	28	30	<5	550	1.0	<0.005	
224553	28	30	20	<5	520	1.0	0.005	
224554	30	32	25	<5	635	0.5	0.010	
224555	32	34	30	<5	630	1.0	0.005	
224556	34	36	45	15	805	1.5	0.090	
224557	36	38	20	<5	540	1.5	<0.005	
224558	38	40	40	<5	665	1.5	0.005	
224559	40	42	40	290	630	1.5	0.290	0.290
224560	42	44	30	150	600	2.5	0.060	
224561	44	46	30	<5	465	0.5	0.010	
224562	46	48	30	<5	415	1.0	0.005	
224563	48	50	35	<5	360	1.5	0.005	

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846113

Amoco Minerals Australia Company

drill log cover sheet

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR - 87- 17

Co-ordinates 10035 **mN** 10325 **mE** **Logged by** P A JONES.

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	50°
Direction	G 113° M T
Commenced	
Completed	
Total depth	60 metres.
Drilling company	Stackpoole Drilling
Rig type	Mobile.
Drilling type	Rotary Percussion.
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC.
Assay sample type	1/8 sample of chips.
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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Amoco Minerals Australia Company

geological log

Project CYGNET Prospect MOUNT MARY Hole CTR-87-17 Page ONE.

From	To	Code	Description mineralization in bold type
0.0	4.0		MUDSTONE / SYENITE - Mixture of dark grey, hornfelsed gritty (pebbly) mudstone and beige coloured coarse grained syenite intrusive.
4.0	10.0		FERRIGINOUS SYENITE INTRUSIVE - Weathered, cream yellow, weakly ferruginous coarse grained syenite intrusive.
10.0	38.0		ALTERED MUDSTONE - Dark grey, moderately to strongly epidote altered gritty (pebbly) hornfelsed mudstone. Minor ferruginous chips.
38.0	56.0		ALTERED SYENITE - Weathered orange yellow grey pyritic epidote altered coarse grained syenite.
56.0	58.0		MUDSTONE - Predominantly olive grey mudstone.
58.0	60.0		ALTERED SYENITE - Weathered orange brown clay altered syenite intrusive.
			END OF HOLE.

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Amoco Minerals Australia Company

assays

Project CYGNET **Prospect** MOUNT MARY **Hole** CTR-87-17 **Page** ONE

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224564	0	2.6	40	80	255	1.0	0.060	0.060				
224565	2.6	4	80	40	660	1.0	0.180					
224566	4	6	70	10	1350	0.5	0.430					
224567	6	8	90	165	1000	1.0	0.340					
224568	8	10	85	415	1250	2.5	0.600	0.710				
224569	10	12	100	5	1050	1.0	0.125					
224570	12	14	85	<5	990	1.0	0.360					
224571	14	16	80	<5	800	0.5	0.040	0.065				
224572	16	18	75	<5	790	1.0	0.135					
224573	18	20	80	<5	920	1.5	0.075					
224574	20	22	70	5	1300	1.5	0.200					
224575	22	24	220	905	2950	4.5	1.160	1.280				
224576	24	26	245	1700	4250	6.5	2.150					
224577	26	28	130	875	1750	7.0	2.430	2.650				
224578	28	30	85	80	1400	1.5	0.180					
224579	30	32	60	90	840	1.5	0.230					
224580	32	34	35	75	785	1.0	0.170					
224581	34	36	30	50	670	1.0	0.110					
224582	36	38	30	80	715	1.5	0.115					
224583	38	40	30	95	650	1.0	0.145	0.145				
224584	40	42	30	90	470	1.0	0.090					
224585	42	44	35	85	435	1.0	0.090					
224586	44	46	45	80	510	1.0	0.265					
224587	46	48	25	90	505	1.0	0.140					
224588	48	50	15	60	420	0.5	0.195					
224589	50	52	25	65	370	1.0	0.120					
224590	52	54	30	45	340	1.0	0.115					
224591	54	56	30	50	380	1.0	0.100					
224592	56	58	55	175	600	1.0	0.085	0.030				
224593	58	60	50	110	545	1.5	0.115	0.115				

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846116

Amoco Minerals Australia Company

drill log cover sheet

Project CYGNET **Prospect** KINGS HILL **Hole** CTR-87-18

Co-ordinates 99% **mN** 10000 **mE** **Logged by** P.A. JONES

AMG reference	
County	
Parish	
Portion	
Elevation	
Declination	55°
Direction	G 190 M T
Commenced	
Completed	
Total depth	60 metres.
Drilling company	Stackpoole Drilling
Rig type	Mobile.
Drilling type	Rotary Percussion.
Hole size	112 mm.
Core size	
Depth of casing	6 metres of PVC
Assay sample type	1/8 sample of chips.
Water table depth	
Water yields	

Bore Hole Survey **Type**

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.

Notes

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Amoco Minerals Australia Company

geological log

Project CYGNET Prospect KINGS HILL Hole CTR-87-18 Page ONE

From	To	Code	Description mineralization in bold type
0.0	2.6		NO SAMPLE.
2.6	11.5		SYENITE INTRUSIVE - Weathered orange yellow grey coarse grained, weakly clay altered syenite intrusive.
11.5	23.0		PYRITIC HYDROTHERMAL BRECCIA - Semi massive pyrite (30%) with hydrothermal breccia (lot of quartz chips) and yellow green clay altered fragments.
23.0	34.0		ALTERED SYENITE INTRUSIVE - Weathered orange yellow clay altered syenite intrusive.
34.0	44.0		CLAY ALTERED SYENITE - Grey to olive grey, very clay altered syenite intrusive.
44.0	54.0		SYENITE INTRUSIVE - Weathered yellow grey, clay altered, biotite rich syenite intrusive. Minor quartz chips.
54.0	60.0		SYENITE INTRUSIVE - Weathered yellow orange clayey altered, syenite intrusive. Minor pink (ferruginous) chips.
			END OF HOLE.

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Amoco Minerals Australia Company

assays

Project CYGNET Prospect KINGS HILL Hole CTR-87-18 Page ONE.

Sample	From	To	Cu	Pb	Zn	Ag	FIRE Au	CHECK Au				
224594	2.6	4	85	10	100	0.5	0.045					
224595	4	6	120	<5	75	1.0	0.070					
224596	6	8	115	<5	60	1.0	0.065					
224597	8	10	125	35	90	<0.5	0.065					
224598	10	12	235	60	145	<0.5	0.040					
224599	12	14	1200	<5	20	<0.5	<0.005					
224600	14	16	790	<5	30	<0.5	0.015					
224601	16	18	515	<5	25	<0.5	0.015					
224602	18	20	390	<5	30	<0.5	0.015	0.025				
224603	20	22	1050	<5	25	<0.5	<0.005					
224604	22	24	225	5	30	<0.5	<0.005					
224605	24	26	140	<5	35	<0.5	<0.005					
224606	26	28	150	10	60	<0.5	<0.005					
224607	28	30	125	5	45	0.5	<0.005					
224608	30	32	225	<5	45	<0.5	<0.005	<0.005				
224609	32	34	130	5	50	<0.5	0.010					
224610	34	36	60	5	40	<0.5	0.010					
224611	36	38	110	5	55	<0.5	<0.005					
224612	38	40	105	<5	45	<0.5	0.005					
224613	40	42	100	<5	40	0.5	0.015					
224614	42	44	190	<5	65	<0.5	0.035					
224615	44	46	165	30	80	<0.5	0.090					
224616	46	48	120	35	70	<0.5	0.045					
224617	48	50	145	55	70	<0.5	0.010					
224618	50	52	150	5	60	<0.5	0.010					
224619	52	54	105	<5	30	<0.5	0.005					
224620	54	56	90	10	25	<0.5	<0.005					
224621	56	58	90	80	105	0.5	0.070					
224622	58	60	245	2000	2000	1.5	0.410	0.370				

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846119

Amoco Minerals Australia Company

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

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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%.

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

From	To	Code	Description mineralization in bold type
7.40	7.90		HORNFELSED 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		HORNFELSED 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.

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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 veinleted (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%.

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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		MODERATELY TO STRONGLY ALTERED PEBBLY MUDSTONE. 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%
45.90	50.50		COMPLETELY ALTERED INTRUSIVE. Oxidised? cream yellow coarse grained textured very argillic altered pughy 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 occaissionally 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%.
50.50	65.15		WEAKLY ALTERED PEBBLY MUDSTONE. 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 (chloritised) rich dyke, approx 15cms width at 62.4 metres.

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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		MODERATELY ALTERED MONZOSYENITE. 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 veinleted at both contacts. Core otherwise only weakly veined generally carbonate filled. Core weakly broken, good recoveries + 95%.
73.80	74.85		PORPHYRITIC FINE GRAINED INTRUSIVE. 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.
74.85	77.15		HEMATITIC LAMPROPHYRE 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%
77.15	78.40		HEMATITE ALTERED GRITTY MUDSTONE. Very weakly hematitic (cherry red colouration) altered, massive grey to dark grey, weakly broken gritty mudstone.

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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		MODERATELY TO STRONGLY ALTERED MONZOSYENITE. 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.
81.10	86.90		MODERATELY ALTERED PEBBLY MUDSTONE. 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%.
86.90	87.35		STRONGLY ALTERED SYENOMONZONITE Strongly pyrite chlorite (light green to cream colouration) possibly argillic altered coarse grained syenomonzonite. Pebbly Mudstone xenolith. Good recoveries.
87.35	88.80		WEAKLY ALTERED PEBBLY MUDSTONE. 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%.

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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 ± 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%

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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 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%.
HQ → NQ 114.90m.			
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. Smeared pyrite evidenced on fracture surfaces.
			END OF HOLE

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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

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geological log

Project CYGNET **Prospect** MOUNT MARY **Hole** CT-87-20 **Page** 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.

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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 goerthite 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%.

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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, veinleted 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

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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		PORPHYRITIC SYENITE. Strongly broken (fracture faces heavily stained with iron oxides) grey sanidine porphyritic syenite dyke. Margins heavily crushed. Good recoveries +95%.
54.95	58.90		WEAKLY ALTERED PEBBLY MUDSTONE. 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.
58.90	64.30		STRONGLY ALTERED VEINED PEBBLY MUDSTONE. 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.
64.30	64.90		VEINED SYENITE. 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.
64.90	69.40		STRONGLY ALTERED WEAKLY STOCKWORKED PEBBLY MUDSTONE. Dark grey pebbly mudstone showing very strong actinolite epidote hematite carbonate minor pyrite alteration located along and diffusing away from fractures and veinletwig. Numerous pebbles

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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: occaissionally 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 veinleted, 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 occaissionally sanidine porphyritic (zoned) moderately pyritic epidotitic carbonitic minor actinolite altered syeno-monzonite. Pyrite variable (mainly as disseminations) up to 7.5% and is often oxidised to hematite. Unit weakly carbonate occaissionally hematite veined. Calcic feldspars? and some biotite clots altered to epidote. Trace to minor open space filled with drusy

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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	CON'T	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. Brownu 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

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geological log

Project CYGNET **Prospect** MOUNT MARY **Hole** CT-87-20 **Page** SEVEN

From	To	Code	Description mineralization in bold type
123.70	130.00	CON'T	a silicified angular breccia with trace fine to coarse pyrite as disseminations and minor open space fractures filled with bluish opaline silica. From 126 to 130 core predominantly comprised of mylonitized (clayey) cemented breccia with minor pyrite. Fragments as for the contact breccia are angular to subangular and average < 1cm in width ranging up to 4cm. Minor carbonate alteration. Mylonite breccia is strongly sheared as is evidenced by abundant slickensiding.
			END OF HOLE.

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9 600 N | 9 700 N | 9 800 N | 9 900 N | 10 000 N | 10 100 N | 10 200 N | 10 300 N | 10 400 N

9 800 E

9 900 E

10 000 E B.L.

10 100 E

10 200 E

To Wheatleys Bay

DAM

Pit

5 cm

LEGEND

- Fence.
- Dam.
- Creek.
- Adit collapsed.
- Old costean.
- Shaft / pit and spoil heap.
- Old scratching and spoil heap.
- Quarry and spoil heap.
- Track and gate.
- Road.

- Pm — Minnie Point Formation
- Pd — Deep Bay Formation
- Pb — Bundella Mudstone
- Pw — Woody Island Siltstone
- Cs_1 — Syenite, syenomonzonite – porphyritic minor breccia
- Cs_2 — Monzonite
- Ironstone
- Syenite dyke
- 86 — Joint orientation
- 20 — Bedding

CYPRUS MINERALS

BLACK JACKS

INTERPRETIVE GEOLOGY

DRAWN BY : P.J.

DRAFTSMAN: T.G.D.S.

DATE : Feb. '87

REVISIONS :

FILE NO.

SCALE 1 : 2500 — 25 0 25 50 METRES

FIG. 2

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9 600 N | 9 700 N | 9 800 N | 9 900 N | 10 000 N | 10 100 N | 10 200 N | 10 300 N | 10 400 N

9 800 E

9 900 E

10 000 E B.L.

10 100 E

10 200 E

To Wheatleys Bay

2m 0·10
8m 0·30
6m 0·12
28m 0·39
4m 0·14
2m 0·18
2m 0·15
2m 0·17
4m 0·17
18m 0·20
8m 0·17
2m 0·16
4m 0·17

11m 0·26 Au
1256 As

8m 0·03 Au
900 As

DAM

Pit

5 cm

LEGEND

- Fence.
- Dam.
- Creek.
- Adit collapsed.
- Old costean.
- Shaft / pit and spoil heap.
- Old scratching and spoil heap.
- Quarry and spoil heap.
- Track and gate.
- Road.

CYPRUS MINERALS

BLACK JACKS

COSTEANS
GOLD RESULTS

DRAWN BY : P.J.
DRAFTSMAN: T.G.D.S.
DATE : Mar. '87
REVISIONS :
FILE NO.

SCALE 1 : 2500 — 25 0 25 50 METRES

FIG. 3

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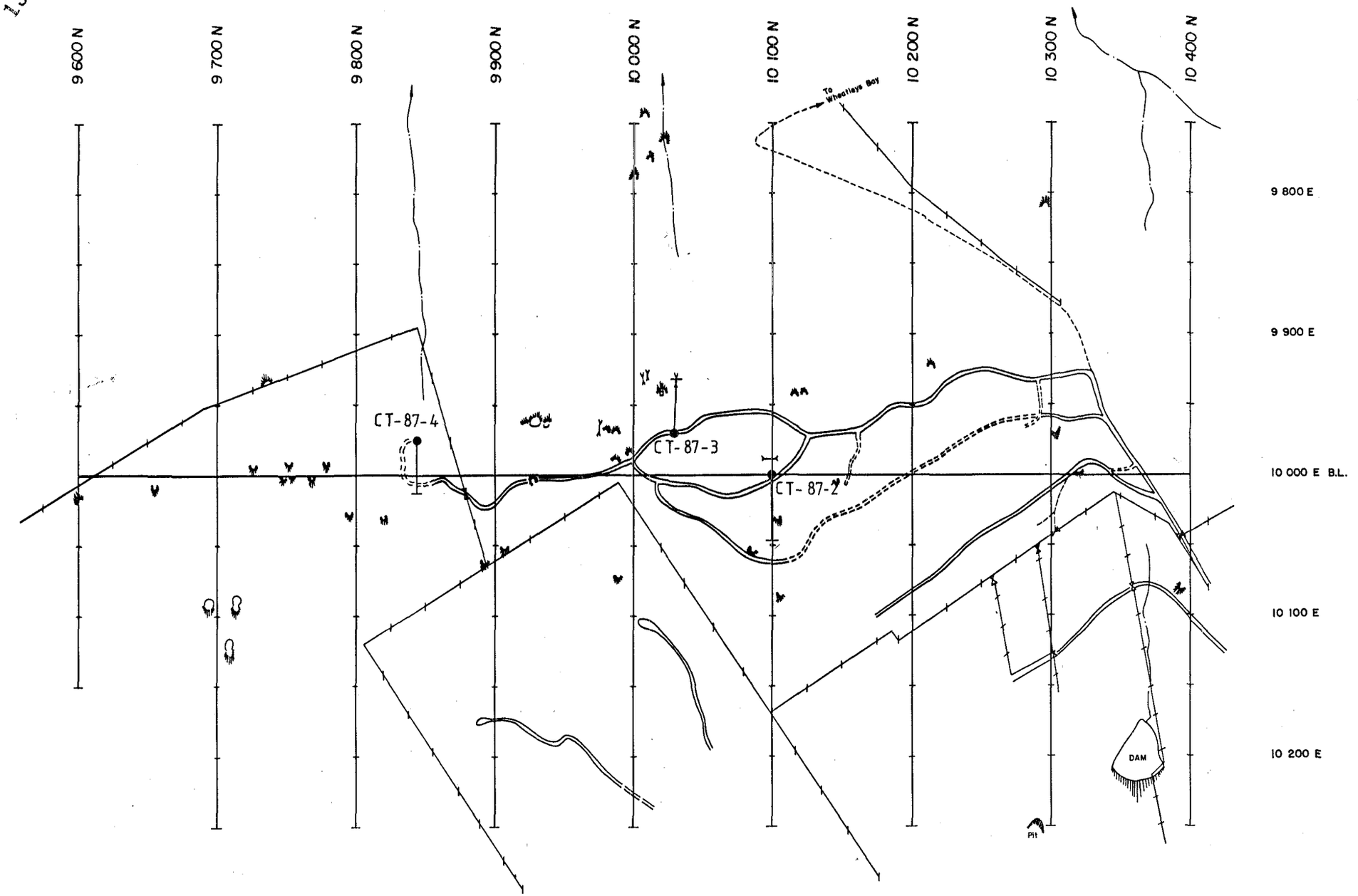

9 800 E

9 900 E

10 000 E B.L.

10 100 E

10 200 E

LEGEND

- Fence.
- Dam,
- Creek.
- Adit collapsed.
- Old costean.
- Shaft / pit and spoil heap.
- Old scratching and spoil heap.
- Quarry and spoil heap.
- Track and gate.
- Road.

CT-87-3 Diamond Hole

5 cm

CYPRUS MINERALS

BLACK JACKS
DRILLHOLE
LOCATIONS

DRAWN BY : P.J.
DRAFTSMAN: T.G.D.S.
DATE : Feb. '87
REVISIONS :
FILE. NO.

SCALE 1 : 2500 25 0 25 50 METRES

FIG. 4

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CYPRUS

costean profile

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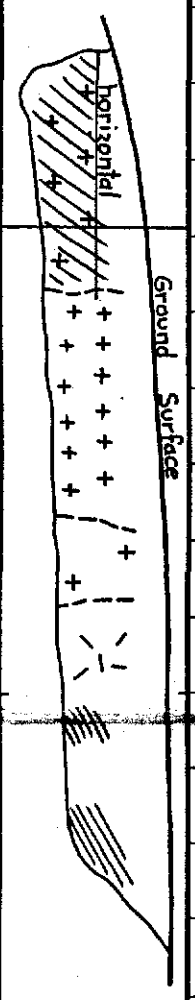
Project	CYGNET **No** 84-111C	**Commenced**	
Prospect	BLACK JACK RIDGE	**Completed**	
Coordinates:	**Line** 9845N.	**Logged by**	P.A. JONES
	9992E to 10003E	**Sample length**	2 metres
Total length	11 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Sample No	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2.5m →		5 cm ← →
								9 992 E
50	<5	15	<0.5	410	0.12		169 886	Syenomonzonite, moderately to strongly ferruginous, veinleted altered coarse grained, K-spar altered.
75	30	55	<0.5	800	0.20		169 887	9 995 E
								Syenite, grey cream to orange cw, coarse grained
90	5	50	<0.5	900	0.17		169 888	
								Syenomonzonite, MW-HW kaolinized altered, coarse grained weakly porphyritic, rusty brown coloured.
60	<5	20	<0.5	900	0.15		169 889	
								10 000 E
65	<5	10	<0.5	530	0.23		169 890	Sediment weakly stockworked, goerthite filled, K-spar altered, sericitic fine sediment, minor ferruginous zones.
								10 002 E Sediment, strongly ferruginous, K-spar altered, minor goerthite filled boxworks.
160	<5	50	<0.5	2000	0.35		169 891	
								END OF TRENCH



Assays in ppm unless noted otherwise

FIGURE 5 **Costean Line** 9845N.

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846140

costean profile

Project CYGNET **No** 84-111C	**Commenced**
Prospect BLACK JACK RIDGE	**Completed**
Coordinates: **Line** 9 900 N (part 1) 10107E **to** 10137E	**Logged by** P.A. JONES
	Sample length 2 metres
Total length 30 metres	**Scale** 1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage Sample No.	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2·5m →		5 cm ← →
								10 105 E
15	<5	35	<0·5	14	<0·01		169 871	Syenite, HW massive coarse grained porphyritic (Sanidine) light brown coloured, weakly chloritic clots in groundmass.
20	<5	45	<0·5	27	0·02		169 872	Completely weathered version of above, mottled light brown cream.
								10 110 E
25	<5	25	<0·5	91	0·01		169 873	Intrusive, orange brown cw coarse grained
25	<5	20	<0·5	18	0·01		169 874	
								10 115 E
25	<5	25	<0·5	7	0·01		169 875	Syenite, mottled orange cream, coarse grained, homogeneous, altered, porphyritic (sanidine) minor chlorite clots in groundmass, possible casts after pyrite.
20	<5	25	<0·5	1	<0·01		169 876	
20	<5	25	<0·5	4	<0·01		169 877	10 120 E
20	<5	25	<0·5	4	<0·01		169 878	Possible crush zone, weakly ferruginous.
25	<5	50	<0·5	7	<0·01		169 879	
								10 125 E
25	<5	30	<0·5	4	<0·01		169 880	
20	<5	35	<0·5	7	<0·01		169 881	
								Intrusive, cw granular light brown
30	<5	60	<0·5	8	<0·01		169 882	10 130 E
								Weakly ferruginous zone
20	<5	40	<0·5	19	<0·01		169 883	

horizontal

Ground Surface

JOINS PART 2

Assays in ppm unless noted otherwise

FIGURE 6 **Costean Line** 9 900N (part 1)

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846141

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costean profile

Project CYGNET **No** 84 - 111 C		**Commenced**	
Prospect BLACK JACK RIDGE		**Completed**	
Coordinates: **Line** 9900 N (part 2)		**Logged by**	P.A. JONES
10107E **to** 10137E		**Sample length**	2 metres
Total length 30 metres		**Scale**	1:100

Assays Analabs					AAS/FIRE	**Graphic geology**	Meterage/Sample No	Meterage — **Geologic description**
Cu	Pb	Zn	Ag	As	Au	← 2·5m →		5 cm ⟷
25	<5	55	<0·5	14	<0·01	horizontal / Ground Surface	169 884	Syenite, cw coarse grained homogenous, porphyritic (saridine)
								10 135 E
20	<5	60	<0·5	5	<0·01		169 885	
								Weakly ferruginous zone.
								10 140 E END OF TRENCH

Assays in ppm unless noted otherwise

FIGURE 6 **Costean Line** 9 900 N (part 2)

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costean profile

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Project CYGNET	**Nº** 84 - 111 C	**Commenced**	
Prospect BLACK JACK RIDGE		**Completed**	
Coordinates:	**Line** 9900 N. (part 1)	**Logged by**	P.A. JONES
	9990E to 10030E	**Sample length**	2 metres
Total length 40 metres		**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage	Meterage	Geologic description
Cu	Pb	Zn	Ag	As	Au	2·5m	Sample Nº		5 cm
100	10	20	<0·5	75	<0·01		169 851	9 990 E	Syenomonzonite, coarse grained, wkly pyritic, wkly altered grey, blocky minor goerthite veinleting sw-mw, trace chlorite, trace quartz veinleting.
65	<5	10	<0·5	72	<0·01	Ground horizontal	169 852		Monzonite, mod. to strongly altered (K-spar) cream orange beige coarse grained, goerthite veinleting abundant.
70	<5	10	<0·5	120	0·01	Surface	169 853	9 995 E	
90	5	10	<0·5	190	0·03		169 854		As above but more ferruginous, orange coloured.
80	<5	10	<0·5	180	0·03		169 855		
								10 000 E	
115	10	5	<0·5	1100	0·04		169 856		Ferruginous crush zone.
60	10	10	<0·5	840	0·03		169 857		Ferruginous zone
50	40	10	<0·5	820	0·05		169 858	10 005 E	
									Minor opaline qtz vein to 3mm width.
90	70	15	<0·5	1200	0·04		169 859		Monzosyenite, coarse grained HW-cw feldspathic porphyritic altered, minor goerthite staining beige cream coloured.
60	20	25	<0·5	740	0·02		169 860		Monzonite, orange cream, strongly altered, coarse grained locally strongly ferruginous.
								10 010 E	
75	10	25	<0·5	720	0·01		169 861		Locally very ferruginous brown/orange, massive clays
65	<5	15	<0·5	160	0·03		169 862		Monzonite, HW blocky siliceous, K-spar altered beige cream brown Ferruginous contact zone Syenomonzonite dyke, pyritic sw, containing xenoliths of pyritic siliceous sediment.
80	<5	40	<0·5	100	0·01		169 863	10 015 E	Monzonite, HW blocky strongly K-spar altered, cream.
80	10	25	<0·5	410	0·01		169 864		Syenomonzonite, brown coarse grained granular cw ferruginous.

Assays in ppm unless noted otherwise

JOINS PART 2

FIGURE 7

Costean Line 9900 N. (part 1)

CYPRUS

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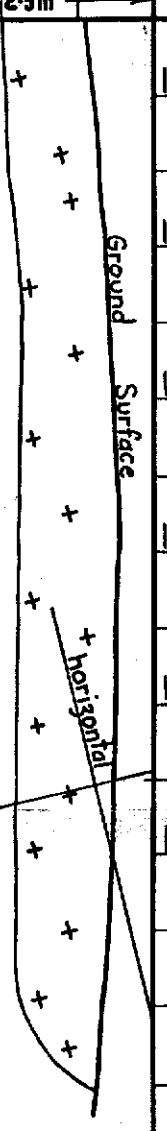
846143

costean profile

Project	CYGNET **No** 84 - 111 C	**Commenced**	
Prospect	BLACK JACK RIDGE	**Completed**	
Coordinates:	**Line** 9900N (part 2)	**Logged by**	P.A. JONES
	9990E **to** 10030E	**Sample length**	2 metres
Total length	40 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Sample No.	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2·5m →		5 cm ← →
65	15	15	<0·5	700	0·06		169 865	
								10 020 E Syenite, mw-hw altered porphyritic cream brown minor ferruginous sections.
40	15	20	<0·5	160	0·05		169 866	
45	<5	25	<0·5	100	0·03		169 867	
65	10	10	<0·5	760	0·03		169 868	10 025 E Syenite, becoming predominantly cw granular dark brown orange ferruginous/manganiferous, very homogeneous.
45	<5	15	<0·5	340	0·03		169 869	
60	10	15	<0·5	660	0·02		169 870	
								10 030 E END OF TRENCH



Assays in ppm unless noted otherwise

FIGURE 7 **Costean Line** 9900N (part 2)

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costean profile

Project CYGNET **No** 84 - 111 C	**Commenced**
Prospect BLACK JACK RIDGE	**Completed**
Coordinates: **Line** 9920 N 9964E to 9980E	**Logged by** P.A. JONES **Sample length** 2 metres
Total length 16 metres	**Scale** 1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage / Sample No	Meterage — Geologic description
Cu	Pb	Zn	Ag	As	Au	2·5m		5 cm
								9 964E
75	<5	15	<0·5	46	0·02		169 892	Pebbly mudstone, very ferruginous pyritic (blebby, disseminated) K-spar altered siliceous, minor pyritized shelly material, goerthite veining.
80	<5	20	<0·5	15	<0·01		169 893	
								Syenomouzonite, weakly ferruginous, veinleted, coarse grained, altered dyke.
80	<5	15	<0·5	21	<0·01		169 894	
								9 970E Pebbly mudstone, more ferruginous more siliceous.
65	<5	10	<0·5	12	<0·01		169 895	
65	10	25	<0·5	6	<0·01		169 896	Sediment, massive hard siliceous, pink to green, very pyritic altered, abundant veinleting, iron stained fracture surface.
80	<5	10	<0·5	9	0·02		169 897	9 975 E
60	<5	10	<0·5	5	<0·01		169 898	
								Weakly ferruginous, brecciated, silicified sediment. Syenomouzonite, dark grey, coarsely crystalline, hard, siliceous? K-spar altered.
60	<5	15	<0·5	5	<0·01		169 899	Pebbly mudstone, grey beige, massive, blocky fractured, pyritic weakly ferruginous, stained, veinleted, siliceous, K-spar altered, fossiliferous.
								9 980E
								END OF TRENCH

Ground Surface

Horizontal

Assays in ppm unless noted otherwise

FIGURE 8 **Costean Line 9920 N**

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costean profile

Project CYGNET **No** 84 - 111 C		**Commenced**	
Prospect BLACK JACK RIDGE		**Completed**	
Coordinates: **Line** 9987 N (part 1) 9922E to 9990E		**Logged by**	P.A. JONES
		Sample length	2 metres
Total length 68 metres		**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Sample No	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2·5m →		5 cm ← →
								9 920E
								Intrusive, cw orange brown silty clays after coarse grained porphyritic syenite? heavily kaolinitic potassic feldspars.
80	10	65	<0·5	9	0·03		169 780	
65	<5	20	<0·5	9	0·04		169 779	9 925 E
								Minor less weathered coarse grained granular syenite, porphyritic, ferromags oxidised to goerthite.
55	5	15	<0·5	8	0·03		169 778	
								Minor less weathered coarse grained granular syenite, porphyritic.
85	<5	25	<0·5	19	0·10		169 777	
								9 930E
70	<5	20	<0·5	25	0·08		169 776	Hornfelsed mudstone, weakly veinleted, moderately ferruginous, bleached white to pink siliceous, hornfelsed, veinlets goerthite filled, minor 'boxworks?'
95	<5	15	<0·5	19	0·06		169 775	
								Mudstone, weakly to moderately brecciated moderately to strongly silicified (patchy) weakly ferruginous, K-spar altered, cream/yellow, wkly fossiliferous
55	<5	25	<0·5	17	0·05		169 774	9 935 E
60	<5	10	<0·5	27	0·02		169 773	
								Mudstone, blocky fractured, grey, cream yellow weakly ferruginous, weakly fossiliferous, massive, minor fine sandstone interbeds.
65	<5	15	<0·5	27	0·03		169 772	Fracture 040°/87°S.
								9 940 E
55	<5	15	<0·5	20	0·05		169 771	
								More ferruginous blocky siltstone.
85	<5	20	<0·5	19	0·683 / 0·62		169 770	Mudstone siliceous brecciated weakly to moderately goerthite veinleted ferruginous, K-spar altered.
								Ferruginous crush zone.
80	<5	15	<0·5	12	0·12		169 769	9 945E
								Mudstone / Siltstone cream white grey, brecciated pebbly / gritty wkly fossiliferous green clay altered.
85	<5	20	<0·5	5	0·13		169 768	Siltstone gritty, massive blocky, white grey cream, minor green clay alteration?
								Bedding 120°/17°S.

Ground Surface

Joins Part 2

Assays in ppm unless noted otherwise

FIGURE 9

Costean Line 9 987N (part 1)

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costean profile

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Project CYGNET	**No** 84 - 111 C	**Commenced**	
Prospect BLACK JACK RIDGE		**Completed**	
Coordinates:	**Line** 9987 N (part 2)	**Logged by**	P.A. JONES
	9922E to 9990E	**Sample length**	2 metres
Total length 68 metres		**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Metres	Meterage / Sample No	Joins part 1 — Geologic description (5 cm)
Cu	Pb	Zn	Ag	As	Au	← 2·5m →			
65	<5	15	<0·5	7	0·34			169 767	Siltstone, brecciated, wkly ferruginous, green clay altered increasing
									9950E
95	20	20	<0·5	17	0·07			169 766	
									Mudstone, moderate to strongly siliceous very ferruginous moderately green clay altered, clotty textured, fossiliferous, orange brown coloured.
60	<5	15	<0·5	10	0·14			169 765	
45	5	15	<0·5	7	0·10			169 047	9955E
									shells/ferns ↓ Well bedded gr cr modular wkly fossil mod to highly limonitic stained siltn/mudstone weakly kaolinized, blocky appearance due to jointing — Bedding 151°/11°S. Joint 239°/88°NW
135	5	15	<0·5	24	0·13			169 046	
									Limonite/goerthite filled shear zone 15° trend. Bedding 130°/10°S.
90	5	10	<0·5	13	0·01			169 045	
									Minor zones of increased ferruginisation limonitic thru shear zone trends 180°
									9960E
65	<5	15	<0·5	5	0·05			169 044	
									Prominent joint 160°/48°E in floor, 76°/69°N on wall.
90	<5	15	<0·5	10	0·06			169 043	
									Limonite interface between soil and rock Bedding 75°/15°S.
95	5	15	<0·5	15	0·15			169 042	Prominent joint 205°/V cut by conjugate set 116°/70°NE blocky parting.
									9965E
75	5	15	<0·5	21	0·02			169 041	Zone of silicification and ferruginisation; modular sltn cooked/baked purply brn K-spar alt? silicif, high % goerthite.
									Cut by shear zone 196°/70°E limonite filled.
45	<5	10	<0·5	29	<0·01			169 040	Baked siltn - beige/cr massive Prom joint 262°/87°N semi // trench - conjugate set 166°/86°W
									9970E
40	<5	10	<0·5	34	<0·01			169 039	Pred ferrug modular, wkly fossil gr cr siltn/mudstone.
65	<5	20	<0·5	29	0·01			169 038	Prom joint 032°/66°SE Zone of increased ferruginisation and crushing (blocky) Bedding 101°/26°S.
55	<5	10	<0·5	20	0·03			169 037	9975E
60	<5	15	<0·5	21	0·05			169 036	Limonite filled shear zone trending 195° dipping steep E.

Graphic geology: horizontal; Ground Surface; 9960E; SKELETAL; ALTERED ZONE; SOILS; 9970E

Assays in ppm unless noted otherwise

JOINS PART 3

FIGURE 9 **Costean Line 9987 N** (part 2)

CYPRUS

846147

costean profile

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Project CYGNET **No** 84 - 111 C	**Commenced**
Prospect BLACK JACK RIDGE	**Completed**
Coordinates: **Line** 9987 N (part 3) 9922E to 9990E	**Logged by** P.A. JONES
	Sample length 2 metres
Total length 68 metres	**Scale** 1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage / Sample No.	Meterage — Joins part 2 — Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2.5m →		5 cm
80	<5	15	<0.05	31	0.04		169 035	
						9980E		Bedding 108°/27°S.
								9 980 E
105	<5	15	<0.05	94	0.04		169 034	Partial silicification of silt/mudstone, mod/strong ferruginisation but patchy.
								Bedding 84°/6°S.
125	<5	15	<0.05	190	<0.01		169 033	Patchy altn (silicif K-spar) with patchy ferrug.
170	<5	15	<0.05	420	0.08		169 032	9 985 E Limonite filled shear zone 207° trend. Increasing alter and ferrug, minor fine stockworking goethite filled veins (7 to inch) in baked or yell. orange siltn? mudstone.
115	<5	20	<0.05	102	0.02	SKELETAL SOILS / Ground Surface	169 031	Possible kaolin altn? as above very clayey not silicified.
								Prom. joint 242°/76°NW
60	<5	15	<0.05	81	<0.01		169 030	Org yell or soft HW siltn/mudstone
						9990E		9 990 E
								END OF TRENCH

Assays in ppm unless noted otherwise

FIGURE 9 **Costean Line** 9987 N (part 3)

costean profile

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Project CYGNET	**No** 84 - 111 C	**Commenced**	
Prospect BLACK JACK RIDGE		**Completed**	
Coordinates:	**Line** 10100N (part 1)	**Logged by**	P.A. JONES
	9970E to 10050E	**Sample length**	2 metres
Total length 80 metres		**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage / Sample No	Meterage — Geologic description (5 cm)
Cu	Pb	Zn	Ag	Au	As			
								9 970 E
35	<5	15	<0·5	<0·01	3		169 089	possible bedding 074°/23°S
								Predominantly limonitic stained NW siltstones and mudstones.
125	<5	10	<0·5	<0·01	5		169 090	prominent joint 247°/84°W
120	<5	15	<0·5	<0·01	17		169 091	
								Slightly more ferrug. and crushed.
40	<5	15	<0·5	<0·01	6		169 092	
65	<5	15	<0·5	<0·01	9		169 093	Contact 150°/60°E with intrusive and altered sediments
							9 980 E	Prominent jointing 156°/70°E rock quite blocky, bleached white light grey massive mudstone? joint face silica coated?
65	<5	15	<0·5	0·01	24		169 094	Shear zone 160°/69°E green clay filled and 6cm width, V ferrug. shear zone.
								prominent joint 51°/V
90	<5	20	<0·5	<0·01	16		169 095	Green clay alteration in kaolinitic and grnd (W?) intrusive
180	<5	20	<0·5	<0·01	13		169 096	Sheared and alt. ferrug. intrusive
								Shear zone 149°/74° strongly ferrug.
								Mod/strongly ferrug. very alt kaolinitic (CW?) intrusive cut by numerous thin ferrug. veinlets.
180	<5	40	<0·5	0·05	24		169 097	Massive concoidal fractured hematitic ironstone, minor banded goerthitic I/S and v minor v alt. intrusive (kaolinitic) inclusions.
								Alt. mon3 porphyry becomes prog. more ferrug until ironstone contact at 88·2m
60	<5	25	<0·5	0·04	6		169 098	joint 092°/66°S
							9 990 E	
80	<5	25	<0·5	0·17	5		169 099	Prominent contact 336°/36°E lammar goerthitic = 2cm width. FW to it is highly alt. (resistant) porphyritic monzonite? H/S2 intrusive (K-spar) mod. ferrug.
								joint 084°/82°N
95	1·5	25	<0·5	0·01	4		169 100	
								CW intrusive move coarser grained and gr, rusty brown mottled colour.
130	<5	25	<0·5	0·05	1		169 101	
								Limonitic clay filled shear trending 135°/85°NE zone 2m either side brecciated and mod. to strongly ferruginous.
110	10	25	<0·5	0·09	7		169 102	
								Pred. med grnd CW cream yell weakly ferrug. massive intrusive? containing MW relict boulders of grey pyritic biotitic med grained wkly porphyritic monzonitic?
85	<5	30	<0·5	<0·01	3		169 103	10 000 E

Graphic geology: 1m; 9970 E; Ground Surface; SKELETAL SOILS; horizontal; 9980E; 9990E

Assays in ppm unless noted otherwise

JOINS PART 2

FIGURE 10

Costean Line 10100N (part 1)

CYPRUS

846149

costean profile

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Project CYGNET	**Nº** 84 - 111 C	**Commenced**	
Prospect BLACK JACK RIDGE		**Completed**	
Coordinates:	**Line** 10100N (part 2)	**Logged by**	P.A. JONES
	9970E **to** 10050E	**Sample length**	2 metres
Total length 80 metres		**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology (2.5m)	Sample Nº	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au			
								Monzonite? cw orange yellow coarse grained, porphyritic. granular clays.
								10 000E
70	10	15	<0.5	14	0.05		169 740	
								Mudstone, wkly ferruginous, fossiliferous, bleached, altered, minor silicification goerthite infilling of fossil casts.
70	<5	15	<0.5	17	0.05		169 741	Moderately to strongly ferruginous, mod silicified, green clay altered, boxworked? pebbly bleached white cream orange mudstone. very fossiliferous.
								Mudstone, bleached, kaolinitic weakly ferruginous. Bedding 266°/14°S
50	10	30	<0.5	23	0.17		169 742	10 005E
								Intrusive cw orange/yellow/cream gritty clays, porphyritic, trends 140° mag.
50	<5	15	<0.5	7	0.17		169 743	
95	<5	25	<0.5	20	0.09		169 744	
								10 010E Highly ferruginous pebbly mudstone, silicified, Kspar altered, fossiliferous
75	<5	10	<0.5	10	0.13		169 745	goerthitic, boxworked, minor siltstone, white yellow to ferruginous red brown.
130	<5	15	<0.5	27	0.35		169 746	
								Mudstone more red/brown, weakly goerthitic stockworked, fractured, altered, silicified, siltstone minor fine sandstone.
85	<5	15	<0.5	13	0.11		169 747	10 015E
								Mudstone, white cream, weakly ferruginous, clay altered, minor green clay, weakly goerthitic, minor brecciation.
50	<5	20	<0.5	6	0.23		169 748	
								Moderately ferruginous crush zone in beige honey brown mudstone.
55	<5	20	<0.5	10	0.23		169 749	
								10 020E Siltstone, kaolinitic wkly fossiliferous, cream massive, jointed
50	<5	30	<0.5	7	0.10		169 750	Highly fossiliferous mudstone, fossil fragments highly limonitic.
60	<5	20	<0.5	9	0.12		169 751	Ferruginous crush zone.
115	<5	10	<0.5	9	0.25		169 752	10 025E
								Mudstone, highly ferruginous orange red brown cream silicified Kspar altered, goerthite replacing mudstone fabric, moderately to highly
125	<5	10	<0.5	57	0.24		169 753	fossiliferous.
85	<5	10	<0.5	6	0.07		169 754	

Assays in ppm unless noted otherwise

JOINS PART 3

FIGURE 10 **Costean Line** 10100N (part 2)

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846150

costean profile

Project CYGNET **No** 84-111C	**Commenced**
Prospect BLACK JACK RIDGE	**Completed**
Coordinates: **Line** 10100N (part 3) 9970E to 10050E	**Logged by** P.A. JONES
	Sample length 2 metres
Total length 80 metres	**Scale** 1:100

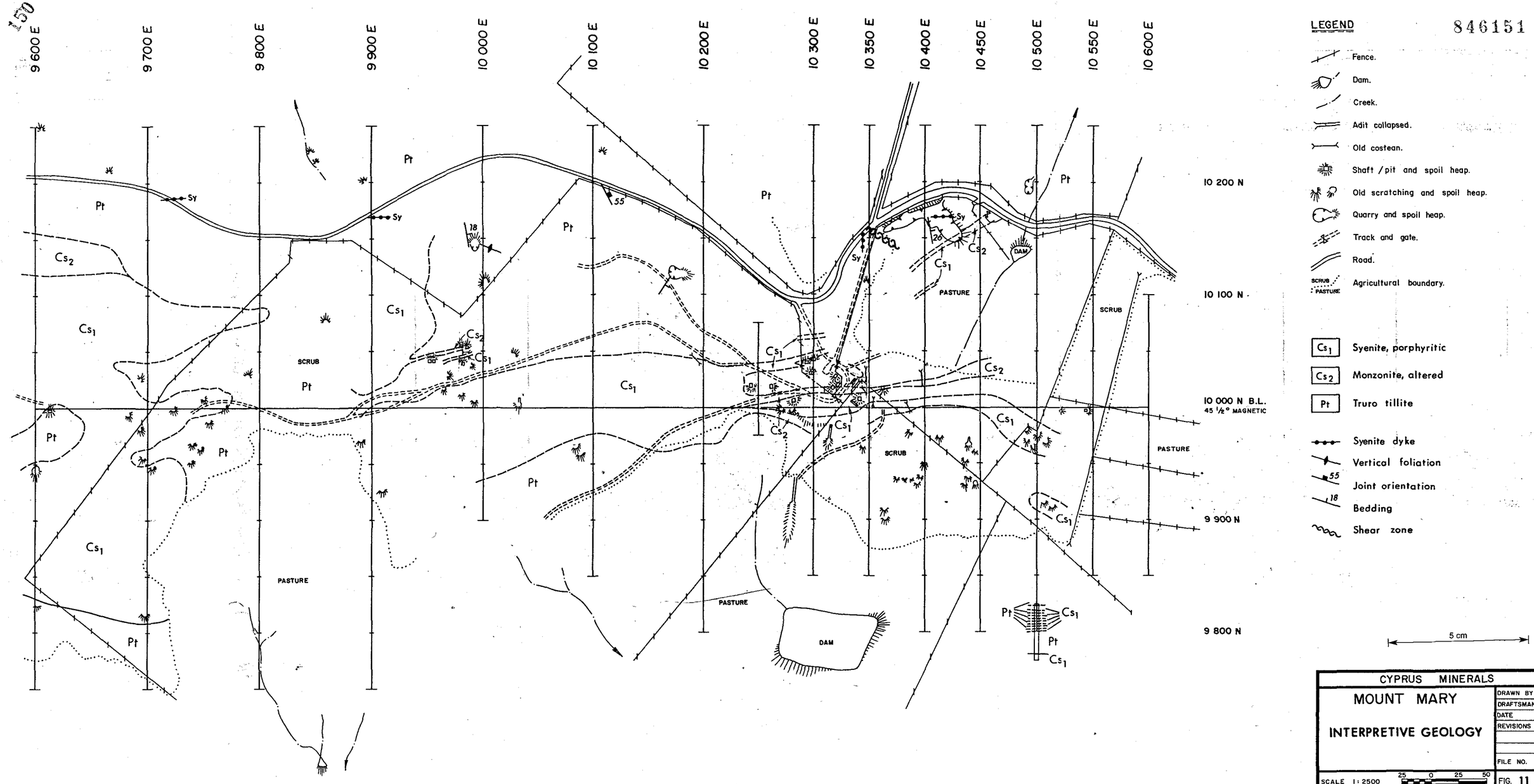
Assays Analabs					AAS/FIRE	Graphic geology (2·5m)	Meterage Sample No	Meterage / Geologic description (5 cm)
Cu	Pb	Zn	Ag	As	Au			
								Mudstone, highly ferruginous.
								10 030E
55	<5	15	<0·5	20	0·15		169 755	
								Mudstone, fractured, weakly ferruginous goerthite veinleted mod. to strongly green clay altered, wkly fossiliferous, pebbly, sedimentary structures evident
45	<5	20	<0·5	5	0·13		169 756	
120	5	15	<0·5	11	0·22		169 757	Porphyritic, Intrusive, cw yellow beige clays, relict coarse grained texture minor red ferruginous sections over 20 cms.
								10 035E
195	10	25	<0·5	95	0·16		169 758	PIT
125	5	15	<0·5	62	0·08		169 759	
								10 040E
90	<5	15	<0·5	36	0·08		169 760	Mudstone, very ferruginous, goerthite veined weakly to moderately stock-worked siliceous, Kspar altered, relict fossils, orange red brown coloured. Weakly brecciated, gritty.
115	5	15	<0·5	39	0·16		169 761	
120	10	25	<0·5	47	0·06		169 762	10 045E
								Intrusive porphyry, cw orange yellow brown massive coarse grained textured, clays.
135	5	20	<0·5	35	0·04		169 763	
180	5	15	<0·5	22	0·12		169 764	
								10 050E
								END OF TRENCH

Ground Surface

horizontal

Assays in ppm unless noted otherwise

FIGURE 10 **Costean Line** 10100N (part 3)



LEGEND

846151

- Fence.
- Dam.
- Creek.
- Adit collapsed.
- Old costean.
- Shaft / pit and spoil heap.
- Old scratching and spoil heap.
- Quarry and spoil heap.
- Track and gate.
- Road.
- SCRUB / PASTURE — Agricultural boundary.

- Cs_1 — Syenite, porphyritic
- Cs_2 — Monzonite, altered
- Pt — Truro tillite

- Syenite dyke
- Vertical foliation
- 55 — Joint orientation
- 18 — Bedding
- Shear zone

5 cm

CYPRUS MINERALS

MOUNT MARY

INTERPRETIVE GEOLOGY

DRAWN BY : P.J.
DRAFTSMAN: T.G.D.S.
DATE : Feb. '87
REVISIONS :
FILE NO.

SCALE 1 : 2500 — 25 0 25 50 METRES

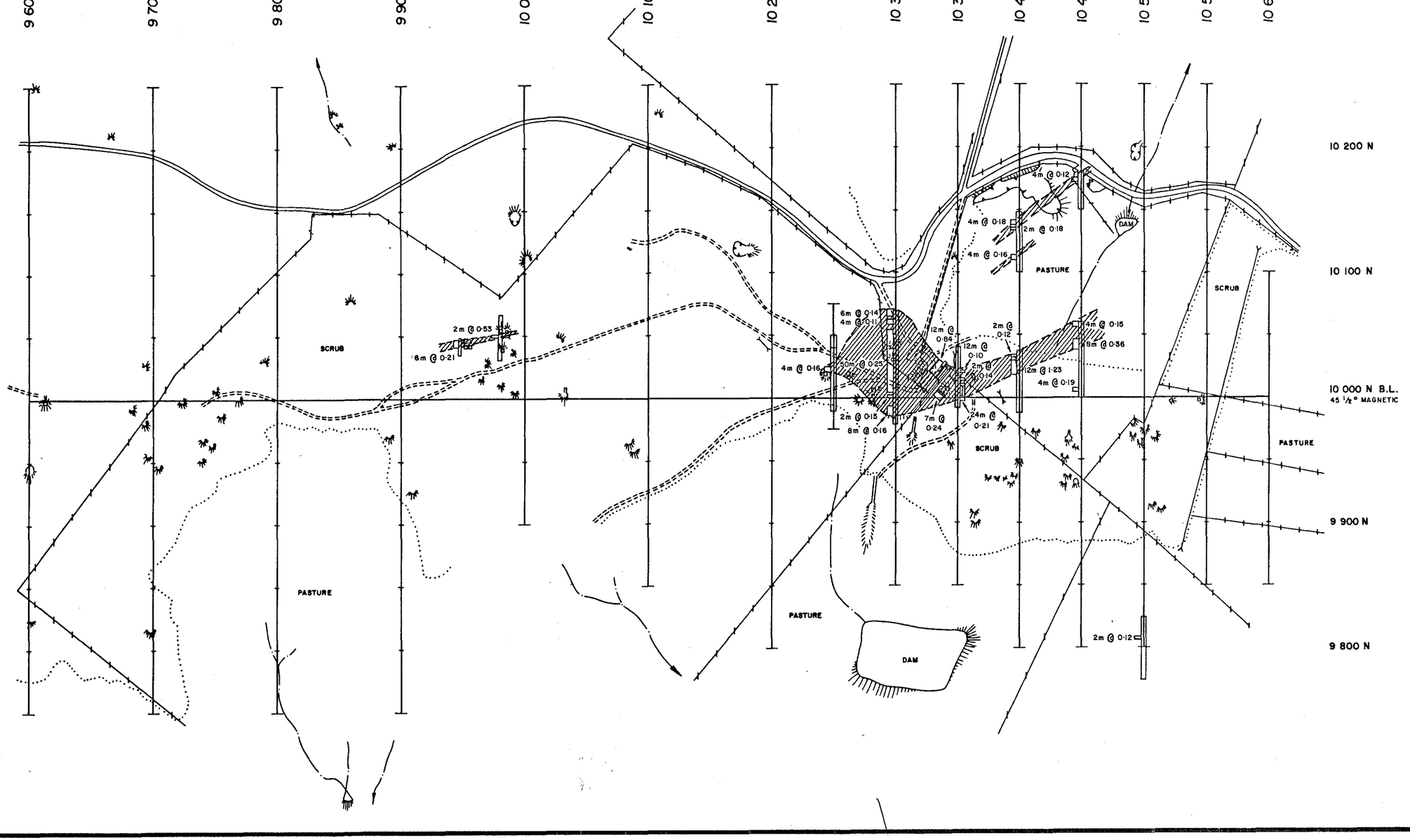
FIG. 11

151

846152

9 600 E
9 700 E
9 800 E
9 900 E
10 000 E
10 100 E
10 200 E
10 300 E
10 350 E
10 400 E
10 450 E
10 500 E
10 550 E
10 600 E

10 200 N
10 100 N
10 000 N B.L.
45 ½° MAGNETIC
9 900 N
9 800 N



LEGEND

- Fence.
- Dam.
- Creek.
- Adit collapsed.
- Old costean.
- Shaft / pit and spoil heap.
- Old scratching and spoil heap.
- Quarry and spoil heap.
- Track and gate.
- Road.
- SCRUB / PASTURE — Agricultural boundary.

5 cm

CYPRUS MINERALS

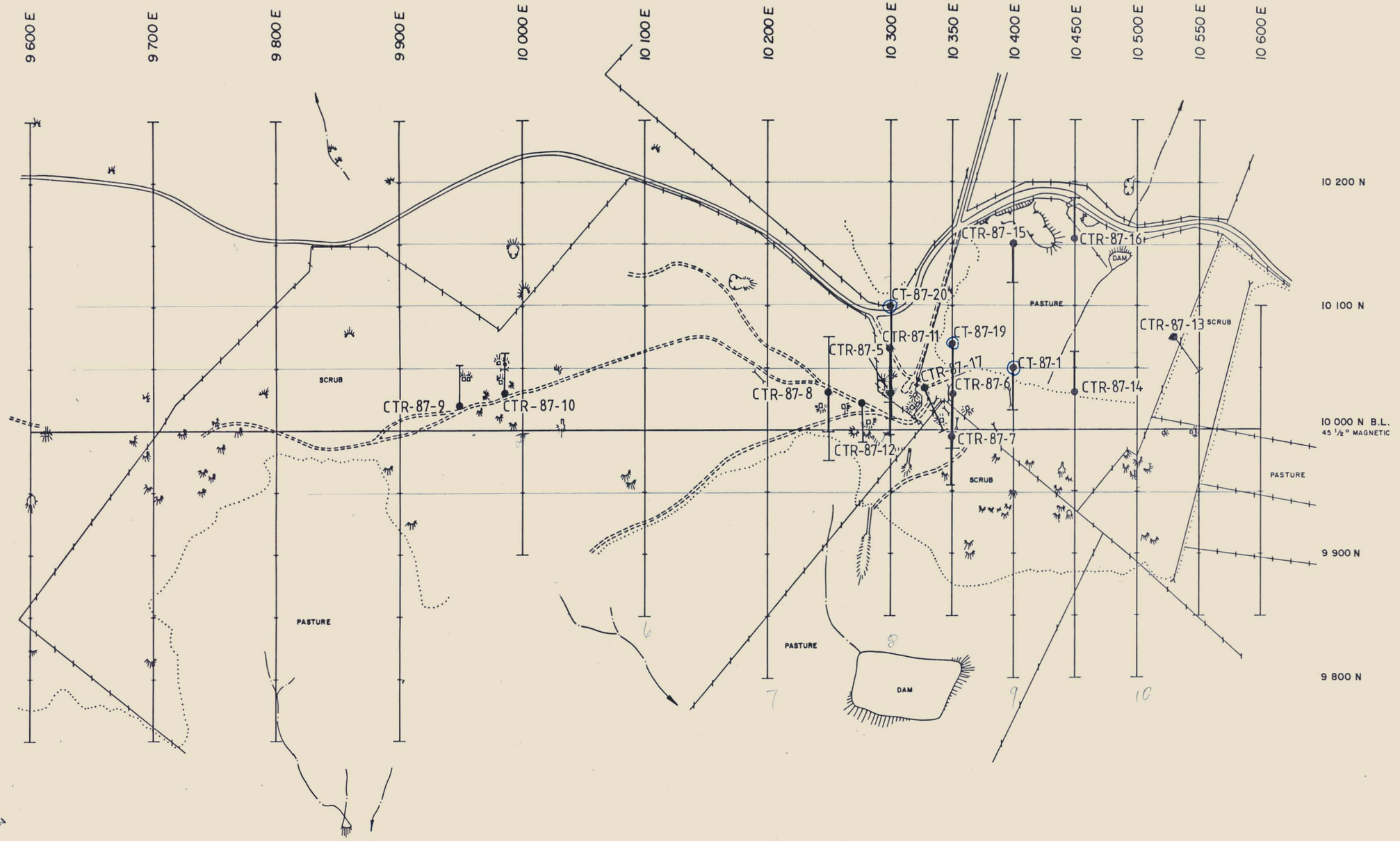
MOUNT MARY

COSTEAN LOCATIONS AND SIGNIFICANT RESULTS (>0·10 g/t Au)

DRAWN BY : P.J.
DRAFTSMAN: T.G.D.S.
DATE : Feb. '87
REVISIONS :
FILE NO.

SCALE 1 : 2500 — 25 0 25 50 METRES

FIG. 12



LEGEND

- Fence.
- Dam.
- Creek.
- Adit collapsed.
- Old costean.
- Shaft / pit and spoil heap.
- Old scratching and spoil heap.
- Quarry and spoil heap.
- Track and gate.
- Road.
- SCRUB / PASTURE — Agricultural boundary.

CT Diamond Hole

CTR Percussion Hole

5 cm

CYPRUS MINERALS

MOUNT MARY

DRILLHOLE LOCATIONS

DRAWN BY : P.J.

DRAFTSMAN : T.G.D.

DATE : Feb. '

REVISIONS :

FILE NO.

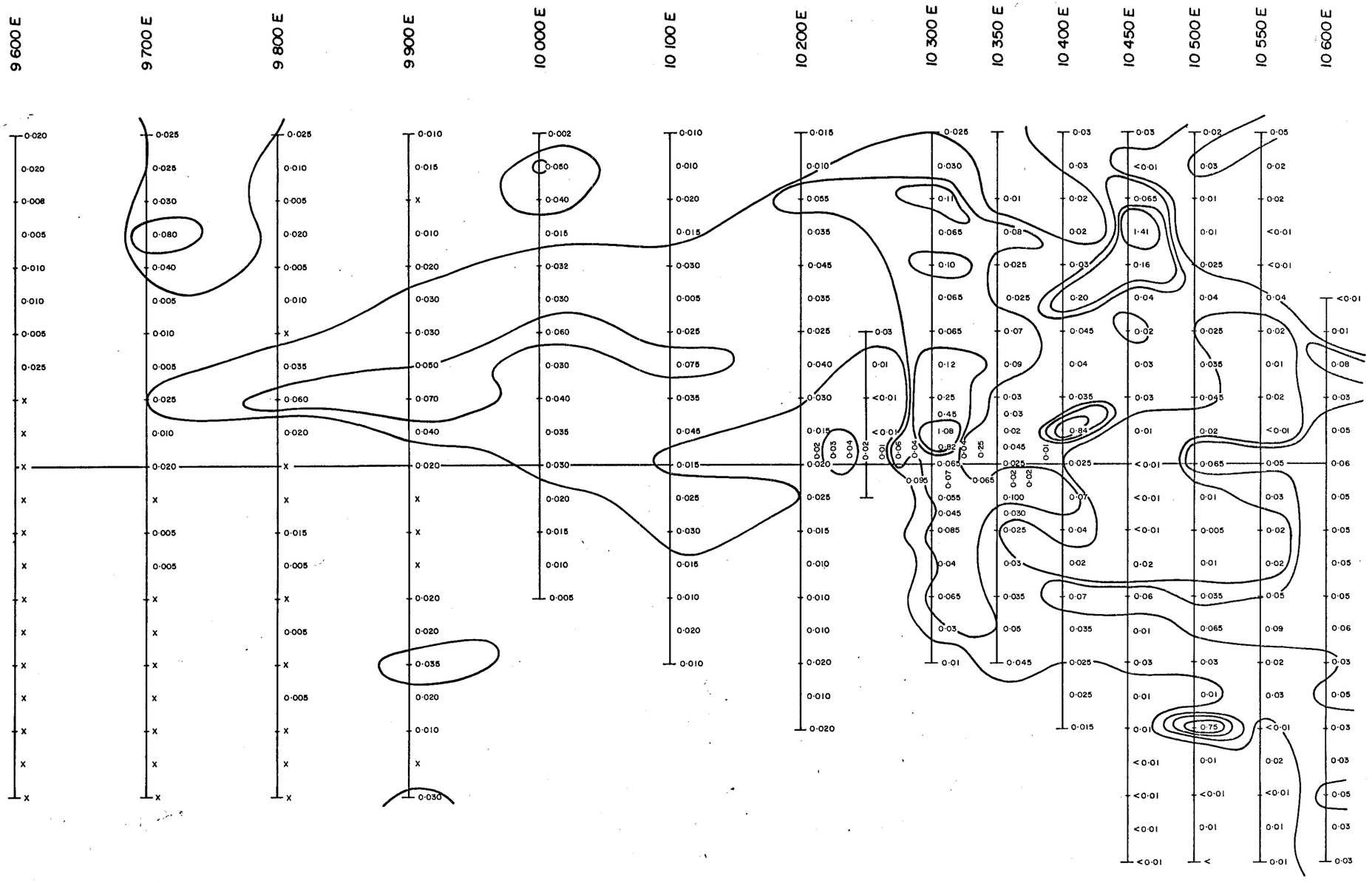
SCALE 1 : 2500 — 25 0 25 50 METRES

FIG. 13

846153

152

846154



Contour Interval = 0·025, 0·05, 0·1, 0·5 etc.

5 cm

CYPRUS MINERALS

MOUNT MARY

GOLD

GEOCHEMISTRY

DRAWN BY : P.J.
DRAFTSMAN: T.G.D.S.
DATE : Mar. '87
REVISIONS :

FILE NO.

SCALE 1 : 2500 25 0 25 50 METRES

FIG. 14

837

846155

CYPRUS

costean profile

154

Project CYGNET **No** 84-111C		**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates: **Line** 9980 E (part 1) 10030 N **to** 10066 N		**Logged by**	P.A. JONES
		Sample length	2 metres
Total length 36 metres		**Scale**	1:100

Assays Analabs Cu	Pb	Zn	Ag	As	AAS/FIRE Au	Graphic geology ←2·5m→	Meterage Sample No	Geologic description (5 cm)
								10 066 N
45	55	185	<0·5	4	0·02		169 739	Mudstone, purple, black gritty hornfelsed, minor epidote.
								Mudstone, green brown cw clays.
50	55	200	<0·5	5	0·01		169 738	
								Mudstone, purple black gritty hornfelsed, fractured ground, jointed minor chlorite clots.
50	125	395	<0·5	4	0·01		169 737	
								10 060 N
50	70	380	<0·5	5	0·02		169 736	
35	55	495	<0·5	8	0·01		169 735	
								Possible bedding 140°/10°W. Joint 273°/84°S.
40	140	770	<0·5	5	<0·01		169 734	10 055 N
60	180	980	<0·5	6	0·03		169 733	
80	925	1200	<0·5	5	0·03		169 732	
								10 050 N Purple hornfelsed mudstone turns brown, clayey at contact zone.
190	2250	920	0·5	18	0·68 / 0·53		169 731	Monzonite porphyry HW altered ferruginous orange yellow cream. trace goethite veining.
								Ferruginous contact - shear zone
								Gritty altered mudstone.
55	45	495	<0·5	4	0·03		169 730	Orange cw clay.
								Mudstone, HW purple gritty hornfelsed.
60	180	445	<0·5	3	0·03		169 729	10 045 N
95	80	1400	<0·5	7	0·03		169 728	
								Intrusive HW-CW coarse grained granular textured orange mottled brown.
60	30	705	<0·5	5	<0·01		169 727	
								10 040 N Mudstone, hornfelsed, purple grey, highly fractured, gritty Fracture 292°/V. Fracture 215°/76°S.
40	30	540	<0·5	6	0·02		169 726	

Ground Surface

Horizontal

JOINS Part 2

Assays in ppm unless noted otherwise

FIGURE 15 Costean Line 9980 E (part 1)

CYPRUS

155

846156

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 9980E (part 2) 10030N to 10066N	**Logged by**	P.A. JONES
		Sample length	2 metres
Total length	36 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage Sample No	Meterage Joins part 1 — Geologic description
Cu	Pb	Zn	Ag	As	Au	2·5m		5 cm
55	35	560	<0·5	8	0·01		169725	
								Mudstone, gritty purple, fractured, blocky hornfelsed. minor sandstone.
60	40	700	<0·5	8	<0·01		169724	10035N Becoming less altered ↓ or hornfelsed.
105	45	710	<0·5	7	0·05		169723	Mudstone greeny brown HW. gritty. Mottled dark brown CW clays.
								Mudstone grey pink pebbly.
								Mudstone grey beige
60	20	1300	<05	7	<0·01		169722	Weakly ferruginous cherty altered mudstone.
								Mudstone pebbly grey brown.
								10030N

horizontal

Ground Surface

Assays in ppm unless noted otherwise

FIGURE 15 **Costean Line** 9980E (part 2)

CYPRUS

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846157

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10250E (part 1) 9990N to 10050N	**Logged by**	R.A. JONES
		Sample length	2 metres
Total length	60 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage Sample No	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2·5m →		5 cm ← →
								10050N
25	35	180	<0·5	13	0·06		169682	
								Mudstone? mottled grey brown orange massive fat clays, weak veining.
20	30	140	<0·5	9	0·05		169681	
15	25	135	0·5	13	0·02		169680	10045N Mudstone? mottled olive grey orange massive fat clays, relict porphyritic intrusive fragments?
15	15	120	<0·5	7	0·01		169679	
15	25	135	<0·5	5	0·02		169678	Mudstone, weakly brecciated, pebbly, CW, containing quartzite, shale, and porphyry fragments, predominantly rounded set in silt/clay matrix, mottled grey olive orange.
								10040N
25	30	140	0·5	8	0·03		169677	
								Mudstone, moderate calcite veined, brecciated grey MW to HW altered cooked mudstone.
60	40	195	0·5	6	0·01		169676	Baked gritty mudstone. Fracture 57°/76°N.
55	35	200	<0·5	3	<0·01		169675	10035N Syenite dyke, grey green v porphyritic, coarse grained, HW surface envelope, equigranular, sub parell to trench.
50	25	215	<0·5	2	0·01		169674	Fracture 135°/75°W.
55	35	155	0·5	4	0·01		169673	
								10030N Joint? Fracture? 132°/75°SW.
25	35	160	<0·5	7	0·01		169672	Mudstone pebbly weakly hornfelsed.
								NB: Syenite dyke on west wall
20	25	135	<0·5	6	0·05		169671	Fractured grey brown pebbly mudstone HW.
								Syenite dyke - sub parallel to trench!
30	30	120	<0·5	16	0·06		169670	10025N
								Mougonite, altered weakly ferruginous, dyke.
50	20	115	<0·5	87	0·20		169669	Intensely brecciated moderately ferruginous shear zone altered sediments predominant.

Ground Surface Horizontal

Assays in ppm unless noted otherwise

JOINS PART 2

FIGURE 16 **Costean Line** 10250E (part 1)

CYPRUS

157

846158

costean profile

Project CYGNET **No** 84-111C	**Commenced**
Prospect MOUNT MARY	**Completed**
Coordinates: **Line** 10250E (part 2) 9990N to 10050N	**Logged by** P.A. JONES
	Sample length 2 metres
Total length	**Scale** 1:100

Assays Analabs Cu	Pb	Zn	Ag	As	AAS/FIRE Au	Graphic geology	Sample No.	Meterage / Geologic description
						2.5m		Joins part 1 — 5 cm
50	30	205	0.5	56	0.11		169668	Ferruginous shear zone
								Less ferruginous, less brecciated altered mudstone
								10 020 N
35	20	215	<0.5	12	0.09		169667	
25	20	185	<0.5	10	0.05	Ground	169666	Mudstone, mottled grey green brown massive fat cw clays, pebbly.
25	25	160	<0.5	9	0.03		169665	10 015 N
						Surface		
40	20	215	<0.5	8	0.03		169664	
30	25	210	<0.5	8	0.06		169663	~~Mottled orange~~ brown grey fat massive brecciated mudstone.
								10 010N Mudstone, stockworked (kaolin infilled) epidotitic.
15	20	175	0.5	4	0.07		169662	
								Intrusive, altered epidotitic, moderately ferruginous monzonitic intrusive
								Fracture 140°/78°NE.
								Fracture 087°/67°S.
15	25	85	<0.5	7	0.02	ROAD	169661	
								Intrusive, moderately to strongly epidotitic, chloritic and ferruginous.
15	25	65	<0.5	6	0.02		169660	10005N Weakly ferruginous, coarse grained monzonite
								Shear zone, cream, mottled orange. Fracture 132°/V.
								Fracture 262°/V.
30	25	75	<0.5	6	0.07		169659	
								Mudstone, weakly ferruginous, highly fractured, pebbly, qtz-felds fragments.
45	25	175	0.5	7	0.06	Horizontal	169658	Mudstone, stockworked, carbonate infilled, epidote altered, pebbly; cobble sized fragments including ferruginous qtz, quartzite and ℇ porphyry.
								10 000 N
45	35	145	<0.5	9	0.06		169657	Mudstone, less stockworked grey olive pebbly.
								Monzonitic Intrusive, brecciated, very ferruginous epidotitic, kaolinitic.
45	35	155	<0.5	7	0.06		169656	
								Mudstone, stockworked epidote altered brecciated, grey olive.
45	40	250	0.5	5	0.04		169655	9995N Mudstone, mottled, moderately ferruginous, brecciated veined, pebbly grey olive brown, weak stockworking.
50	50	300	0.5	4	0.03		169654	
								Mudstone, greeny grey, brecciated, weakly veined pebbly (qtzite, micaceous)

Assays in ppm unless noted otherwise

JOINS PART 3

FIGURE 16 **Costean Line 10250E (part 2)**

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846159

costean profile

Project CYGNET **No** 84-111C	**Commenced**
Prospect MOUNT MARY	**Completed**
Coordinates: **Line** 10250E (part 3) 9990N **to** 10050N	**Logged by** P.A. JONES
	Sample length 2 metres
Total length	**Scale** 1:100

Assays Analabs					AAS/FIRE	**Graphic geology**	~~Meter-age~~ Sample No	Meterage Joins part 2 **Geologic description**
Cu	Pb	Zn	Ag	As	Au	2·5m		5 cm
50	55	330	0·5	9	0·02	Ground, Horizontal, Surface	169653	
								9990 N

Assays in ppm unless noted otherwise

FIGURE 16 **Costean Line** 10250E (part 3)

CYPRUS

159

846160

costean profile

Project CYGNET	**No** 84 - 111 C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10300E (part 1)	**Logged by**	P.A. JONES
	9980N **to** 10070N	**Sample length**	2 metres
Total length	90 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage Sample No	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2·5m →		5 cm ← →
								10070N
15	65	105	0·5	7	0·11		169 649	Mudstone, mottled grey orange brown cw weakly pebbly/gritty.
								Shear zone? white to cream, minor grey orange mottled porous breccia, kaolinitic
15	55	105	0·5	4	0·20		169 648	
								Mudstone? mottled dark grey orange, minor carbonate? veining, massive clays.
15	66	120	0·5	6	0·12		169 647	10065N
								Shear zone, white, olive grey kaolinitic shear, <20cm wide, sub vertical.
20	100	135	<0·5	8	0·08		169 646	
								Syenite? orange, grey, cw clays, textureless, possible carbonate veining.
20	60	155	0·5	6	0·12		169 645	Mudstone. pebbly massive grey orange cw clays (qtzite pebbles). Syenite. mottled orange grey cw clays, textureless, possible veining.
								10060N Mudstone, massive grey orange fat cw clays gritty.
20	70	170	0·5	5	0·10		169 644	Shear zone, white cream kaolinitic ≃ 15cm wide.
25	60	170	<0·5	7	0·09		169 643	Syenite porphyry, mottled light grey/orange/olive cw clays - intrusive? Shear white, kaolinitic.
								Sediment? mottled orange dark grey moderately ferruginous fat textureless clays, speckled white due to kaolinized grit?
35	90	230	<0·5	8	0·01		169 642	10055N
								Shear zone white beige <5cm width, kaolinitic.
30	95	250	0·5	5	0·11		169 641	
								Sediment? relict syenite boulder? in fat massive black grey mottled orange clays, minor speckled white.
30	110	245	<0·5	7	0·10		169 640	Minor quartzite grit in cw clays. - pebbly mudstone.
								10050N
25	130	190	0·5	8	0·15		169 639	Sediment reddish brown phyllitic quartzite pebbles in dark grey mottled orange fat clays. Brecciated sediment, mottled light grey olive.
								Mudstone? massive fat dark grey orange olive cw clays.
40	150	265	<0·5	10	0·11		169 638	Brecciated grey olive massive fat clays overlain by syenite.
								* TRENCH OFFSET 5m TO SOUTHWEST TO 10045N AVOID SHAFT
45	135	265	0·5	6	0·36		169 652	Monzonite, very ferruginous HW fractured, epidotized altered. Sediment grey olive, brecciated. Syenite. MW fine grained porphyritic (Sanidine) grey green with coarse grained HW to CW granular syenite envelope.

Forestonfal

Ground Surface

JOINS PART 2

Assays in ppm unless noted otherwise

FIGURE 17 **Costean Line 10300 E (part 1)**

CYPRUS

160

846161

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10300E (part 2)	**Logged by**	P.A. JONES
	9980N **to** 10070N	**Sample length**	2 metres
Total length	90 metres	**Scale**	1:100

Assays Analabs Cu	Pb	Zn	Ag	As	AAS/FIRE Au	Graphic geology (2·5m)	Meterage / Sample No	Geologic description
40	85	325	<0·5	6	0·18		169 651	* TRENCH OFFSET 5m SOUTHWEST TO AVOID SHAFT — Mudstone, brecciated weakly stockworked olive grey weakly ferruginous
30	100	340	1·0	7	0·23		169 650	Minor epidote alteration
							10 040 N	↓ increasing stockworking, epidote alteration, increasing brecciation
40	320	365	0·5	6	0·13		169 637	small lens of monzonite
								Brecciated mudstone.
50	230	370	0·5	8	0·15		169 636	Mudstone less brecciated gritty cw dark brown beige
55	235	500	<0·5	7	0·15		169 635	Syenite dyke, ferruginous mottled orange/white/brown cw coarse grained.
							10 035 N	Mudstone, moderately brecciated gritty cw dark brown olive, minor pebbles. Ferruginous shear.
50	270	680	0·5	9	0·30		169 634	FILL (Shaft mullock)
50	250	760	<0·5	4	0·21		169 633	Mudstone, brecciated hard, massive fat clays cw weakly ferruginous gritty.
							10 030 N	Increasing ferruginization, more brecciated
55	370	965	<0·5	4	0·21		169 632	
								Mudstone less brecciated massive textureless olive dark grey clays.
70	335	865	0·5	6	0·22		169 631	Possible ferruginous shear zone.
								Mudstone, carbonate stockworked, brecciated grey pebbly HW.
50	1010	625	1·0	21	0·26		169 630	10 025 N
								Major very ferruginous brecciated zone, large and small angular frags, set in dark brown clay matrix
85	250	1300	0·5	4	0·21		169 629	Mudstone, brecciated, pebbly HW-CW dark grey to grey angular breccia fragments.
65	635	780	0·5	12	0·12		169 628	
							10 020 N	
65	525	1350	<0·5	11	0·09		169 627	Decreasing ↑ stockworking
90	250	1350	<0·5	0·43 / 7·52	0·43 / 0·52		169 174	
80	320	900	<0·5	5	0·97 / 0·90		169 173	10 015 N — Heavily stockworked (carbonate/clay) pebbly mudstone, weak to moderate ferruginization and epidote veining. Numerous 1-2 cm wide calcite-clay filled veins.

Ground Surface

Horizontal

5 cm

Joins part 1

Joins part 3

Assays in ppm unless noted otherwise

FIGURE 17

Costean Line 10300E (part 2)

CYPRUS

161

846162

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10300E (part 3) 9980N **to** 10070N	**Logged by**	P.A. JONES
		Sample length	2 metres
Total length	90 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology (2·5m)	Sample No	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au			Joins part 2 — 5 cm
90	590	870	<0·5	7	0·40/0·48		169172	Contact zone (calcite altered, brecciated) between stockworked mudstone, and porphyritic syenite dyke (50cm width) trending oblique to trench.
80	510	840	<0·5	4	0·40/0·45		169171	Contact approximately 182°M, green chloritic syenite dyke and grey, green pebbly mudstone.
								10 010 N
80	165	750	<0·5	38	0·31/0·35		169170	
								Ferruginous/manganiferous clay filled vein 047°/80°N.
75	80	1100	<0·5	7	0·23		169169	
60	70	715	<0·5	5	0·12		169168	10 005 N
50	75	685	<0·5	3	0·07		169167	
50	65	585	1·0	6	0·15		169166	
								10 000 N
45	60	545	<0·5	3	0·06		169182	
								Joint 237°/86°W Weakly ferruginous thin (<1cm) wide calcite vein dip ≈ 45°S.
45	40	520	<0·5	2	0·05		169183	Joint 135°/65°W.
40	35	465	<0·5	5	0·08		169184	9 995 N Pebbly Mudstone, dark grey to grey HW-CW clayey, cleaved, dropstones comprised of ferruginous micaceous schists/volcanics, minor intrusives.
45	35	385	<0·5	2	0·14		169185	
55	30	475	<0·5	4	0·16		169691	Mudstone, veined clay infilled, weakly ferruginous. Mudstone, fractured, grey weakly veined, minor epidote alteration.
								9 990 N Mudstone, becoming moderately veined, weakly stockworked
40	35	345	<0·5	5	0·18		169692	
50	40	645	<0·5	13	0·14		169693	Monzonite, Kspar altered, very ferruginous, epidotitic coarse grained, HW orange
45	25	780	<0·5	7	0·08		169694	9 985 N

Horizontal

Ground Surface

JOINS PART 4

Assays in ppm unless noted otherwise

FIGURE 17

Costean Line 10300E (part 3)

CYPRUS

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846163

costean profile

Project CYGNET	**No** 84 - 111 C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10 300E (part 4)	**Logged by**	P.A. JONES
	9 980 N to 10 070 N	**Sample length**	2 metres
Total length	90 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meter-age / Sample No.	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	2.5m		Joins part 3 — 5 cm
35	35	445	<0.5	5	0.05	Ground Surface / Horizontal	169 695	
								Intrusive, cw, brown, weak orange coloured, coarse grained, granular textured, minor epidote, monzonite porphyry.
40	40	355	<0.5	3	0.02		169 696	
								9 980 N

Assays in ppm unless noted otherwise

FIGURE 17

Costean Line 10 300 E (part 4)

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846164

costean profile

Project CYGNET	**No** 84 - 111 C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** TRENCH 6	**Logged by**	P.A. JONES
	0 to 14	**Sample length**	2 metres
Total length	14 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage Sample No	Meterage — 5 cm	Geologic description
Cu	Pb	Zn	Ag	As	Au	2·5m			
								0	
25	45	615	0·5	13	0·09		169 684		Ferruginous shear zones. Sanidine Porphyry, grey cream, minor epidote alteration.
									Ferruginous shear zone.
60	55	470	<0·5	11	0·12		169 685		Hornfelsed sediments, pyritic, epidotitic fine grained. Fracture 050°/80° SE Fracture 153°/V.
									Weakly ferruginous shear.
85	1550	1100	<0·5	120	1·71 / 2·58		169 686	5	Mudstone, brecciated weakly veined, becoming ferruginous & more siliceous. grey olive coloured.
									Mudstone, moderately ferruginous, brecciated HW (kspar) weakly siliceous.
95	745	1550	0·5	90	1·35 / 1·36		169 687		Heavily ferruginous and brecciated mudstone - shear.
									Brecciated Mudstone.
									Ferruginous breccia zone - shear.
60	160	640	<0·5	16	0·68 / 0·18		169 688		Mudstone, carbonate veined and stockworked, brecciated, grey. Ferruginous epidotitic shear, brecciated on either side.
								10	Mudstone, weakly to moderately stockworked carbonate/epidote veined.
85	160	1450	<0·5	18	0·17		169 689		Mudstone chloritic / epidotitic clayey. Minor zones of brecciation.
									Intrusive, brecciated, weakly ferruginous.
75	200	1200	<0·5	10	0·10		169 690		Mudstone, prominent chlorite/epidote alteration in fractured mudstone.
								14	Mudstone, mottled orange yellow cream.

Horizontal

Ground Surface

Assays in ppm unless noted otherwise

FIGURE 18 **Costean Line** TRENCH 6

CYPRUS

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846165

costean profile

Project CYGNET	**No** A-84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10350E PART 1	**Logged by**	P. JONES
	9946 N (10014 N) **to** 10042 N	**Sample length**	2 metres
Total length	96 metres	**Scale**	1:100

Assays ANALABS Cu	Pb	Zn	Ag	As	AAS/FIRE Au	Graphic geology (1m)	Meterage & SAMPLE No	Geologic description (5 cm)
							10042 N	
35	50	295	<0.5	27	0.06		169106	SW hornfelsed dark grey gritty pyritic mudstone
							10040 N	Porphyritic (sanidine) coarse grained syenite dyke.
35	60	235	<0.5	19	0.04		169107	Chlorite filled fracture 135/73 SW
							38 N	SW massive, hard, hornfelsed? purple gritty mudstone, tr pyrite.
50	55	240	<0.5	22	0.05		169108	
							36 N	
65	90	400	<0.5	47	0.07		169109	
							34 N	HW-CW grey green gritty mudstones progressively becoming harder - hornfelsed to the north.
105	55	280	<0.5	44	0.08	TRANSITIONAL.	169110	Transitional.
							32 N	
105	45	290	<0.5	43	0.27/0.10		169111	MW weakly altered (cut by thin jarosite/clay filled fractures) sheared mudstone, minor epidote veining.
							10030 N	Joints. 150/74, 080/53 NE.
90	50	370	<0.5	17	0.05		169112	Joint 030/87 SW.
							28 N	HW-CW grey green gritty mudstones.
95	55	400	<0.5	53	0.06		169113	Minor quartz/carbonate veining < 1 cm width.
							26 N	
85	35	355	<0.5	35	0.14		169114	Joint 155/76 SW.
							24 N	Predominantly grey green blocky pebbly mudstone
85	45	365	<0.5	38	0.05		169115	
							22 N	
85	80	960	<0.5	98	0.17		169116	
							10020 N	Ferruginous shear zone adjacent to quartz carbonate ? vein approximately 2 cm width dipping 65° W.
95	85	780	<0.5	42	0.13		169117	
							18 N	
145	390	1300	<0.5	68	0.75/0.78	TRANSITIONAL.	169118	MW-HW blocky mudstones varying from light grey to white (bleached?) pebbly, minor ferruginous zones.
							16 N	
170	400	1850	<0.5	35	0.34/0.42	GROUND SURFACE.	169119	MW-HW blocky, weakly K-spar altered, weakly ferruginous sheared mudstone.
							10014 N	Joint 110/65 NE. Very ferruginous contact zone over 10 cm.

Assays in ppm unless noted otherwise

JOINS PART 2.

FIGURE 19 **Costean Line** 10350 E Part 1

CYPRUS

846166

costean profile

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Project CYGNET	**No** A - 84 - III C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10350 E PART 2. 9946 N (9984 N) **to** 10042 N	**Logged by**	P. JONES
		Sample length	2 metres.
Total length	96 metres.	**Scale**	1 : 100

Assays ANALABS Cu	Pb	Zn	Ag	As	AAS/FIRE Au	Meterage & SAMPLE No	Geologic description
							5 cm
100	145	1600	<0.5	10	0.12	10014N 169120	CW feldspathic coarse grained porphyritic (sanidine) syenomonzonite dyke - trends 045/70 W sheared ? southern contact, ferruginous.
70	95	1150	<0.5	9	0.23	10012N 169121	
90	130	1250	<0.5	9	0.24/0.14	10010N 169122	
80	75	1400	<0.5	5	0.16	08N 169123	HW- CW predominantly grey to dark grey olive mudstone containing small to large pebbles of acid tuff and intrusives, siltstone, siliceous arenites, unit massive, highly cleaved. No obvious bedding, clots of very ferruginous micaceous sediment (schist?) - cw.
65	85	925	<0.5	6	0.09	06N 169124	
80	80	800	<0.5	8	0.09/0.12	04N 169125	
75	55	575	<0.5	4	0.13	02N 169126	HW- CW coarse grained granular intrusive
55	45	560	<0.5	6	0.24/0.10	10000N 169127	
80	55	415	0.5	5	0.06	98N 169128	
30	90	520	<0.5	7	0.02	96N 169129	SW- MW coarse grained hornblende, minor quartz rich porphyritic syenomonzonite. Minor boxworks after pyrite! prominent fracture 130/V, jointing 190/76 W.
20	35	330	<0.5	7	0.04	94N 169130	
65	170	1200	<0.5	4	0.04	92N 169783	
55	95	1200	<0.5	3	<0.01	9990N 90N 169784	
50	30	910	<0.5	5	0.05	88N 169785	
60	70	1300	<0.5	16	0.17	86N 169786	Fractured, sheared? contact zone, epidotitic, moderately ferruginous, coarse grained altered intrusive.
						9984 N	Progressively more ferruginous, manganiferous and brecciated downslope. (south).

Graphic geology: 1m; Ground Surface; Horizontal.

JOINS PART 3

Assays in ppm unless noted otherwise

FIGURE 19 **Costean Line** 10350E Part 2.

CYPRUS

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846167

costean profile

Project CYGNET **No** A-84-111C	**Commenced**
Prospect MOUNT MARY	**Completed**
Coordinates: **Line** 10350E PART 3 9946 N (9954 N) **to** 10042 N	**Logged by** P. JONES
	Sample length 2. metres
Total length 96 metres	**Scale** 1 : 100

Assays ANALABS Cu	Pb	Zn	Ag	As	AAS/FIRE Au	Meterage & SAMPLE No	Geologic description
					1.52	9984 N	Progressively more ferruginous / manganiferous, brecciated with very clayey
110	1625	1700	<0.5	210	1.68	169787	matrix - Monzonite?
						9982N	Gossanous brecciated Monzonite, very ferruginous orange clay matrix, minor manganese, minor epidote.
65	160	960	<0.5	40	0.20	169788	Very ferruginous altered monzonite becoming less ferruginous downslope.
						9980N	
50	90	555	<0.5	24	0.23	169789	
						78N	
40	45	315	<0.5	14	0.09	169790	MW weakly ferruginous coarse grained less altered syenite. Minor relict
						76N	SW very pyritic (disseminated and as streaks along fractures) green coarse grained porphyritic syenite. - variably weathered.
40	45	210	<0.5	17	0.04	169791	Minor epidote alteration.
						74N	
35	10	210	<0.5	18	<0.01	169792	
						72N	
35	5	195	<0.5	17	0.02	169793	
						9970N	
90	<5	165	<0.5	8	<0.01	169794	
						68N	
40	55	180	<0.5	11	<0.01	169795	
						66N	
50	10	255	<0.5	12	0.05	169796	
						64N	
45	10	285	<0.5	11	<0.01	169797	Olive grey, massive fat clays after mudstone, brecciated, veinlated, weakly ferruginous.
						62N	Syenomonzonite dyke? - highly fractured, no chilled margins.
55	5	475	<0.5	7	0.02	169798	Mudstone, olive grey weakly ferruginous, highly brecciated weakly altered, mottled sections orange/brown.
						9960N	
40	<5	300	<0.5	9	0.07	169799	
						58N	
45	<5	160	<0.5	8	0.04	169800	
						56N	Monzonite, altered (epidote) bleached, weakly gossanous.
35	<5	135	<0.5	10	0.08	169801	
						9954N	

Graphic geology: 1 m; 5 cm; Horizontal; 9970 N.

Assays in ppm unless noted otherwise

JOINS PART 4.

FIGURE 19

Costean Line 10350E Part 3.

CYPRUS

846168

costean profile

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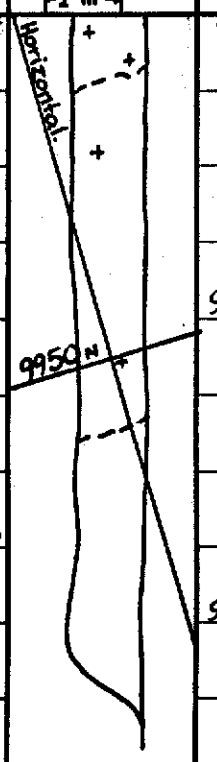
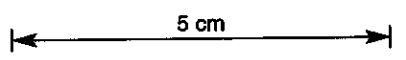
Project CYGNET	**No** A-84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10350E PART 4	**Logged by**	P. JONES.
	9946 N (9946 N) **to** 10042 N	**Sample length**	2 metres
Total length	96 metres.	**Scale**	1:100

Assays ANALABS					AAS / FIRE	Graphic geology	Meterage & Sample No	Geologic description
Cu	Pb	Zn	Ag	As	Au			
35	<5	175	<0.5	5	<0.01		9954N 169802	Monzonite, epidote altered, bleached, weakly gossanous.
							52N	
40	<5	175	<0.5	8	0.03		169803	Syenomonzonite, weakly altered, orange brown, large books of biotite?
							9950N	
55	<5	190	<0.5	7	0.02		169804	
							48N	
55	<5	265	<0.5	8	0.03		169805	Olive grey cw brecciated altered sediment.
							9946N	





Assays in ppm unless noted otherwise

FIGURE 19 **Costean Line** 10350E Part 4.

CYPRUS

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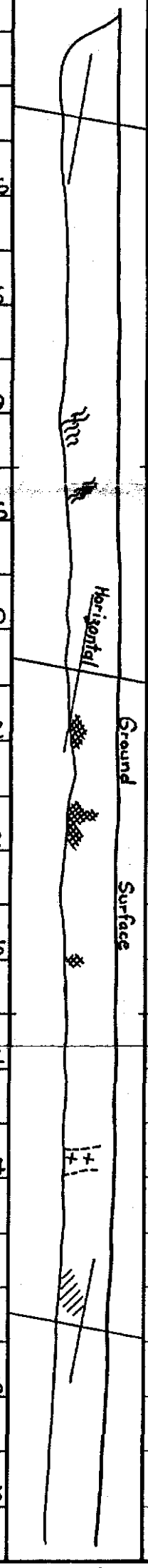
846169

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10400 E (part 1)	**Logged by**	P.A. JONES
	10100N to 10148N	**Sample length**	2 metres
Total length	48 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Sample No.	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2·5m →		5 cm ← →
								10 150 N
30	100	270	<0·5	30	0·06		169 581	
								Pebbly Mudstone, predominantly olive grey, massive fat gritty clays after cw mudstone, minor mottling orange colour.
40	125	310	<0·5	40	0·06		169 580	10 145 N
35	136	435	0·5	88	0·09		169 579	
								Ferruginous shear zone, weakly limonitic, clay stockworking.
45	200	1300	<0·5	200	0·26		169 578	Weakly ferruginous shear zone in mw to hw crushed grey mudstone.
								10 140 N
30	95	745	<0·5	99	0·10		169 577	
30	95	745	<0·5	99	0·02		169 576	Pebbly mudstone, epidote/chlorite clots in grey to olive grey matrix, mudstone becoming harder (altered?)
35	110	760	<0·5	110	0·18		169 575	Blocky fractured MW (cooked?) mudstone, minor epidote with ferruginization and beige clays (after siltstone?)
								10 135 N
30	80	435	<0·5	75	0·05		169 574	Blocky fractured mw-HW mudstone
25	90	395	<0·5	49	0·04		169 573	
								10 130 N
25	115	295	<0·5	47	0·04		169 572	Syenite, dark grey green, porphyritic dyke, sub vertical, fracture (030°/75°N.) system clay filled.
30	125	450	<0·5	110	0·09		169 571	Mudstone, mottled orange/beige blocky mudstone.
25	140	320	<0·5	77	0·06		169 570	10 125 N
								Mudstone, minor hornfelsed purple pebbly HW mudstone, with minor grey beige moderately mottled orange mudstones.
20	120	320	<0·5	28	0·05		169 569	



Assays in ppm unless noted otherwise

JOINS PART 2

FIGURE 20

Costean Line 10400 E (part 1)

CYPRUS

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846170

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10400E (part 2)	**Logged by**	P.A. JONES
	10100N **to** 10148N	**Sample length**	2 metres
Total length	48 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage Sample No.	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2.5m →		Joins part 1 — 5 cm
25	135	345	0.5	37	0.06		169 568	Mudstone, blocky mw dark grey purple pebbly, cooked? Minor to moderate HW - grey fractured mudstone.
								10 120 N
40	150	555	0.5	80	0.07		169 567	
25	135	550	<0.5	42	0.07		169 566	
30	170	710	0.5	110	0.06		169 565	10 115 N Mudstone, blocky fractured pebbly mw to HW. Fracture 112°/81°SE. 180°/60°NW.
40	185	1015	<0.5	140	0.14		169 564	
50	415	1750	<0.5	240	0.18		169 563	Crush zone, ferruginous mottled orange - yellow - grey ≃ 160°/V.
								10 110 N Mudstone, blocky fractured, pebbly, olive grey. Joint / 135°/42°S.
40	505	675	0.5	160	0.09		169 562	
25	130	400	<0.5	26	0.04		169 561	
25	135	375	0.5	23	0.06		169 560	10 105 N Mudstone olive grey fractured mw to HW, minor large qtzite pebbles and ferruginous clots.
30	190	435	<0.5	22	0.07		169 559	
65	245	455	<0.5	29	0.05		169 558	
								10 100 N Syenite, dark grey green weakly altered dyke, minor hornfelsing - purple gritty mudstone.

Graphic geology: ?-- ?-- Ground Surface Horizontal

Assays in ppm unless noted otherwise

FIGURE 20 **Costean Line** 10400E (part 2)

CYPRUS

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846171

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10450 E (part 1)	**Logged by**	P.A. JONES
	10000 N **to** 10060 N	**Sample length**	2 metres
Total length	60 Metres	**Scale**	1:100

Assays Analabs Cu	Pb	Zn	Ag	As	AAS/FIRE Au	Graphic geology 2·5m	Sample No	Meterage / Geologic description (5 cm)
								10 060 N
20	180	270	<0·5	22	0·10		169 626	
30	290	660	0·5	49	0·20		169 625	
								CW Mudstone, mottled grey olive minor orange wkly pebbly.
25	245	395	<0·5	19	0·06		169 624	10 055 N
20	230	404	0·5	23	0·07		169 623	
20	320	460	<0·5	13	0·08		169 622	
								10 050 N
30	205	525	0·5	30	0·08		169 621	
								Mudstone, ferruginous weakly sheared, MW-HW, orange-yellow-grey.
30	220	525	<0·5	9	0·03		169 620	
								Mudstone, mottled grey olive beige MW weakly altered, hard, pebbly, minor epidote and possible carbonate veining.
35	240	735	<0·5	23	0·11		169 619	10 045 N Ferruginous shear zone approximately 10 cm wide
65	2275	1200	1·0	170	0·84 / 1·12		169 618	Ferruginous shear zone approximately 30 cm width, very altered, clayey orange brown grey mudstone.
								Mudstone, dark grey to olive grey HW weakly ferruginous, weakly pebbly.
40	400	615	<0·5	36	0·10		169 617	
								10 040 N Brecciated sheared weakly to moderately ferruginous chlorite / epidote, altered pebbly mudstone.
30	465	370	<0·5	36	0·11		169 616	
								Brecciated Intrusive, CW to HW moderately ferruginous, coarse grained, muscovite alteration! cream orange coloured.
5	60	180	<0·5	16	0·02		169 615	
								Syenomonzonite, fine grained matrixed, grey, trachytic porphyritic (feldspars) abundant epidote.
20	170	200	<0·5	20	0·03		169 614	10 035 N
20	70	175	<0·5	7	0·01		169 613	Ferruginous shear approximately 20cm wide, brecciated, heavily iron stained.

Horizontal

Ground Surface

JOINS PART 2

Assays in ppm unless noted otherwise

FIGURE 21

Costean Line 10450 E (part 1)

CYPRUS

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846172

costean profile

Project	CYGNET **No** 84-111C	**Commenced**	
Prospect	MOUNT MARY	**Completed**	
Coordinates:	**Line** 10450 E (part 2)	**Logged by**	P.A. JONES
	10000 N **to** 10060N	**Sample length**	2 metres
Total length	60 metres	**Scale**	1:100

Assays Analabs Cu	Pb	Zn	Ag	As	AAS/FIRE Au	Graphic geology ←2·5m→	Meterage Sample No.	Meterage	Geologic description
									Joins part 1 — 5 cm
15	45	170	<0·5	10	0·03		169 612		Syenomonzonite, fine grained matrixed grey trachytic porphyritic, abundant epidote.
								10 030 N	Mudstone, grey pebbly
15	40	140	0·5	11	0·01		169 611		Intrusive, grey orange HW porphyritic, vesicular - epidote filled, weakly trachytic, fine grained matrixed.
20	30	145	<0·5	28	0·01		169 610		Mudstone HW grey brecciated pebbly.
									Intrusive, orange cream epidotitic, brecciated coarse grained.
25	20	130	<0·5	37	0·02		169 609	10 025 N	
30	25	145	<0·5	31	0·01		169 608		
25	20	135	<0·5	13	0·02		169 607		
								10 020 N	Mudstone light olive grey blocky HW - CW pebbly
25	20	145	<0·5	9	0·01		169 606		
25	25	140	<0·5	10	0·02		169 605		
25	30	160	<0·5	13	0·03		169 604	10 015 N	
30	65	155	0·5	10	0·02		169 603		
25	20	210	<0·5	8	0·03		169 602		
								10 010 N	
30	25	245	<0·5	9	0·05		169 601		
45	45	760	<0·5	21	0·27		169 600		Syenite, sanidine porphyritic, brecciated, dark grey matrix, cream sanidine phenocrysts, minor epidote, weakly trachytic.
									Ferruginous shear, brecciated altered grey mudstone.
30	60	570	<0·5	16	0·10		169 599		Very ferruginous vertical layered shear zone.
								10 005 N	Dull grey olive orange medium grained, massive syenite overlying black weakly altered mudstone.
30	35	270	0·5	9	0·04		169 598		
									Brecciated grey brown mudstone.

Ground Surface

Horizontal

NB South Wall all Sediments.

JOINS PART 3

Assays in ppm unless noted otherwise

FIGURE 21

Costean Line 10450 E (Part 2)

846173

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CYPRUS

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10450 E (part 3)	**Logged by**	P.A. JONES
	10000 N **to** 10060 N	**Sample length**	2 metres
Total length	60 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	**Graphic geology**	Meterage / Sample No.	Meterage Joins part 2 **Geologic description**
Cu	Pb	Zn	Ag	As	Au	← 2·5m →		5 cm ← →
25	30	270	<0·5	8	0·03	Ground Surface / Horizontal	169 597	Mudstone, brecciated grey brown CW
								10 000 N CW-HW Intrusive orange yellow coarse grained.

Assays in ppm unless noted otherwise

FIGURE 21

Costean Line 10450 E (part 3)

CYPRUS

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846174

costean profile

Project CYGNET	**No** 84-111C	**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates:	**Line** 10450E (part 1)	**Logged by**	P.A. JONES
	10150N **to** 10180N	**Sample length**	2 metres
Total length	30 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Sample No	Meterage / Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2.5m →		5 cm ← →
								10 180 N
35	50	240	<0.5	33	0.04		169 596	CW Mudstone, beige olive, massive fat clays, minor pebbles
45	105	270	<0.5	36	0.04		169 595	Minor thin porphyry dykes semi parallel to trench, feldspars cw to kaolin.
45	70	210	<0.5	71	0.11		169 594	10 175 N Altered siliceous? k-spar altered sediment and dyke. Remainder of rock HW - CW soft clays.
								Mudstone, moderately to weakly ferruginous, brecciated, sheared, kaolin filled veinlets.
65	315	295	<0.5	200	0.13		169 593	
								Ferruginous, brecciated, carbonate/clay stockworked, pebbly brown mudstone, shear zone? veining
70	185	245	<0.5	52	0.05		169 592	Brecciated weakly stockworked weakly ferruginous brown mudstone.
								10 170 N
70	150	240	<0.5	27	0.05		169 591	Mudstone, brown, mottled yellow/orange weakly veined.
50	140	225	<0.5	34	0.04		169 590	
45	75	225	<0.5	53	0.07		169 589	10 165 N Mudstone, mottled grey orange, massive clays, minor pebbles, minor to weak veining.
45	415	230	<0.5	36	0.05		169 588	Porphyry, HW to CW coarse grained sanidine porphyroblasts.
15	60	115	<0.5	24	0.02		169 587	Syenomonzonite, fine to coarse grained, minor epidote, trace Aspy Minor xenoliths, very chloritic, pyritic.
								10 160 N Possible areas where monzonite predominates, unit hard, K-spar altered, massive.
15	60	80	<0.5	17	0.02		169 586	
20	55	105	<0.5	27	0.05		169 585	
55	60	160	<0.5	44	0.05		169 584	10 155 N
								Mudstone? mottled grey orange massive clays, minor pebbles.
100	50	230	<0.5	33	0.06		169 583	
								Mudstone, blocky fractured (crushed?) weakly veined - clay filled, beige grey in colour.

Horizontal

Ground Surface

Assays in ppm unless noted otherwise

JOINS PART 2

FIGURE 22

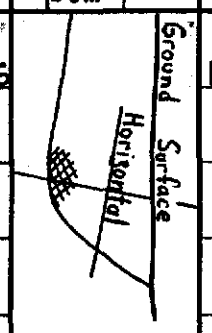
Costean Line 10450E (part 1)

174

846175

costean profile

Project	CYGNET **No** 84-111C	**Commenced**	
Prospect	MOUNT MARY	**Completed**	
Coordinates:	**Line** 10450E (part 2)	**Logged by**	P.A. JONES
	10150N **to** 10180N	**Sample length**	2 metres
Total length	30 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage / Sample No.	Meterage — Joins part 1 — Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2·5 m →		5 cm
100	55	235	<0·5	39	0·06		169 582	
								10 150 N. Mudstone, minor ferruginization, mottled crushed zone.

Assays in ppm unless noted otherwise

FIGURE 22 **Costean Line 10450 E** (part 2)

CYPRUS

846176

costean profile

175

Project CYGNET **Nº** 84-111C		**Commenced**	
Prospect MOUNT MARY		**Completed**	
Coordinates: **Line** 10 500 E (part 1) 9775 N to 9825 N		**Logged by**	P.A. JONES
		Sample length	2 metres
Total length 50 metres		**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology (2·5m)	Meterage Sample Nº	Meterage — Geologic description (5 cm)
Cu	Pb	Zn	Ag	As	Au			
								9 825 N
30	25	150	<0·5	5	0·05		169 697	Mudstone? mottled grey brown weakly orange, massive sticky cw clays.
								Slightly more ferruginous
20	40	175	<0·5	6	0·03		169 698	Intrusive, cw, mottled orange yellow cream light grey massive clays, granular texture, Slightly more ferruginous.
10	50	170	<0·5	4	0·04		169 699	9 820 N
								Progressively ↓ becoming mottled light grey orange cream granular textured massive clays – cw – Intrusive?
15	40	160	<0·5	5	0·02		169 700	
								Slightly more ferruginous.
25	30	150	0·5	5	0·03		169 701	Mudstone? cw, mottled grey brown yellow massive sticky clays.
								9 815 N
15	45	85	<0·5	7	0·04		169 702	
								Intrusive, mottled, orange cream grey coarse grained cw porphyritic syenite?
20	30	130	<0·5	6	0·02		169 703	Mudstone? mottled grey olive brown minor orange massive sticky clays.
20	25	110	<0·5	6	0·03		169 704	9 810 N
								Porphyry dyke, speckled white, mottled grey olive, becoming orange more ferruginous ↓ coarse grained large sanidine (cw) porphyroblasts.
25	30	105	<0·5	5	0·03		169 705	
								Mudstone, mottled grey olive orange cw massive clays.
30	40	120	<0·5	18	0·12		169 706	
								9 805 N Syenite porphyry, cw orange brown cream grey.
15	40	105	<0·5	9	0·04		169 707	
25	35	110	<0·5	11	0·05		169 708	Mudstone? cw mottled grey olive orange massive clays, minor speckled white kaolinitic clots.
25	30	80	0·5	16	0·02		169 709	9 800 N.
30	25	90	<0·5	14	0·03		169 710	

Ground Surface

Horizontal

Assays in ppm unless noted otherwise

JOINS PART 2

FIGURE 23 **Costean Line** 10 500 E (part 1)

846177

9800E 9900E 10000E 10100E 10200E

10200N 10100N 10000N 9900N 9800N

BASELINE 300°MAG.

CTR-87-18

Cs_1 Cs_2 Cs_3 Pt

LEGEND

- Pt — Truro tillite
- Cs_1 — Syenite, porphyritic
- Cs_2 — Monzonite, syenomonzonite
- Cs_3 — Breccia Pipe
- —/— Fence
- Shallow working
- Costean
- Quartz vein
- Creek and dam
- Track

M/N

87-2743

CYPRUS MINERALS

KINGS HILL

INTERPRETIVE GEOLOGY

DRAWN BY: R.J
DRAFTSMAN: J.M.T.
DATE: Dec. 1987
REVISIONS:

FILE No.

SCALE 1:2500 25 0 25 50 METRES

FIG. 24

177

176

846178

costean profile

Project	CYGNET **No** 84-111C	**Commenced**	
Prospect	MOUNT MARY	**Completed**	
Coordinates:	**Line** 10500 E (part 2) 9775N to 9825N	**Logged by**	P.A. JONES
		Sample length	2 metres
Total length	50 metres	**Scale**	1:100

Assays Analabs					AAS/FIRE	Graphic geology	Meterage	Meterage Joins part 1 — Geologic description
Cu	Pb	Zn	Ag	As	Au	← 2·5m →	Sample No	
30	20	90	<0·5	13	0·02		169 711	
								9795 N
30	35	80	<0·5	9	0·02		169 712	Mudstone? cw mottled grey olive orange massive clays, minor speckled with kaolinitic clots. Minor relict qtzite pebbles.
30	20	85	<0·5	11	0·02		169 713	As above - predominantly pebbly mudstone.
30	25	85	0·5	8	0·02		169 714	9790 N
								Mudstone, cw pebbly slightly ferruginous mottled orange grey olive massive clays.
40	35	90	<0·5	11	0·03		169 715	
								Pebbles include € intrusive fragments, quartzite, muscovite schist.
35	30	85	<0·5	7	0·02		169 716	
								9785 N
35	30	80	<0·5	11	0·03		169 717	
35	30	85	<0·5	11	0·02		169 718	
								Minor spring.
25	30	80	<0·5	11	0·02		169 719	9780 N
								Mudstone cw weakly ferruginous mottled orange olive grey clays, pebbly/gritty, possibly brecciated.
25	35	70	<0·5	11	0·01		169 720	
								Intrusive, cw? greeny grey massive textureless clays, minor possible relict carbonate? veining, minor granular texture.
15	20	85	<0·5	11	0·02		169 721	
								9775 N

Ground Surface

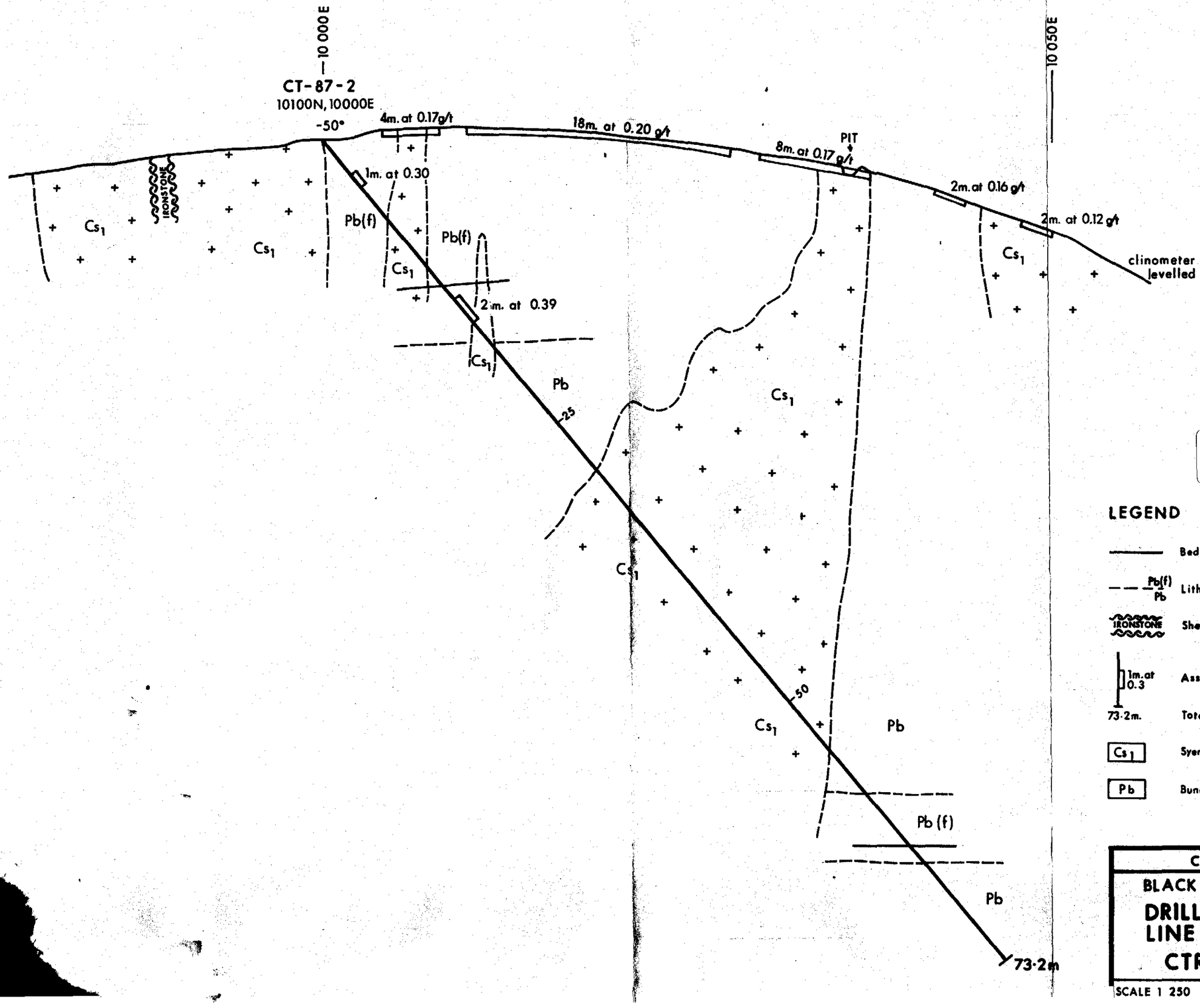
Horizontal

Assays in ppm unless noted otherwise

FIGURE 23

Costean Line 10500 E (part 2)

846179



LEGEND

- Bedding attitude
- Lithological boundary: Pb(f) Bundella Mdst.(fossiliferous) / Pb Bundella Mdst.(massive slst.)
- IRONSTONE — Shear zone, ironstone filled
- 1m. at 0.3 — Assay interval and grade (g/t) gold
- 73·2m. — Total depth(metres)
- Cs1 — Syenite, syenomonzonite – porphyritic
- Pb — Bundella Mudstone

87-2743

CYPRUS MINERALS

BLACK JACK RIDGE

DRILL SECTION
LINE 10100N
CTR-87-2

DRAWN BY: P.J.
DRAFTSMAN: J.T.
DATE: JAN. 1988
REVISIONS:
FILE No.

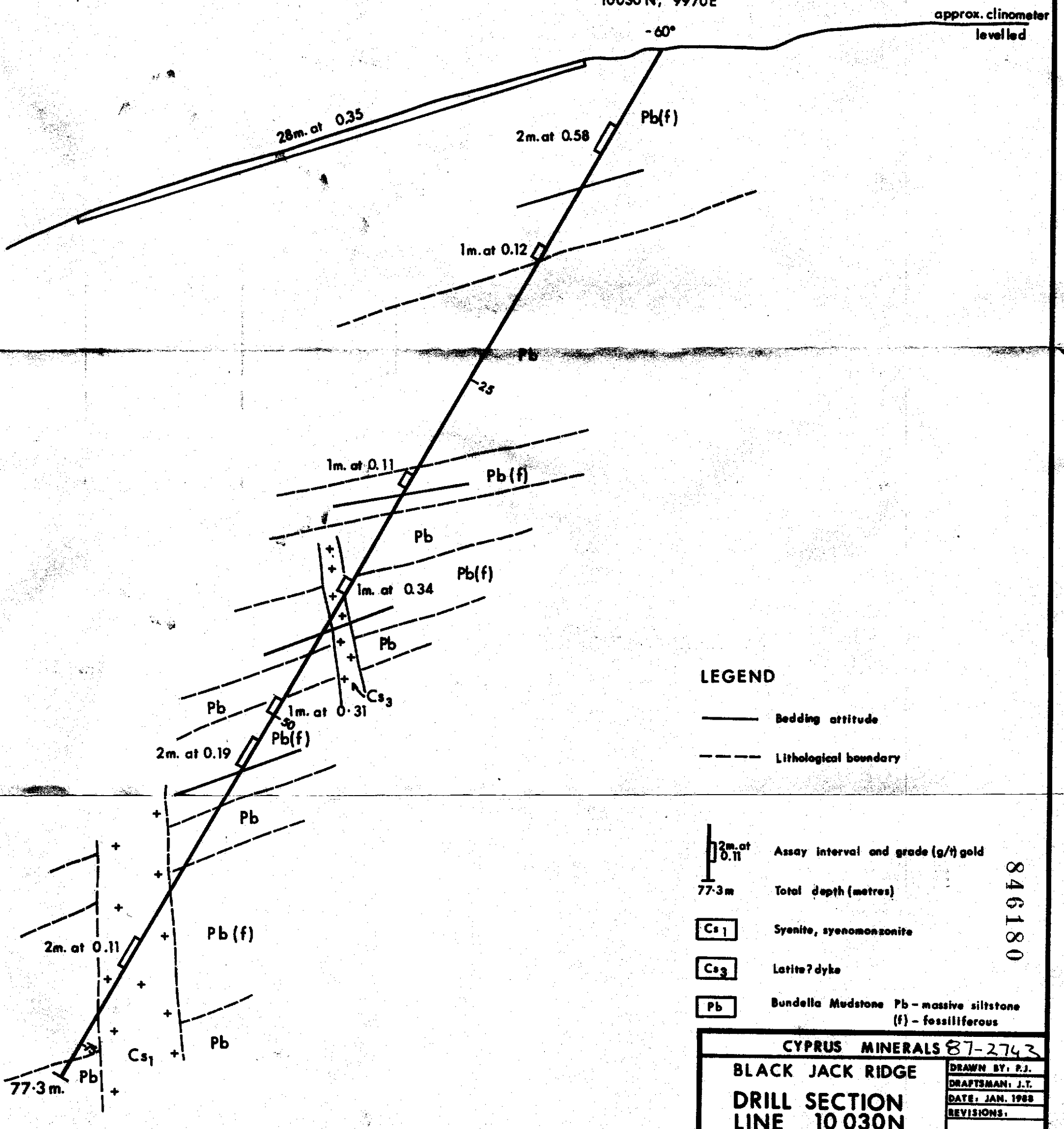
SCALE 1 250 — 2·5 0 2·5 5·0

ENCLOSURE 1

9950E

9990E

CT - 87 - 3
10030 N, 9970E



LEGEND

——— Bedding attitude

– – – – Lithological boundary

2m. at 0.11 — Assay interval and grade (g/t) gold

77·3m — Total depth (metres)

Cs1 — Syenite, syenomonzonite

Cs3 — Latite? dyke

Pb — Bundella Mudstone Pb – massive siltstone (f) – fossiliferous

5 cm

CYPRUS MINERALS 87-2743

BLACK JACK RIDGE

DRILL SECTION
LINE 10 030N

CT - 87 - 3

DRAWN BY: P.J.
DRAFTSMAN: J.T.
DATE: JAN. 1988
REVISIONS:

FILE No.

SCALE 1:250 — 2·5 0 2·5 5·0 METRES

ENCLOSURE 2

846180

9960E 9975E 10000E 10020E

CT-87-4
9845N, 9975E
-60°

11m. at 0.26

Approx. clinometer levelled

Cs_1

4-9
5m. at 0.16

2m. at 0.29 11-13

Cs_2

1m. at 0.12 17-18

1m. at 0.17 20-21

Cs_1 25

27-28
1m. at 0.11

Pb(f)

5m. at 0.39 29-34

Pb

1m. at 0.30 35-36

Pb(f)

1m. at 0.17 39-40

2m. at 0.21 41-43

Cs_1

Pb(f)

50

1m. at 0.17 51-52

Cs_1

Pb(f)

Cs_1

Pb(f)

74-75
75 1m. at 0.36

Cs_1

75·6m.

LEGEND

——— Bedding attitude

– – – – Lithological boundary

2m. at 0.29 — Assay interval and grade (g/t) gold

75·6m — Total depth (metres)

Cs_1 — Syenite, syenomonzonite

Cs_3 — Latite? dyke

Pb — Bundella Mudstone, Pb – massive siltstone
(f) – fossiliferous

CYPRUS MINERALS 87-2743	
BLACK JACK RIDGE	DRAWN BY: P.J.
DRILL SECTION LINE 9845N	DRAFTSMAN: J.T.
CT-87-4	DATE: JAN. 1988
	REVISIONS:
	FILE No
SCALE 1:250 (2·5 0 2·5 5·0 METRES)	ENCLOSURE 3

5 cm

84618I

846182

CT-87-1
10050N, 10400E
-60°

10050N

10000N

clinometer levelled

8m. at 1·78 g/t

Pt

Cs_1

1m. at 0·12

Sy

1m at 0.13

1m. at 0.19

FAULT ZONE

Cs_1

FAULT ZONE

5m. at 0.84

25

Pt

Cs_1

1m. at 0·1

Pt

2m. at 0.12

Cs_1

2m. at 0.12

50

2m. at 0.24

Pt

1m. at 0.26

1m. at 0.11

Cs_1

1m. at 0.17

71·3m.

5 cm

LEGEND

- Bedding attitude
- Lithological boundary
- Shear zone
- 5m.at 0.84 — Assay interval and grade (g/t) gold
- 71·3m — Total depth (metres)
- Cs_1 — Syenite, syenomonzonite
- Pt — Truro Tillite

87-2743

CYPRUS MINERALS

MOUNT MARY

DRILL SECTION LINE 10 400N CTR-87-1

DRAWN BY: P.J.
DRAFTSMAN: J.T.
DATE: JAN. 1988
REVISIONS:
FILE No.

SCALE 1:250 — 2·5 0 2·5 5·0 METRES

ENCLOSURE 4

190

189

10100N

10050N

10000N

CTR-87-5 10030N - 10300E -60°

CTR-87-11
10065N - 10300E -50°

MAIN ROAD

10100N - 10300E -45°
CT-87-20

infilled shaft

16m. at 0.25

12m. at 0.40

6m at 0.36

10m. at 0.19

12m. at 0.13

1m. at 0.12

3m. at 0.21

2m. at 0.11

4m. at 0.17

4m. at 0.16, 5.0gm Ag

3m. at 4.26

17m. at 1.0

mineralized zone (>0·1g/t)

T.D. 66 metres

T.D. 72 metres

FAULT ZONE

T.D. 130 metres

Pt Permian: Truro Tillite

Cs_1 Cretaceous: Syenite, porphyritic, variably altered

Cs_2 Monzonite syenomonzonite, variably altered

Cs_3 Lamprophyre

Lithological boundary

Fault zone

Shear zone

Mineralized zone assaying >0·1g/t Au

6m. at 0.21 Assay interval and grade (g/t)

T.D. Total depth

CTR Percussion hole

CT Diamond hole

846183

5 cm

CYPRUS MINERALS

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

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

SCALE 1: 250 2·5 0 2·5 5·0 METRES

ENCLOSURE 5

188

10050N

10000N

9950N

CT-87-19
(10070N-10350E)
-50°

CTR-87-6 (10030N-10350E)
-50°

CTR-87-7
(9994N-10350E)
-50°

mineralized zone

12m at 0.21

mineralized zone ?

18m at 0.21

2m at 1.63

mineralized zone

50 metres

50 metres

FAULT ZONE

100

T.D. 132·9 metres

LEGEND

Pt	Permian: Truro Tillite
Cs_1	Cretaceous: Syenite, porphyritic, variably altered
Cs_2	Monzonite svenomonzonite, variably altered
Cs_3	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

846184

5 cm

87-3743

CYPRUS MINERALS

MOUNT MARY
DRILL SECTION –
LINE 10350E
CTR-87-6, CTR-87-7,
CT-87-19

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

SCALE 1:250 2·5 0 2·5 5·0 METRES

ENCLOSURE 6

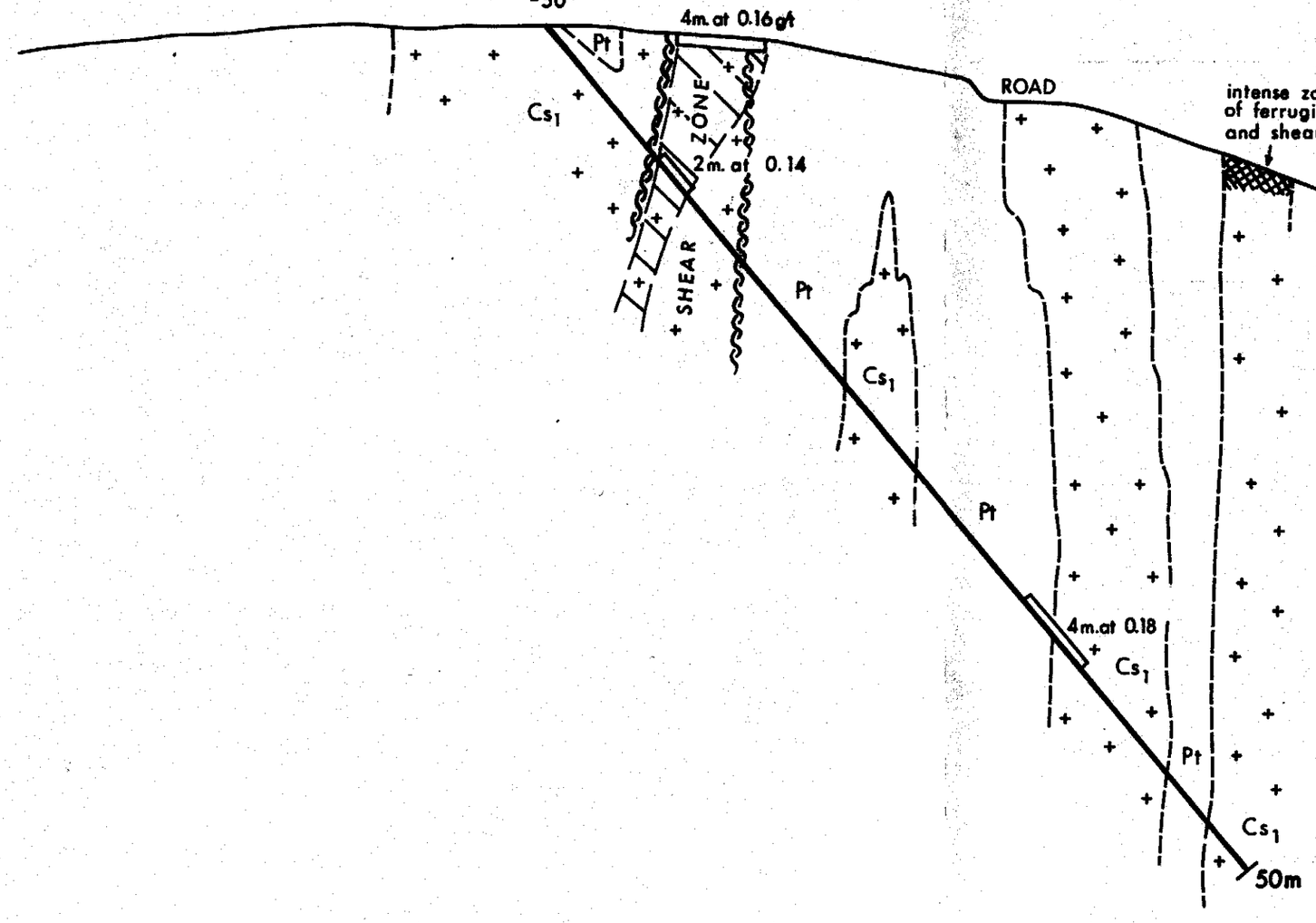
846185

10050N

10030N

10000N

CTR-87-8
10030N, 10250E
-50°



5 cm

LEGEND

- Bedding attitude
- Lithological boundary
- Shear zone
- 2m.at 0.14 — Assay interval and grade (g/t) gold
- 50m. — Total depth (metres)
- Cs1 — Syenite, syenomonzonite
- Pt — Truro Tillite

87-2743

CYPRUS MINERALS	
MOUNT MARY **DRILL SECTION** **LINE 10 250 N** **CTR-87-8**	DRAWN BY: P.J. DRAFTSMAN: J.T. DATE: JAN. 1988 REVISIONS: FILE No.
SCALE 1:250 (2·5 0 2·5 5·0 METRES)	ENCLOSURE 7

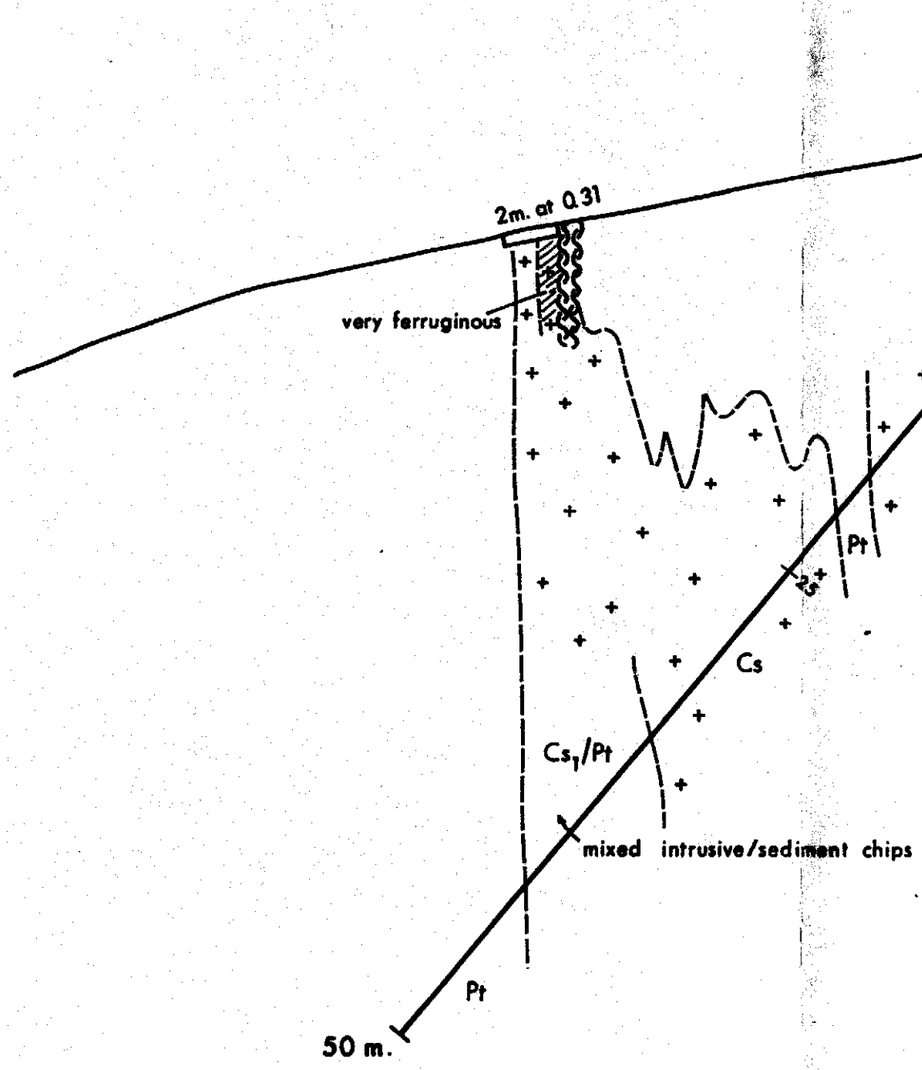
L87

846186

10050 N | 10020 N | 10 000N

CTR-87-9
10020N, 9945E
-50°

clinometer levelled



5 cm

LEGEND

- Bedding attitude
- Lithological boundary
- Shear zone
- 2m at 0.31 — Assay interval and grade (g/t) gold
- 50m. — Total depth (metres)
- Cs1 — Syenite, syenomonzonite
- Pt — Truro Tillite

87-2743

CYPRUS MINERALS	
MOUNT MARY DRILL SECTION LINE 9945 E CTR-87-9	DRAWN BY: P.J. DRAFTSMAN: J.T. DATE: JAN. 1988 REVISIONS: FILE No.
SCALE 1:250 2·5 0 2·5 5·0 METRES	ENCLOSURE 8

981

846187

10 080N

10 050N

10 030N

10 000N

CTR - 87 - 10
10030N, 9982E
-50°

2m.at 0.53

clinometer levelled

Pt

4m. at 0.35

Cs_1

25

2 m. at 0.13

Pt

Pt

50 m.

5 cm

LEGEND

- Bedding attitude
- Lithological boundary
- Shear zone
- 2m.at 0.13 — Assay interval and grade (g/t) gold
- 50m — Total depth (metres)
- Cs_1 — Syenite, syenomonzonite
- Pt — Truro Tillite

87-2743

CYPRUS MINERALS

MOUNT MARY

DRILL SECTION
LINE 9982E
CTR-87-10

DRAWN BY: P.J.
DRAFTSMAN: A.T.
DATE: JAN. 1988
REVISIONS:

FILE No.

SCALE 1:250 2·5 0 2·5 5·0 METRES

ENCLOSURE 9

183

846188

10020N

10000N

9980N

CTR - 87 - 12
10021N, 10275E

MAIN SHAFT

-50°

2.6m.at 0.12

Cs_1

Pt

6m. at 0.27

-25

Cs_1

2m. at 0.14

2m. at 0.16

Pt

Pt / Cs_1 mixed intrusive sediment chips

50m.

approx. land surface only

5 cm

LEGEND

Bedding attitude

Lithological boundary

2m. at 0.14 — Assay interval and grade (g/t) gold

50m. — Total depth (metres)

Cs_1 — Syenite, syenomonzonite

Pt — Truro Tillite

87-2743

CYPRUS MINERALS

MOUNT MARY

DRILL SECTION
LINE 10 275 E
CTR - 87 - 12

DRAWN BY: P.J.
DRAFTSMAN: J.T.
DATE: JAN. 1988
REVISIONS:

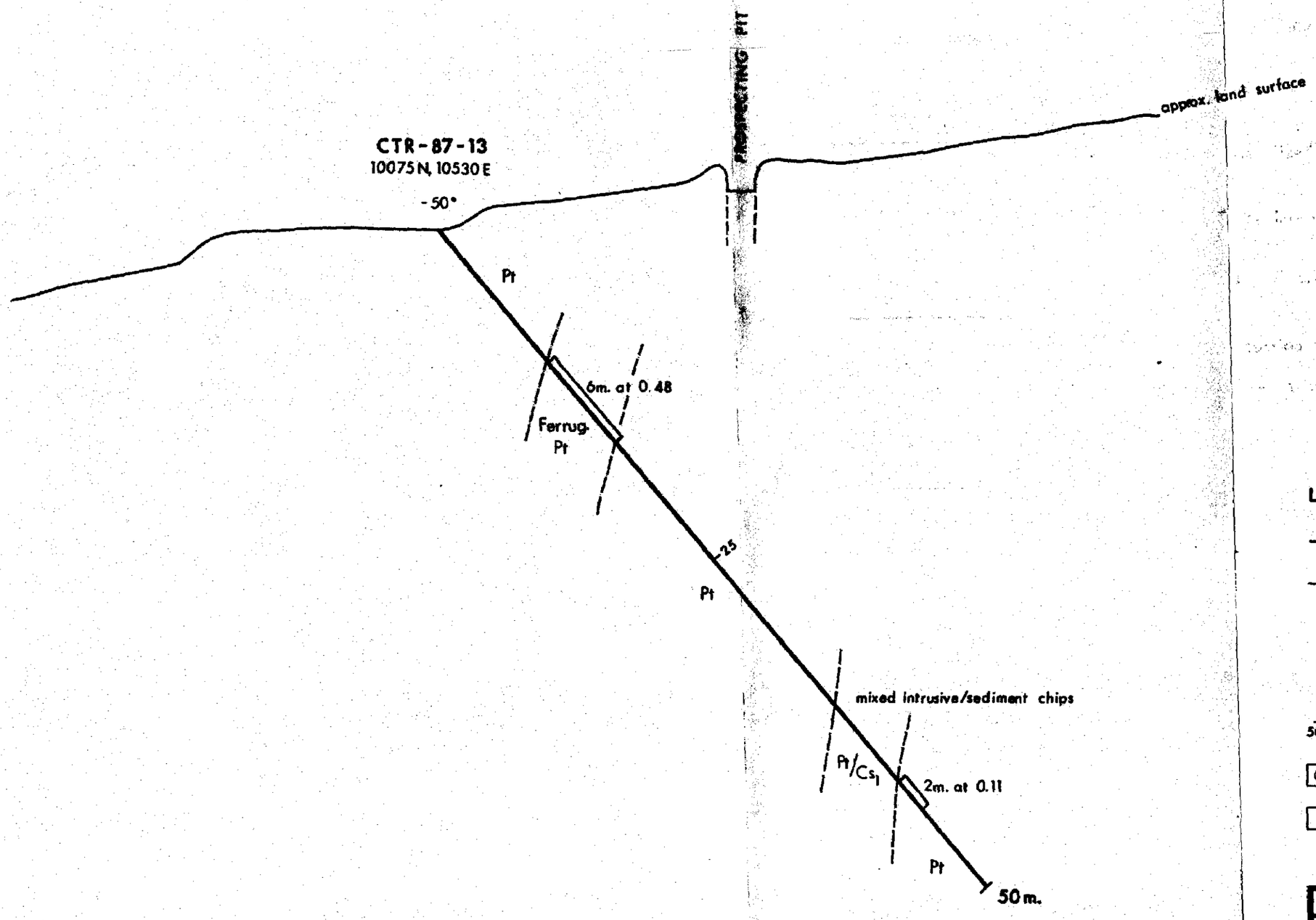
FILE No.

SCALE 1:250 — 2·5 0 2·5 5·0 METRES

ENCLOSURE 10

181

846189



5 cm

LEGEND

- Bedding attitude
- Lithological boundary
- 2m. at 0.11 — Assay interval and grade (g/t) gold
- 50m. — Total depth (metres)
- Cs1 — Syenite, syenomonzonite
- Pt — Truro Tillite

87-2743

CYPRUS MINERALS

MOUNT MARY

DRILL SECTION 10075N, 10530E Bearing 112°M CTR-87-13

DRAWN BY: P.J.
DRAFTSMAN: J.T.
DATE: JAN. 1988
REVISIONS:
FILE No.

SCALE 1:250 2·5 0 2·6 5·0 METRES

ENCLOSURE II

681

846190

10 090N

10 050N

10000N

CTR - 87 - 14
10030N, 10450 E

clinometer levelled

-50°

4m. at 0.15

8m. at 0.36

Pt

Cs_1

Cs_1

Ferrug. Pt

Pt

2m. at 1·32

25

Cs_1

Pt

Pt

2m. at 0.24

50 m.

5 cm

LEGEND

Bedding attitude

Lithological boundary

2m. at 0.24 — Assay interval and grade (g/t) gold

50m — Total depth (metres)

Cs_1 — Syenite, syenomonzonite

Pt — Truro Tillite

87-2743

CYPRUS MINERALS

MOUNT MARY

DRILL SECTION
LINE 10450 E
CTR - 87 - 14

DRAWN BY: P.J.
DRAFTSMAN: J.T.
DATE: JAN. 1988
REVISIONS:

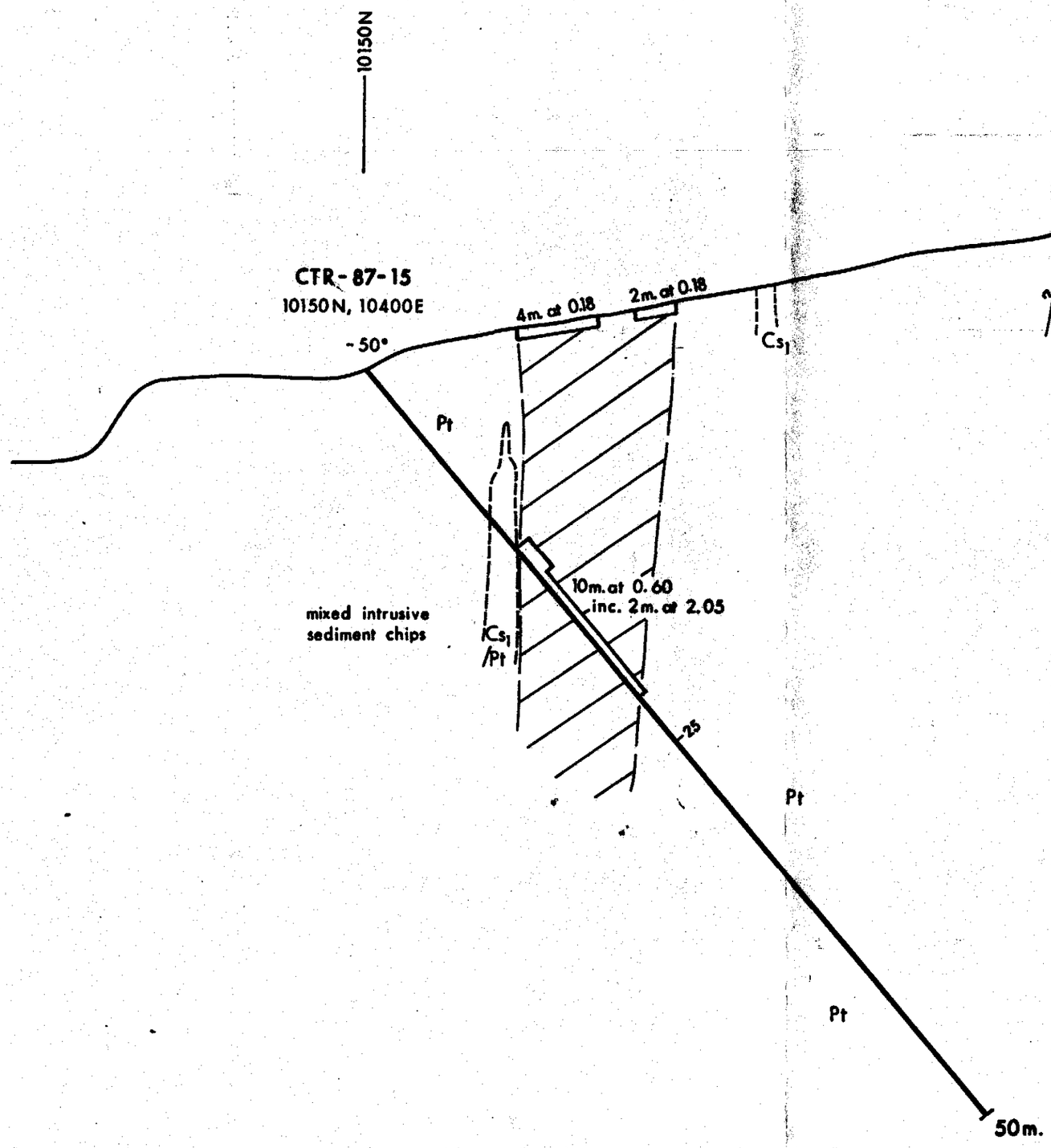
FILE No.

SCALE 1:250 — 2·5 0 2·5 5·0 METRES

ENCLOSURE 12

182

846191



5 cm

LEGEND

- Bedding attitude
- Lithological boundary
- 2m.at 0.12 — Assay interval and grade (g/t) gold
- 50m — Total depth (metres)
- Cs1 — Syenite, syenomonzonite
- Pt — Truro Tillite

87-2743

CYPRUS MINERALS

MOUNT MARY

DRILL SECTION
LINE 10 400 N
CTR-87-15

DRAWN BY: P.J.
DRAFTSMAN: J.T.
DATE: JAN. 1988
REVISIONS:

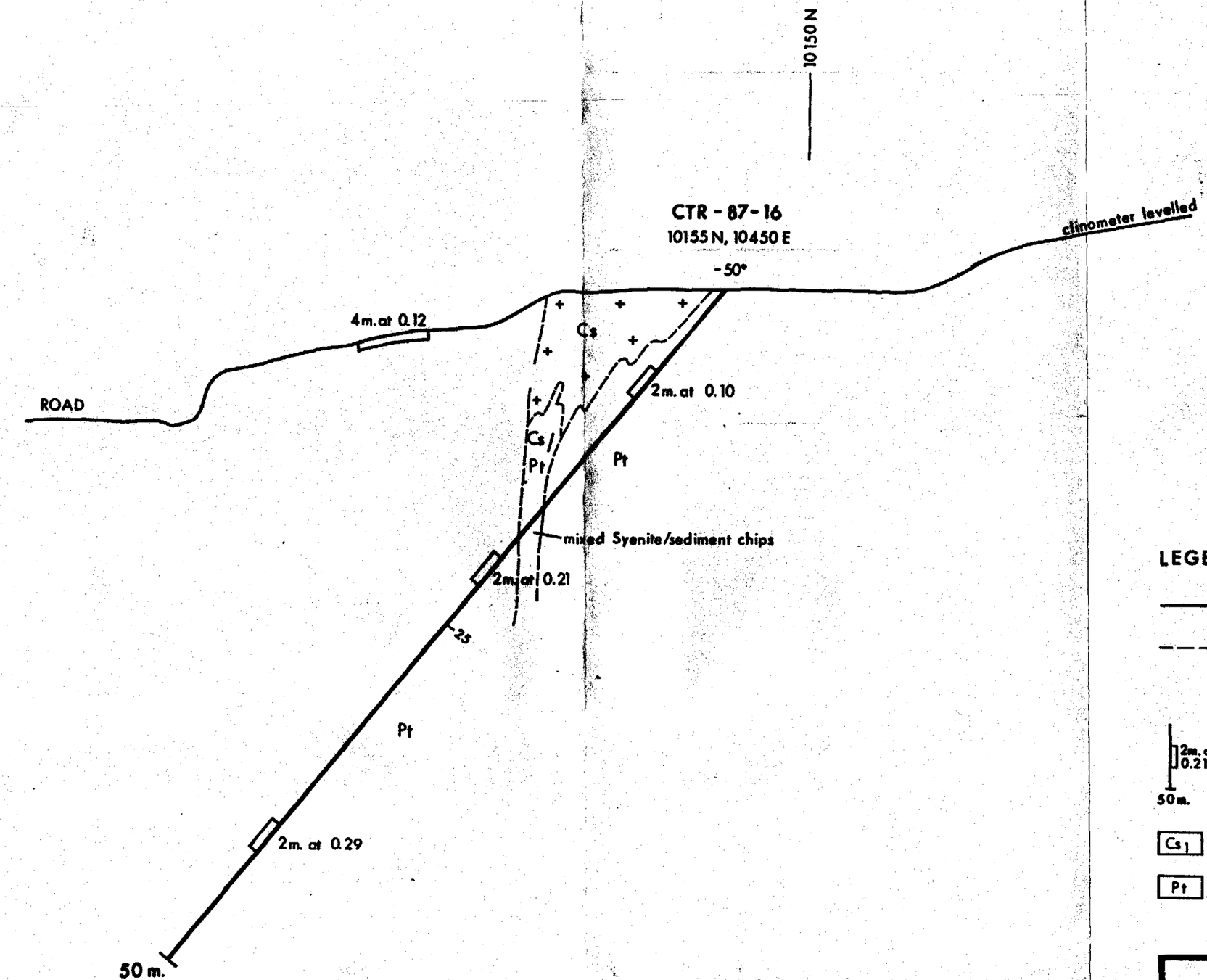
FILE No.

SCALE 1:250 2·5 0 2·5 5·0 METRES

ENCLOSURE 13

181

846192



5 cm

LEGEND

- Bedding attitude
- Lithological boundary
- 2m. at 0.21 — Assay interval and grade (g/t) gold
- 50m. — Total depth (metres)
- Cs1 — Syenite, syenomonzonite
- Pt — Truro Tillite

87-2743

CYPRUS MINERALS	
MOUNT MARY **DRILL SECTION** **LINE 10 450 E** **CTR - 87 - 16**	DRAWN BY: P.J. DRAFTSMAN: J.T. DATE: JAN. 1988 REVISIONS: FILE No.
SCALE 1:250 (2.5 0 2.5 5.0 METRES)	ENCLOSURE 14

180

846193

CTR - 87 - 17

10035 N, 10325 E

-50°

PROSPECTING PIT

approx. land surface only

Mixture of intruse and sediment chips

Cs_1/Pt

11.4m. at 0.36

Cs_1

2m. at 0.14

25

Pt

20m. at 0.72

inc. 6m. at 2.0

Cs_1

12m. at 0.16

50

Cs_1

Pt

2m. at 0.12

60m.

5 cm

LEGEND

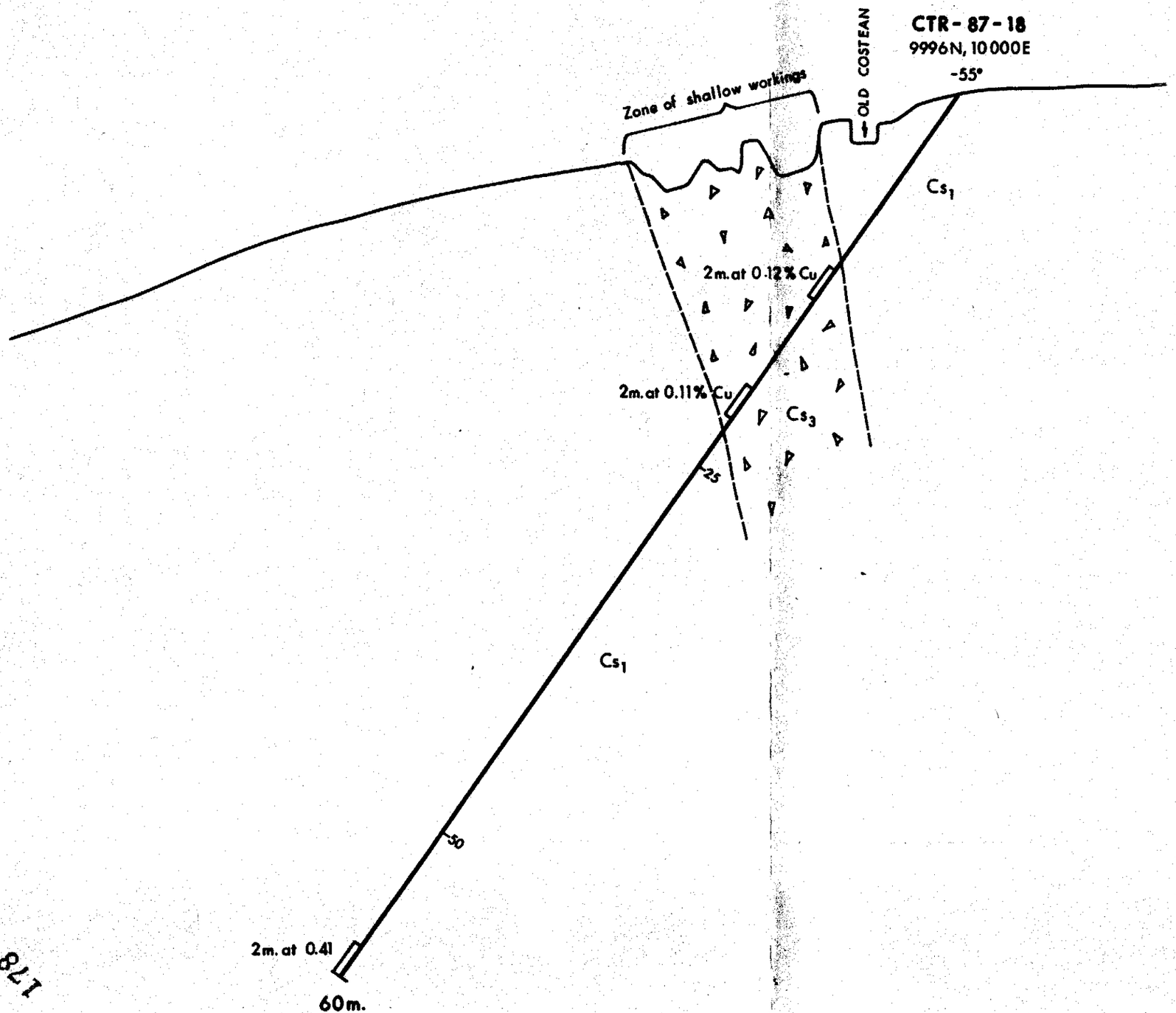
- Bedding attitude
- Lithological boundary
- Shear zone
- 2m. at 0.12 — Assay interval and grade (g/t) gold
- 60m. — Total depth (metres)
- Cs_1 — Syenite, syenomonzonite
- Pt — Truro Tillite

87-2743

CYPRUS MINERALS	
MOUNT MARY **DRILL SECTION** **10035N, 10325E** **Bearing 113°** **CTR - 87 - 17**	DRAWN BY: P.J. DRAFTSMAN: J.T. DATE: JAN. 1988 REVISIONS: FILE No.
SCALE 1:250 (2·5 0 2·5 5·0 METRES)	ENCLOSURE 15

179

846194



5 cm

LEGEND

- Bedding attitude
- Lithological boundary
- 2m. at 0.41 — Assay interval and grade (g/t) gold
- 60m. — Total depth (metres)
- Cs1 — Syenite, syenomonzonite
- Cs3 — Hydrothermal breccia pipe

87-2743

CYPRUS MINERALS

KINGS HILL

DRILL SECTION 9996N, 10000E Bearing 190°M CTR-87-18

DRAWN BY: P.J.
DRAFTSMAN: J.T.
DATE: JAN. 1988
REVISIONS:

FILE No. 24

SCALE 1:250 — 2·5 0 2·5 5·0 METRES

ENCLOSURE 16

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