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**NEWMONT AUSTRALIA LTD
AUSTRALIAN DEVELOPMENT LTD
JOINT VENTURE**

**EXPLORATION LICENCE 5066
PHILLIP CREEK
FOURTH & FINAL ANNUAL REPORT
January 29, 1990 to January 28, 1991
TENNANT CREEK 1:250,000
GEOLOGICAL SHEET**

**D.F. Pearson,
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EL5066 PHILLIP CREEK

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SUMMARY

This report details work completed on EL5066 during Year 4. Programmes including detailed gravity, IP, EMP and residual magnetic modelling confirmed that, of the methods tested, magnetics is the only direct discovery technique. Residual magnetic modelling suggests a secondary target located 300m north of the Vivid ironstone at a depth of 235m.

An additional deep drill hole VIV-8 was completed at the Vivid prospect extending the known strike of the ironstone system a further 30m west and achieving the following intersections:

Depth	m	Au g/t	Cu %	Bi %
278.5 to 286	7.5	0.47	3.00	0.01
348 to 354	10.0	1.83	0.88	0.83

Elsewhere on EL5066 programmes included a regional gravity survey with nominal station spacing of 500m and investigation of the P17 magnetic anomaly. These programmes have identified a gravity (high) anomaly at Raia's Revenge east and a discrete off-hole magnetic anomaly at P17 both of which require further investigation.

Exploration proposed for 1991 will focus on testing the known ironstone system at the Vivid prospect for high grade gold mineralisation by close spaced drilling. Further investigation of the Vivid residual magnetic anomaly, Raia's Revenge east and P17 will be a second priority. As EL5066 expires early in 1991 these programmes will be conducted on replacement tenements.

1.0 INTRODUCTION

1.1 GENERAL

EL5066 forms part of a project area with EL5076 granted to Australian Development Ltd. Exploration has been conducted on this project area by Newmont Australia Ltd under the terms of a joint venture with Australian Development Ltd which commenced in December 1987. Management of EL5076 was returned to Australian Development Ltd during September, 1990 however the joint venture remained current for EL5066.

1.2 THE JOINT VENTURE

Australian Development Limited (ADL) and Newmont Australia Limited (Newmont) entered into a joint venture in 1987 where Newmont can earn a 50% interest by exploration expenditure of \$3M during the four year period to December 1991. Newmont commenced exploration of the licence in November 1987.

1.3 LOCATION AND ACCESS

The Phillip Creek project lies within the boundaries of Phillip Creek Station 30km NW of Tennant Creek township (Figure 1). The sealed Warrego Road passes within 1km of the southern boundary and the Stuart Highway passes 4 to 5km east of the eastern boundary of the project area. Access off the Warrego Road and the Stuart Highway is via several old, and in many cases, disused exploration tracks which are impassable for brief periods after heavy wet season rains but otherwise quite suitable for exploration access. A dirt road passing between the Gecko mine access road and the Northern Star mine traverses the central part of the area.

Access to other parts of the area is assisted by station and fence line access tracks.

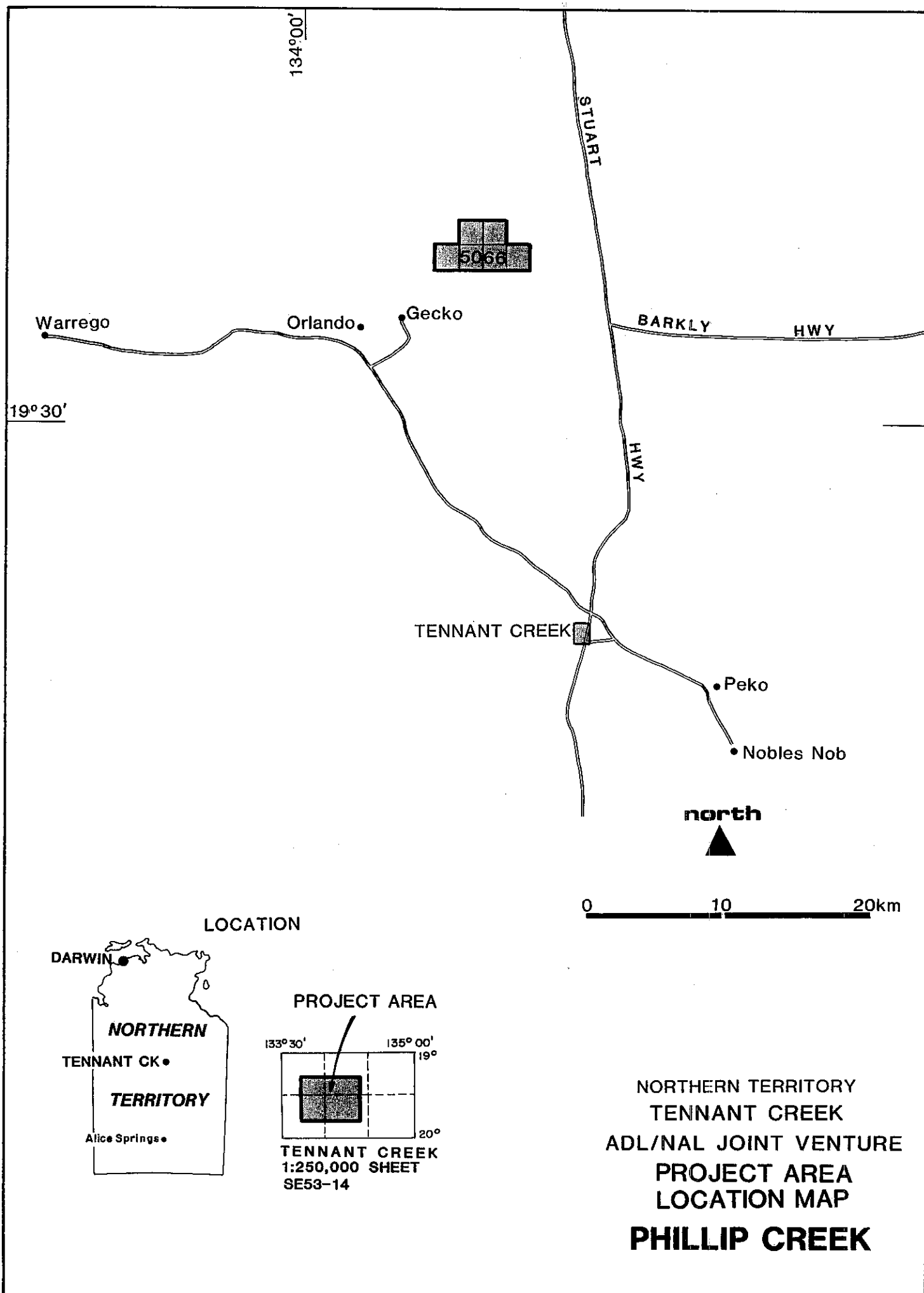


FIGURE 1

2.0 GEOLOGY

2.1 REGIONAL GEOLOGY

EL5066 covers parts of the central section of the early Proterozoic Warramunga Group sediments. Dodson and Gardener (1978) provide the most recent formal stratigraphic subdivision for this group. These authors subdivide the uppermost formation, previously known as the Carraman Formation into six numbered greywacke units and two units of acid volcanics known as the Gecko Volcanics and the Warrego Volcanics. This sequence is underlain by acid volcanics and shaley sediments of the Bernborough Formation and the Whippet Sandstone which are in turn underlain by unit 1 greywackes of Dodson and Gardener or the Monument Beds of previous authors.

Williams (1987) has suggested that the Whippet sandstone is the lower most unit of the Warramunga Group and that it unconformably overlies a sequence of greywacke, shale, BIF, chert and acid volcanics which he considers are the equivalent of Division 1 of the Arunta inlier in central Australia. The Warramunga Group is viewed as the equivalent of Division 2 of the Arunta complex by Stuart et.al. (1984).

Williams (1987) has further proposed an informal subdivision of the Carraman Formation by recognizing lower, middle and upper units. The middle unit named the Black Eye Member (thickness up to 3000m) has been delineated on the basis of its magnetic response and includes a sequence of hematite shales, quartz porphyries and greywackes with up to 20wt% magnetite. This unit also encloses all known massive magnetite ironstones on the field, some of which are hosts to the major ore bodies including Nobles Nob, Juno and Warrego.

Structure is reasonably complex with three main deformations resulting in moderate to steep open folds orientated ESE-WNW with numerous plunge reversals. Two main periods of faulting are recognized including an earlier development of steep shear zones sub parallel to fold axes and a later set of NW-SE faults with major sinistral strike displacements. Folding is thought to have commenced early in the basins' history while some sediments were still only partially consolidated.

The Warramunga Group has been metamorphosed to greenschist facies and shows evidence of local contact metamorphism against granite contacts, however, the numerous porphyry intrusives have produced minimal contact metamorphic effects.

Two ages of granites occur on the field the earliest known as the Tennant Creek Granite occurs mainly on the eastern side of the field and is foliated. The Warrego Granite which occupies the central and western parts of the field post dates the folding events but carries numerous quartz veins related to the

later faulting event. Other intrusives include dolerite, syenite and lamprophyre dykes.

Several sets of large quartz veins cut through the field with a north to north westerly trend and are considered to be low temperature fillings of late stage fractures. These later features are not known to be mineralised.

2.2

FEATURES OF KNOWN TENNANT CREEK ORE DEPOSITS

The major ore deposits of the Tennant Creek gold field have a number of common features:

- (i) They occur in hematite and magnetite ironstone bodies in sheared and altered sediments often at the intersection of the two phases of shear orientation.
- (ii) They occur in anticlinal fold closures in both principal folds and drag folds.
- (iii) They are often closely associated with iron rich sediments in the folded stratigraphy.
- (iv) They occur in alteration zones which are confined to the shear zones and have root like channels open down dip.
- (v) Alteration assemblages include chlorite (dominant) magnetite, talc, dolomite, quartz, and sericite. Bleaching is common in the footwalls.

There are two distinct deposit types in the field, the gold rich deposits such as Nobles Nob and the copper rich deposits such as Peko. Both styles have significant Bi and Se (commercially extractable in some cases), and minor uranium which may be of some use to exploration. Silver and base metals other than Cu are generally low however individual shoots of Pb-Zn mineralisation were found in some of the Cu rich mines eg. Orlando and the Ivanhoe mine produced more silver than gold in a ratio of approx. 3:1.

The deposits are iron sulphide poor, Cu occurs as chalcopyrite and gold is free or associated Cu-Bi sulphosalts, As is minor or absent.

In form the deposits tend to be pipe or plug shaped bodies of quartz hematite and magnetite surrounded by chlorite magnetite hematite and zones of dolomite. Several shoots of ore may be present at each mineralised site and metal ratios vary between shoots. Several of the ore bodies, such as Nobles Nob and White Devil are elongate in plan with the long axis parallel to local cleavage direction.

Of the 700 odd mapped or drilled ironstones in the field, some 150 carry detectable gold mineralisation. Paragenetic studies on the various deposits

have all shown that the Cu, Au, Bi assemblages have been deposited from solution subsequent to the emplacement of the magnetite bodies.

Weathering-oxidation extends to an average of 60m with a zone of trace element depletion extending to an average depth of 30m beneath a dissected, partially pisolitic laterite profile. Several deposits including Nobles Nob and Peko benefited from supergene enrichment.

LOCAL GEOLOGY

The geology exposed within the boundaries of EL5066 (Plate 1) represents a broad stratigraphic section through the central part of the Warramunga Group. The oldest rocks are the acid porphyries and volcanics of the Bernborough Formation exposed on the eastern side of the tenement. This formation's upper boundary with the greywackes of the lower Carraman Formation trends N-S adjacent to the Bernborough prospect.

Further to the east the lower Carraman Formation passes upwards into the Black Eye Member of Williams (1987) which includes a sequence of hematitic shales and ironstones in addition to greywackes and siltstones. This sequence is in turn overlain by turbidites of the upper Carraman Formation in the area west of the Gecko Mine.

The structure of the licence area is dominated by a broad open NNW plunging synclinorium related to the warping of the overlying Tomkinson Creek Beds. Within the broad confines of this structure the picture is made more complex locally by numerous moderate to tight NW plunging folds with wavelengths averaging around 200m. Additionally the sequence is cut by axial plane parallel and N-S trending shear zones and NW trending faults related to the Quartz Hill Fault deformation event.

In much of the central and northern parts of the licence area the Proterozoic geology is obscured by alluvial and aeolian sand. RAB drilling suggests that this cover is in general only 2 to 4m in thickness above oxidized Proterozoic rocks.

Three old mines are located in the eastern part of project area, namely the Bernborough the Golden Slipper and the Queen Alexandria. The Bernborough Mine is situated on a low hill rising above soil and sand covered flats. Minor gold copper and bismuth mineralisation occurs in a small pod of ironstone localized at the intersection of a NE trending shear zone and the north trending lithological boundary. The production history of the Bernborough mine is not known but it is thought to be small.

At the Golden Slipper Mine several shafts and pits have been opened on a zone of locally intensely silicified and brecciated siltstones. Gold mineralisation is associated with a mesh of thin quartz hematite veinlets within the breccia. Specimens of thin secondary "paint" gold can be found on the dumps suggesting that most of the recorded production of 125oz of gold came from supergene mineralisation.

The Queen Alexandria (Raia's Revenge prospect) consists of two shallow shafts sunk in kaolinised shales adjacent to a small jasperoidal ironstone body. Past production is not known but the nature of the workings suggest that production was negligible.

3.0 EXPLORATION PROGRAMME

3.1 PREAMBLE

Systematic exploration of EL5066 proceeded through a phase of data acquisition which included systematic soil sampling, geological mapping, interpretation of low level airborne geophysics and rotary air blast drilling.

During Year 2 exploration identified 6 low order gold anomalies in soil (C2, C6, C7, C8, C9 and C12) which were test drilled with RAB. Drilling was designed to test the subsurface geochemistry beneath a range of styles of surface geochemical and geophysical anomalies but failed to detect significant gold mineralisation. Drilling data indicated that lateral dispersion of mineralisation in the oxidized profile was limited (Pearson, 1989).

Exploration completed during Year 3 included additional geological mapping and assessment of the airborne geophysical data leading to the selection of the P2 (Explorer 166) magnetic anomaly and old mine prospects at Bernborough, Golden Slipper and Raia's Revenge (Queen Alexandria) for more detailed examination (Figure 2). Prospect scale programmes included gridding, geological mapping, ground magnetics, soil and outcrop (old workings) sampling and drilling.

Drilling at the P2 (Explorer 166) magnetic anomaly resulted in the discovery of a blind mineralised hydrothermal ironstone body which has been designated the VIVID prospect. Exploration completed on the other prospects has down graded these zones (Preston & Pearson 1990).

Year 4 programmes on EL5066 have included both geophysical and further geochemical surveys at the VIVID prospect as well as completion of an additional deep drill hole, further extending the mineralised ironstone system. Elsewhere on EL5066 magnetic anomalies P16 and P17 have been assessed, leading to detailed ground magnetics and drilling at P17. A gravity survey based on an average station spacing of 500m has also been completed.

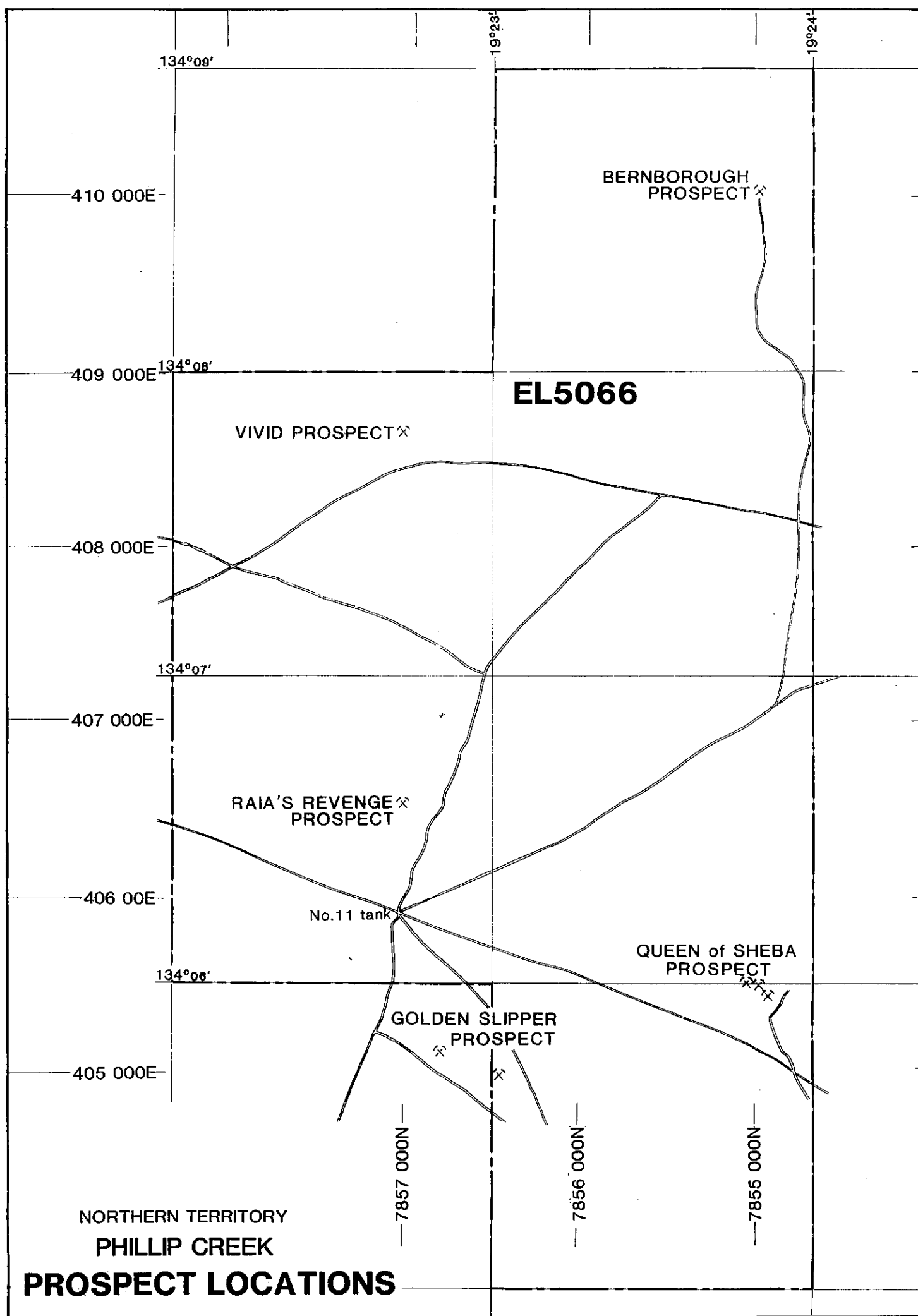


FIGURE 2

3.2 EXPLORATION COMPLETED AT THE VIVID PROSPECT

3.2.1 Geophysical Characterisation Surveys

Geophysical surveys including EMP, IP, detailed gravity, regional gravity (on EL5066) and downhole EMP and IP surveys were attempted at the Vivid prospect. Unfortunately both the downhole EMP and IP surveys failed due to technical difficulties.

Surface EMP and IP surveys both identified weak conductive anomalies however the results are difficult to interpret and can only be seen to be related to the mineralised ironstone in retrospect.

The detailed gravity survey conducted on a station spacing of 25m by 80m on the Vivid grid does not specifically identify the ironstone body as a zone of anomalously high density. The survey does, however, indicate the position of several structures which are thought to control the location of the ironstone.

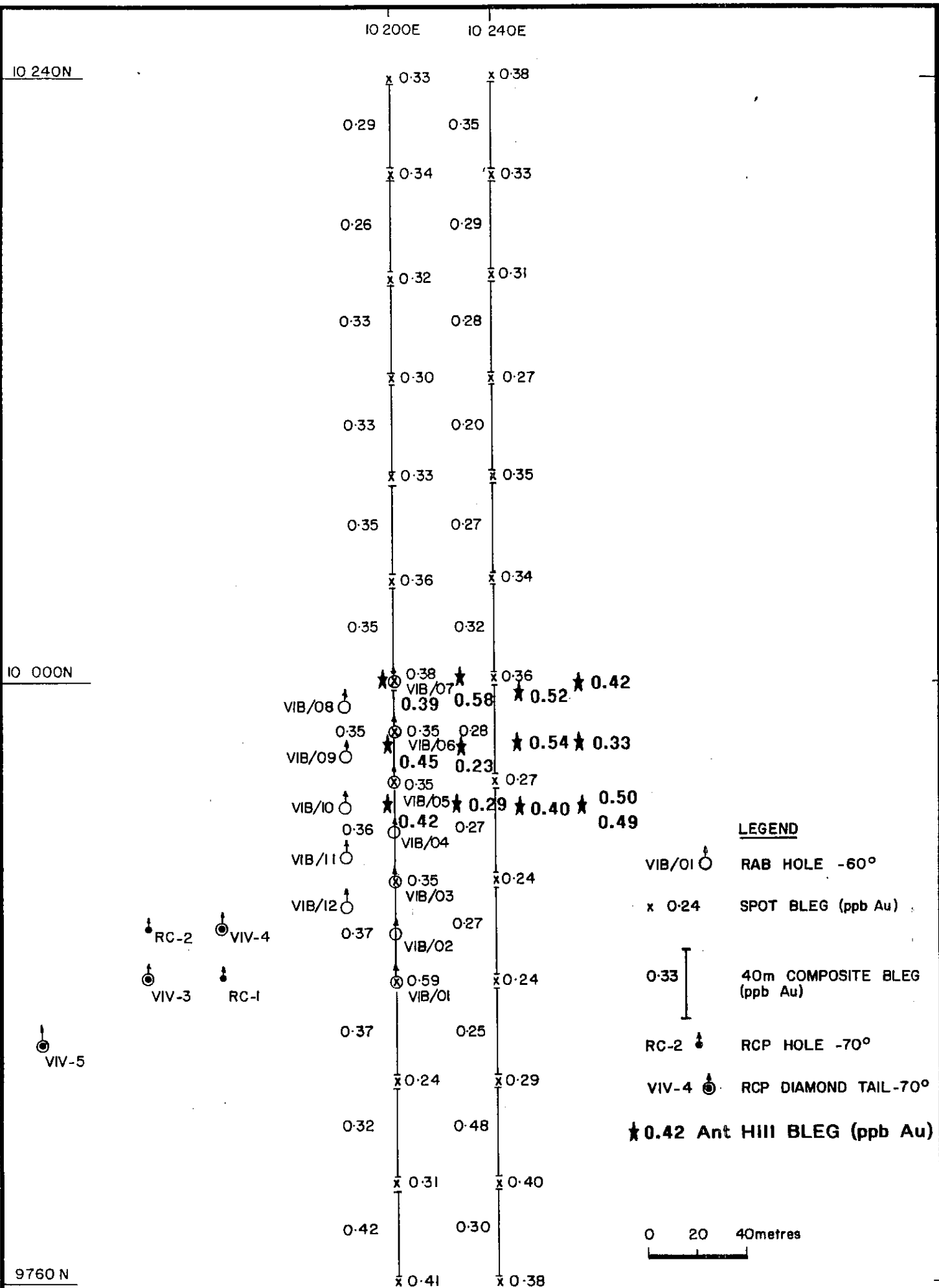
The residual magnetic anomaly at Vivid has been modelled by subtracting the effect of the known ironstone, based on a simple model constrained by current drill sections and bulk magnetic susceptibilities. This study has defined a separate magnetic target located 300m north of Vivid at a depth of 235m. Although this work suggests a further drill target no test is proposed until the target can be re-modelled following better definition of the Vivid ironstone by the next phase of drilling.

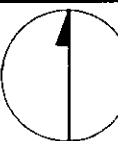
3.2.2 Surface Geochemical Survey

Surface BLEG sampling conducted during Year 3 over the projected surface expression of the VIVID ironstone returned results averaging 0.33ppb Au with a high of 0.59ppb Au located at 10200E 9880N. It was concluded that this result would be unlikely to be considered anomalous in the context of a regional sampling programme.

As a further investigation of the prospects' geochemical character, thirteen 5kg samples of termite mound material were collected on a 25m grid over the zone previously soil sampled (Figure 3). Each sample was from a single termite mound and was pulverised prior to analysis by bulk cyanide leach at Classic Labs in Darwin. Care was taken to sample only ant mound material visibly uncontaminated by dust from the 1989 RAB drilling programmes.

BLEG results for the termite mound samples fell in the range 0.23 to 0.58ppb Au without producing an identifiable anomalous pattern. It was concluded that this mode of sampling did not produce any results significantly different from the previous soil sampling.



 NORTH	Newmont Australia Limited			VIVID RAB DRILL HOLE LOCATION AND BLEG PLAN
	COMPILED	SCALE	1:2000	
	DRAWN C.S.D.S.	DRAWING No.		
	DATE MARCH '90	FIGURE No.	3	

3.2.3 Deep Drilling Programme

3.2.3.1 *Review of the 1989 Programme Data*

In recognition of the complex nature of the geology of the Vivid ironstone system (as described in Preston & Pearson, 1990) a programme of re-logging all existing drill holes using a standardised format was instigated. Following this programme the intersections were re-assessed as a test of the original interpretation (Mather and Kennedy, 1990).

In a gross sense the previous interpretation of the configuration and character of the ironstone-alteration-mineralisation system remains unchanged following the re-logging programme. Interpretation of this work confirms the continuity and homogeneity of the alteration-mineralogical zones previously interpreted with minor adjustments in detail to some boundaries on working sections.

The following observations are worth of specific mention:-

- (i) The footwall chlorite alteration zone in the down plunge and down dip (keel) position on section 10020E is more extensive than previously recorded. This may indicate a greater ironstone thickness up dip from the VIV-6 intersection than previously thought.
- (ii) There is strong evidence of an ENE trending shear, footwall to the ironstone which may truncate the ironstone system at depth, and which may have contributed to the excessive deviation in azimuth evident in VIV-7.
- (iii) An additional mineralogical zone the, Hematite Talc ironstone zone, was described occurring in the cap position forming a thin layer over the upper Dolomite rich zone and the Central ironstone body on sections 10100E and 10060E. The Hematite Talc zone consists predominantly of talc and hematite with subordinate carbonate and jasper. Within this relatively restricted zone carbonate is present below the 850RL (circ.) whilst above that level jasper is present instead.

In order to better understand the dynamics of the VIVID ironstone system 10 specimens of drill core were submitted to Amdel Ltd for petrographic description with particular emphasis on indications of paragenesis (a full report on this work by Dr. D.R. Mason is included as Appendix 1).

A summary of the petrographic work is as follows:-

- (i) Ten (10) drill core rock samples were studied petrographically and mineragraphically and named as follows:

<u>Sample</u>	<u>Rock name</u>
VIV-3 (190.74-190.83)	Cu-mineralised hematite-dolomite breccia
VIV-3 (192.29-192.37)	Hematite ironstone
VIV-3 (198.37-198.45)	Cu-mineralised hematite-magnetite ironstone
VIV-3 (204.06-204.14)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV-3 (255.03-255.11)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV-5 (268.90-268.98)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV-5 (272.50-272.59)	(Au-Bi-)Cu-min. hematite-magnetite ironstone
VIV-5 (277.71-277.80)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV-6 (325.01-324.92)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV-6 (327.90-328.00)	Cu-mineralised magnetite ironstone

- (ii) The rocks are composed of variable proportions of magnetite, hematite, quartz, chlorite, dolomitic carbonate, chalcopryrite, pyrite, bismuthinite, and rare native gold.
- (iii) The rocks are considered to represent (Au-Bi-)Cu-Fe-rich hydrothermal deposits, as supported by the presence of mineralogical banding, colloform structures, atoll textures in magnetite, and the metallic element association. Subsequent deformation of the rock body has caused various degrees of fracturing, partial recrystallisation, replacement, and vein development.
- (iv) Mineral parageneses are related to initial crystallisation and subsequent deformation effects:
- More-or-less synchronous deposition of magnetite, hematite, chlorite, quartz, carbonate, chalcopryrite and bismuthinite occurred under hydrothermal conditions to generate the mineralogically banded structures. Microtextural evidence indicates that, within this mineral association, magnetite was early and the other phases were late.
 - Deformation of the rock body resulted, in part, in the deposition of veins variably composed of quartz, carbonate, hematite, chalcopryrite, and bismuthinite.
- (v) Native gold was observed in only one sample, where its association with chalcopryrite and with hematite-chlorite alteration patches in magnetite indicates relatively late deposition.

The above observations are consistent with descriptions of other mineralised ironstone systems from the Tennant Creek field.

3.2.3.2 *Drilling conducted during 1990*

The last of the 1989 programme deep drill holes, VIV-7, had been designed to test the ironstone system on section 9980E. However due to excessive easterly azimuth deviation VIV-7 intersected the keel of the ironstone on section 10020E close to the intersection previously achieved by VIV-6 (Preston & Pearson, 1990).

In view of this result and the interpreted NE trending shear zone discussed above, drill hole VIV-8 was designed to achieve the 9980E intersection by drilling from the north, Figure 4.

Drill hole VIV-8 was completed at total depth of 408m and surveyed by down hole magnetometer. The Vivid ironstone system was intersected between 278.5mdh and 353mdh and returned the following mineralised intervals from separate intersections of magnetite-chlorite ironstone (see Figure 5):-

VIV-8	From	To	m	Au g/t	Cu %	Bi %
	278.5	286	7.5	0.47	3.00	0.01
	348	354	10.0	1.83	0.88	0.83
	(including		1.0	6.08	1.28	0.87)

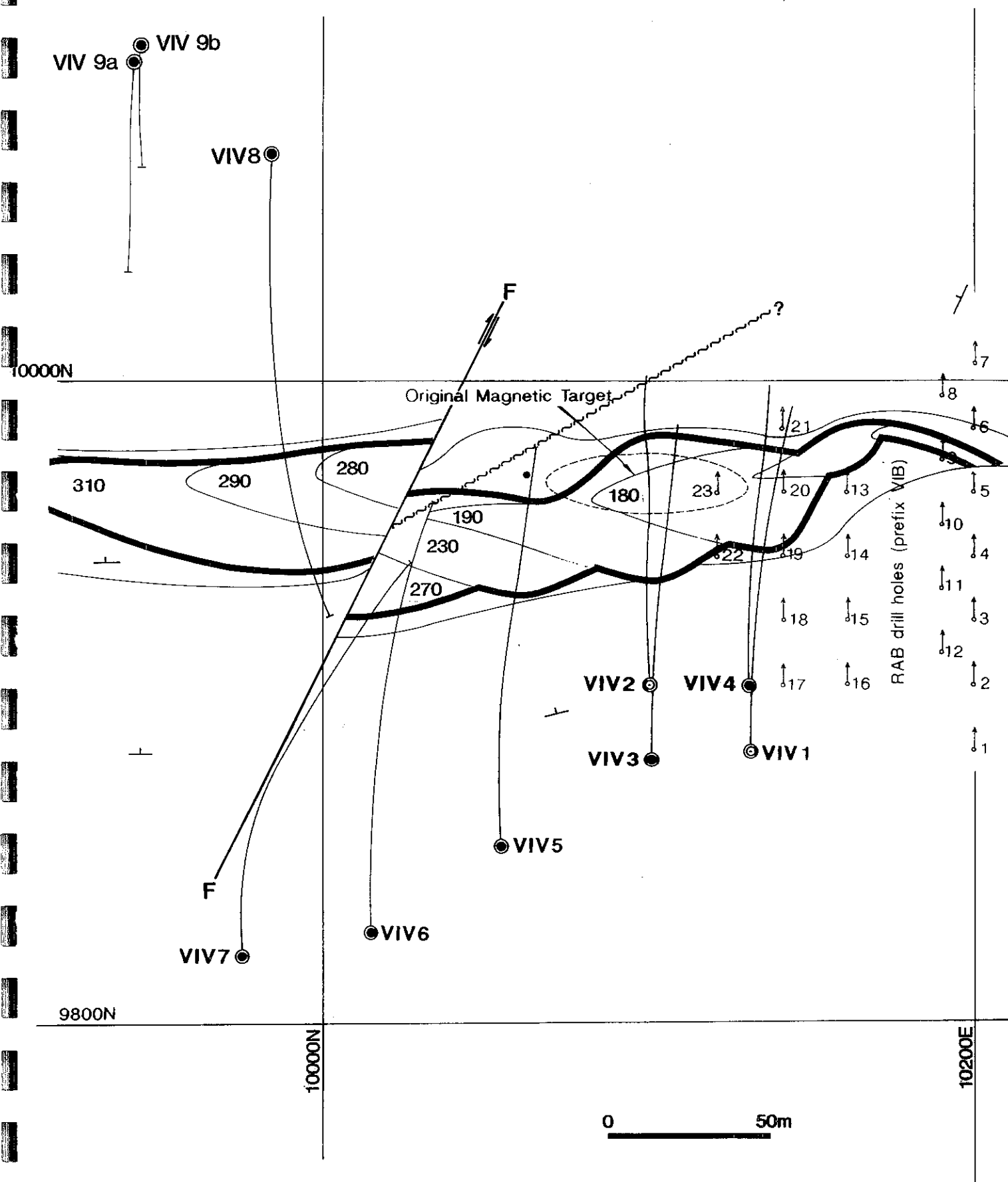
Bismuthinite was relatively abundant in the deeper intersection with up to 3.0% Bi recorded in individual 1m samples. Detailed drill logs with comprehensive assay and down hole magnetic data are included as Appendix 2 to this report. Detailed sections at 1:500 scale for geology, assay data and downhole magnetics are presented as Plates 2, 3 & 4.

Mineralogical zonation exhibited by the ironstone intersection was close to that predicated from previous work however the intersection was achieved further north than expected. Interpretation of the VIV-8 intersection with respect to previous intersections suggests a minor fault dislocation of 20 to 30m (west side north and down) between the VIV-7 and VIV-8 intersections (Figure 4).

The occurrence of a broad intersection of carbonate-dolomite demonstrates that the dolomitic rich zone persists on the southern hanging wall of the central ironstone body to greater depths down plunge than previously expected. Intersection of mineralised magnetite chlorite ironstone in the upper hanging wall position (278.5m-286m) demonstrates a significant extension of the potential gold pod host rock in an area not tested by any of the previous drilling (Figure 5).

Interpretation of down hole magnetic data by consultant Leigh Farrar (Plate 4) indicates that the ironstone system maintains a consistent plunge of 48.5° W with no indication of a reduction in size or imminent termination down plunge. The VIV-8 intersection effectively extends the known strike extent of the VIVID ironstone system a further 30m to the west (approximately 9990E) where it remains open.

Following the relative success of hole VIV-8 the next hole VIV-9 was also designed to be drilled from the north aimed at intersecting the ironstone system on section 9940E and thus substantially increasing the tonnage potential for



TENNANT CREEK ADL J/V

VIVID PROSPECT

DRILL HOLE LOCATION MAP



Ironstone (Magnetic qtz) Central ironstone body

Magnetite Chlorite Zone

Intense Chlorite Zone

Outer Chlorite Zone

Dolomite Zone

0 50 100m

VIV-8

100m

200m

300m

400m

10m 0.9% Cu, 1.83g/t Au, 0.8% Bi

7.5m 3.0% Cu, 0.47g/t Au

EOH 408m

10100 N

9990 N

VIVID PROSPECT SECTION 9990 E

FIGURE 5

mineralisation. Unfortunately technical problems led to the postponement of VIV-9 until 1991 following deviation problems with the pre-collar.

Two attempts were made to drill the VIV-9 pre-collar, the first was abandoned at 195m due to excessive flattening whilst the second attempt was abandoned at 150m due to steepening and azimuth drift to the east (details are listed in Appendix 3).

3.2.4 Conclusions

- * Geophysical characterisation at the VIVID prospect demonstrates that the ironstone system is only weakly evident in IP and EMP data and not directly detectable by detailed gravity. Magnetics appears to be the only direct discovery technique of the methods tested.
- * Residual magnetic modelling suggests a secondary target located 300m north of the Vivid ironstone at a depth of 235m.
- * Drilling has extended the known extent of the Vivid ironstone a further 30m west with no indications of a reduction in size or degree of mineralisation nor imminent termination.
- * Close space drilling is required to explore within the ironstone system for high grade gold mineralisation. A proposed drill hole pattern is shown on Figure 6 however this is expected to be modified in the light of new data derived from the sequential drilling programme.

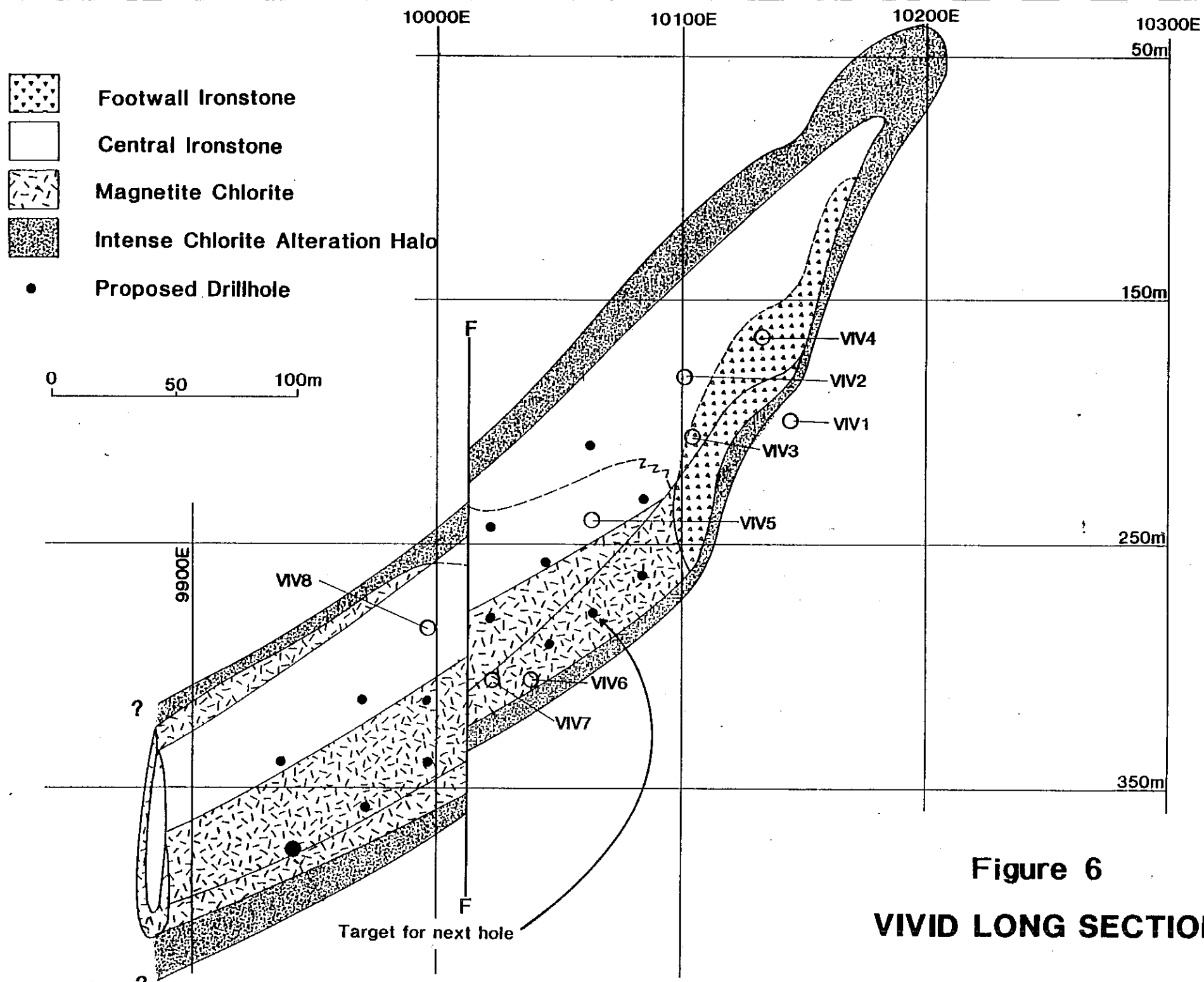


Figure 6
VIVID LONG SECTION

3.3 EXPLORATION COMPLETED ON EL5066 OUTSIDE THE VIVID PROSPECT

3.3.1 Regional Gravity Survey

Gravity measurements were recorded over EL5066 and adjacent area on a nominal grid spacing of 500m. Stations were located by GPS and levelled using high precision digital barometers. Gravity readings were taken from Newmont's La Coste and Romberg gravity meter (#G505) and corrected for diurnal drift using repeat readings. Data was also corrected for earth tides using standard earth tide formulae.

Bouguer densities of 2.00, 2.20 and 2.67g/cc were used to produce three corresponding Bouguer anomaly values for each station. A density of 2.20g/cc however was considered to most accurately reflect surface material and so was selected for final map making. Data is listed in Appendix 3 and contoured Bouguer anomaly data is presented on Figure 7.

Interpretation of the gravity data shows that the Vivid prospect is associated with an EW to NE orientated gravity ridge or zone of higher density. Interestingly the Golden Slipper and Raia's Revenge prospects also appear to be located on the ridge.

The ridge feature may be somewhat exaggerated by the presence of an area of low density lying to the south of Raia's Revenge and immediately east of the Queen of Sheba prospect. A shallow granite intrusion related to the Tennant Creek Granite is the most probable cause of this feature.

One station located approximately 500m east of the Raia's Revenge prospect returned a highly anomalous reading within the gravity ridge feature previously described. The anomaly falls on an area of transported soil in a broad NE trending drainage pattern.

Reconnaissance ground magnetic profiles (Plate 1) were run across the gravity high to check for subtle magnetic signatures indicative of a shear zone or shallow buried oxidised ironstone body. No such signatures were observed.

Follow-up gravity measurements will be required to determine whether the anomaly is real or spurious. If the anomaly is found to be valid it will require drill testing to determine it's origin.

3.3.2 Magnetic Prospects

3.3.2.1 *General*

Re-evaluation of the aeromagnetic data over EL5066 led to the identification of a further two low order magnetic anomalies considered worthy of investigation in early 1990. These anomalies were designated anomaly P16 and P17 (Figure 2). Both anomalies were ground located with reconnaissance ground magnetics and

P17 was considered worthy of further work whilst P16 was located just south of and outside the EL5066 boundary.

3.3.2.2 *The P17 Prospect*

The P17 magnetic anomaly was gridded with ten 100m spaced N-S lines each pegged at 50m intervals for a length of 1200m. Geological mapping at 1:2,500 scale was conducted over the grid area to assist with interpretation of the magnetics (this work is presented on Plate 5). Mapping demonstrates that outcrop is generally poor in the P17 area with the few outcrops NW and E of the magnetic anomaly being weathered porphyritic acid volcanics of the Bernborough Formation. Several NW trending faults are recorded in the grid area and SE trending quartz veins exposed 150m NW of the grid centre probably trend through the anomalous zone.

Ground magnetic data was measured at 5m intervals on the N-S lines by contractors Goanna Exploration Ltd using an EDA OMNI IV proton precession magnetometer with sensor mounted on a 3m staff. An EDA PPM400 proton precession magnetometer was used as a base station.

Contoured ground magnetic data, corrected for diurnal drift, is shown on Plate 6 where it can be seen that line 5000E was extended 300m N and 300m S to provide additional regional gradient data to assist with modelling. Modelling was carried out by senior geophysicist, Marcus Flis using Geosoft inversion programme MAGMOD.

Anomaly P17 was defined as a low order (80nT peak to peak) N-S trending elliptical anomaly, with probable multiple sources, occurring within a high gradient zone increasing west towards the Queen of Sheba magnetic anomaly (Plate 5 & 6). At least two magnetic trends, possibly shear zones, run in a NE direction to the north and south of P17.

Modelling of line 5000E data suggested a steeply south dipping source or sources at a depth range of 100 to 250m. Modelling was also carried out on line 5000N however this was based on only eleven data points. The later model suggested an east (50°) dipping body at a depth range of 170 to 230m.

The anomaly orientation was considered to be poorly defined because although a north-south strike appeared likely the response could also have been caused by multiple, east-west striking, strike-limited bodies stacked in a N-S direction. On the basis of the scant geological data the anomaly was assumed to be N-S and a drill target was defined at 5000E 4900N at a depth of 240m.

RC hole P17P-1 (Plate 5 & 7) tested the above target and was terminated at depth of 280m without encountering ironstone or substantial hydrothermal alteration. A sequence of interbedded weakly magnetic siltstones and claystones and minor ignimbritic acid volcanics were intersected with a moderate increase in magnetic susceptibility over the last 30m. No geochemical anomalies were returned from

4m composite samples of the drill cuttings (drill logs and down hole magnetic data are presented in Appendix 4).

Interpretation of down hole magnetic survey data (collected by Australian Development Ltd technicians using a Sherwell three component bore hole magnetometer) shows a weak but apparently discrete magnetic anomaly located 40m west of the hole trace at a depth of 240m. This response may indicate the presence of an ironstone body, however the generally low geochemical response and the lack of hydrothermal alteration, especially in the later part of the hole (which would be beneath the anomaly) tends to downgrade that possibility.

A second hole will be required at the P17 prospect to explain the off hole magnetic anomaly and the original ground magnetic anomaly. This work however is of secondary priority to further drilling at the Vivid prospect.

3.3.3 Conclusions

- * Follow-up gravity measurements will be required to determine whether the Raia's Revenge east gravity anomaly is real or spurious. If confirmed RAB drilling will be required to determine it's origin.
- * A second hole is required at the P17 prospect to investigate the off hole magnetic anomaly detected in hole P17P-1.
- * Further work at both Raia's Revenge east and P17 prospects is considered of secondary priority to close spaced drilling at Vivid.

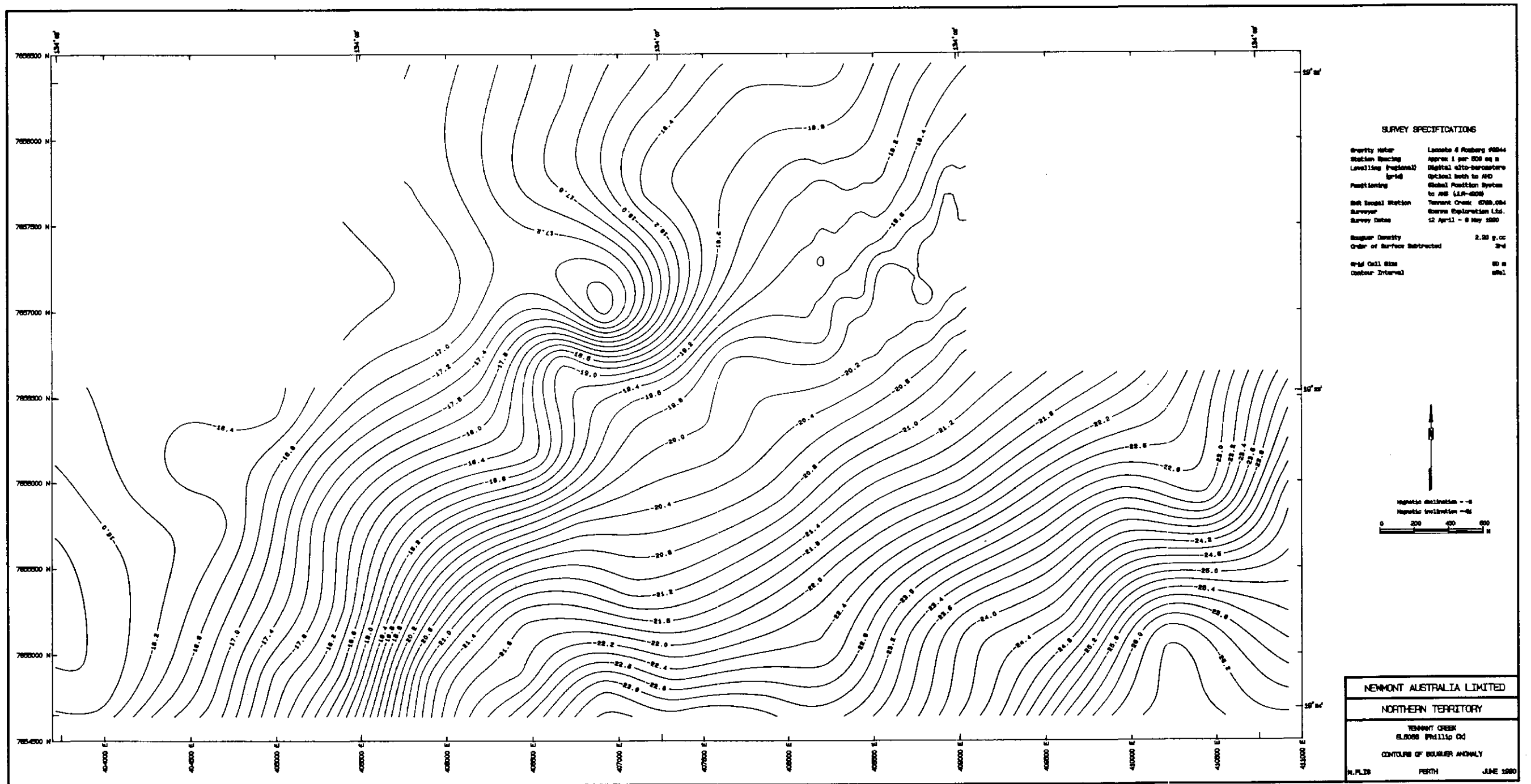


FIGURE 7

6 EXPENDITURE FOR YEAR 4

EL5066 PHILLIP CREEK

January 29, 1990 to January 28, 1991

<u>ITEM</u>	<u>\$</u>
Salaries, Wages & Overheads	178,005
Drafting	716
Assays	6,348
Geophysics	24,588
RC Drilling	70,567
Site Prep.	1,876
Survey	3,611
Consultant	1,937
Rentals & Supplies	55,170
Travel	26,824
Freight	4,648
Vehicles	8,831
Computer	1,063
Administration & Comm.	14,264
TOTAL	\$398,448

ACKNOWLEDGEMENTS

Field work representing the bulk of geological and geochemical investigations completed on EL5066 during 1990 was conducted and supervised by geologists Steve Kennedy and Sally Mather.

Geophysical programmes and geophysical data interpretation was conducted by senior geophysicist Marcus Flis.

REFERENCES

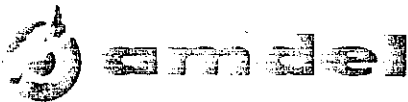
- Dodson, R.G.; and Gardener, J.E.F.; 1978: Tennant Creek Northern Territory, 1:250,000 Geological Series - Explanatory Notes " Aust. Govt.Publishing Service Canberra.
- Kennedy, S.; Mather, S.; 1990: "Preliminary Notes on Shallow and Surface Geochemistry at the Vivid Prospect, Tennant Creek, Northern Territory". Internal report Newmont Australia Ltd, June, 1990.
- Kennedy, S.; 1990: "Status report for 1990 EL5066, Phillip Creek Project, NT Tennant Creek 1:250,000 sheet". Internal report Newmont Australia Ltd, November, 1990.
- Mather, S.; Kennedy, S.; 1990: "Vivid Drill Hole Re-logging Programme: Re-interpretation". Internal memo to D.F.Pearson, Newmont Australia Ltd, August, 1990.
- Pearson, D.F.; 1989: Second Annual Report, Phillip Creek Project, Incorporating EL5066, & 5076, Northern Territory, Tennant Creek, 1:250,000 sheet. Newmont Australia Ltd unpublished report to the Department of Mines and Energy, Darwin.
- Preston, V.A.; Pearson, D.F.; 1990: "Exploration Licences 5066 & 5076, Phillip Creek Project, Third Annual Report, Tennant Creek, 1:250,000 Sheet." Newmont Australia Ltd unpublished report to the Department of Mines & Energy, Darwin.
- Stuart, A.J.; Shaw, R.D.; and Black, L.P.; 1984: The Arunta Inlier: a complex ensialic mobile belt in Central Australia. Part 1: Stratigraphy, correlations and origin. Aust. J. Earth Sci (4) 31: pp445-455.
- Williams, B.T.; 1987: Exploration of the Tennant Creek Mineral Field, N.T. in Geology and Geochemistry of Gold Copper ironoxide systems: Tennant Creek and Starra Districts, Volume 1 University of Tasmania pp28-60.

APPENDIX 1

PETROLOGICAL DESCRIPTIONS FOR TEN DRILL CORE ROCK SAMPLES

FROM THE VIVID PROSPECT

BY DR. D.R. MASON



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23 November 1990

Newmont Australia Limited
PO Box 38355
WINNELLIE NT 0820

ATT: MR STEVE KENNEDY

REPORT G 8842/91 - PART II

YOUR REFERENCE:	Purchase Order No. 1645, dated 4/10/90
IDENTIFICATION:	As per request sheet
MATERIAL:	Quartered drill core
LOCATION:	Northern Territory
DATE RECEIVED:	9 October 1990
WORK REQUIRED:	Large polished thin sections, routine petrographic and brief mineragraphic descriptions, brief scanning, photomicrographs

Investigation and Report by: Dr Douglas R. Mason

Keith Henley

Dr Keith J. Henley
Manager, Geological Services

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PETROGRAPHIC DESCRIPTIONS FOR TEN DRILL CORE ROCK SAMPLES

SUMMARY

1. Ten (10) drill core rock samples have been studied petrographically and mineragraphically. They have been named as follows:

<u>Sample</u>	<u>Rock name</u>
VIV 3 (190.74-190.83)	Cu-mineralised hematite-dolomite breccia
VIV 3 (192.29-192.37)	Hematite ironstone
VIV 3 (198.37-198.45)	Cu-mineralised hematite-magnetite ironstone
VIV 3 (204.06-204.14)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV 3 (255.03-255.11)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV 5 (268.90-268.98)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV 5 (272.50-272.59)	(Au-Bi-)Cu-min. hematite-magnetite ironstone
VIV 5 (277.71-277.80)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV 6 (325.01-324.92)	(Bi-)Cu-mineralised hematite-magnetite ironstone
VIV 6 (327.90-328.00)	Cu-mineralised magnetite ironstone

2. The rocks are composed of variable proportions of magnetite, hematite, quartz, chlorite, dolomitic carbonate, chalcopyrite, pyrite, bismuthinite, and rare native gold.
3. The rocks are considered to represent (Au-Bi-)Cu-Fe-rich hydrothermal deposits, as supported by the presence of mineralogical banding, colloform structures, atoll textures in magnetite, and the metallic element association. Subsequent deformation of the rock body has caused various degrees of fracturing, partial recrystallisation, replacement, and vein development.
4. Mineral parageneses are related to initial crystallisation and subsequent deformational effects:
 - i) More-or-less synchronous deposition of magnetite, hematite, chlorite, quartz, carbonate, chalcopyrite and bismuthinite occurred under hydrothermal conditions to generate the mineralogically banded structures. Microtextural evidence indicates that, within this mineral association, magnetite was early and the other phases were late.
 - ii) Deformation of the rock body resulted, in part, in the deposition of veins variably composed of quartz, carbonate, hematite, chalcopyrite, and bismuthinite.
5. Native gold was observed in only one sample, where its association with chalcopyrite and with hematite-chlorite alteration patches in magnetite indicates relatively late deposition.

PETROGRAPHIC DESCRIPTIONS FOR TEN DRILL CORE ROCK SAMPLES

1. INTRODUCTION

Ten (10) rock samples of quartered drill core were provided by Mr. Steve Kennedy (Newmont Australia Limited, Darwin) on October 9, 1990.

Specific requests were:

1. To prepare a large polished thin section for each sample, being sure to incorporate the entire length of each sample (i.e. 8-10 cm long);
2. To prepare a routine combined petrographic and brief mineragraphic description for each polished thin section, with an appraisal of the paragenetic relationships.
3. To prepare a summary relating the ten samples.
4. Following interim reporting of results, telephone discussion with Mr. Kennedy confirmed that a small selection (about 6) of photomicrographs should be prepared to illustrate important aspects of the samples.

This report presents the results of this work.

2. METHODS

The drill core rock slices ~22x80 mm were mounted on glass plates ~75x110 mm, and large polished thin sections (PTS C54210-221) were prepared.

Combined routine petrographic and brief mineragraphic descriptions were prepared using conventional transmitted and reflected polarised light microscopy.

3. PETROGRAPHIC DESCRIPTIONS

The combined routine petrographic and brief mineragraphic descriptions follow.

SAMPLE: VIV 3 (190.74-190.83)

Large polished thin section: C54210

Rock Name:

Cu-mineralised hydrothermal hematite-dolomite breccia

Hand Specimen:

The drill core rock sample contains two laminated fragments of cm size (composed of white carbonate with red ferruginous staining) that lie in a matrix that is composed of darker grey areas containing fine-grained lustrous hematite flakes, with irregularly distributed lenticular white patches dominated by fine-grained carbonate.

The sample fails to effervesce in reaction with dilute HCl, suggesting that calcite is absent. The sample also fails to respond to the hand magnet.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Carbonate (dolomite)	63	hydrothermal
Hematite	30	hydrothermal
Quartz	1	hydrothermal
Sericite	5	hydrothermal
Chlorite	Tr	hydrothermal
Pyrite	1	hydrothermal
Chalcopyrite	<1	hydrothermal

In polished thin section, this sample contains a few large angular fragments with laminated granular texture, lying in a matrix of granular hydrothermal matrix cut by late thin veinlets.

Carbonate dominates the rock. Its lack of reactivity in hand sample, and its occurrence as rhombic crystals in places, suggests it is dolomitic in composition. Granular massive carbonate is abundant in the laminated fragments, where it ranges in grain size <0.1-~0.4 mm. Carbonate also occurs as massive granular mosaic intergrown with hematite crystals in the abundant matrix of the rock. A minor amount of carbonate occurs as anhedral grains in late thin veinlets.

Hematite is moderately abundant. It occurs in thin laminae (~0.2-1.0 mm thick) in the laminated carbonate-rich fragments. In the laminae, the hematite variably occurs as very fine-grained massive laminae, or as platy aggregates up to ~0.4 mm in grain size. In the abundant matrix of the rock, hematite occurs as even-grained, well-crystallised, randomly oriented flakes ~0.1-0.2 mm in size. Hematite also occurs in late, quartz-rich veinlets, in which it forms small flakes.

Sericite is present in minor amount. It occurs in two distinct sites: as very fine-grained massive patches intergrown with dolomite rhombs in the laminated dolomitic fragments; and as fibrous vein fillings accompanying chalcopyrite in late veinlets.

Quartz occurs in minor amount mainly in late thin veinlets, but also as rare euhedral crystals in carbonate-sericite-rich bands of laminated dolomitic fragments.

Sulphides occur in minor amount. Pyrite occurs entirely within the carbonate-hematite matrix, where it forms one large (~3 mm) angular patch composed of fine-grained crystals intergrown with chalcopyrite; pyrite also occurs as rare small (<0.4 mm) granular aggregates in the same matrix. Chalcopyrite occurs as anhedral patches intergrown with pyrite, and also as massive fillings in thin late veinlets associated with sericite, quartz, and carbonate.

Interpretation:

The macro- and micro-textural features of this sample support the following interpretation:

- i) Deposition of a laminated dolomite-hematite rock under open space, hydrothermal conditions. Sericite may have been part of the early lamination paragenesis.
- ii) Brecciation of the dolomite-hematite rock, with re-cementation by dolomite + hematite + minor pyrite + chalcopyrite.
- iii) Fracturing of the rock body, with deposition of late veinlets of quartz + chalcopyrite + sericite.

SAMPLE: VIV 3 (192.29-192.37)

Large polished thin section: C54211

Rock Name:

Hematitic ironstone

Hand Specimen:

The drill core rock sample contains subequal proportions of blood red, fine-grained hematite and lustrous dark grey specular hematite in a hard, siliceous matrix. Thin, discontinuous veinlets of white carbonate cut the rock, and small aggregates of yellow chalcopryrite are present.

The sample fails to respond to the hand magnet indicating that magnetite is absent, and does not react with dilute HCl suggesting that calcite is absent.

Petrography and Mineragraphy:

Mineral	Vol. %	Origin
Hematite	40	hydrothermal
Quartz	40	hydrothermal
Carbonate (dolomitic)	15	hydrothermal
Sericite	5	hydrothermal
Chalcopryrite	<1	hydrothermal
Pyrite	Tr	hydrothermal

In polished thin section, this sample displays a highly variable texture of hydrothermal origin. Fine- and coarser-grained granoblastic patches contain variable mineral proportions. Tortuous and planar veinlets are discontinuous.

Quartz is abundant. It occurs mainly as granoblastic mosaics of variable grain size (microcrystalline to ~1 mm). Much of the quartz displays strong stain extinction. In places, fine-grained granoblastic quartz fills thin tortuous veinlets.

Hematite is also abundant. It occurs mainly as fine-grained laths in dense aggregates. In places, bladed crystals up to ~1 mm long form specular aggregates in coarse-grained quartz. Elsewhere, fine-grained dense hematite has completely replaced precursor magnetite, retaining some cubic forms of crystals ~0.1-0.2 mm in size.

Carbonate (dolomitic) occurs as fine-grained granular aggregates, intergrown with sericite and quartz in patches between hematite-rich aggregates. It also occurs as fillings in thin discontinuous veinlets.

Sericite occurs in minor amount as very fine-grained, massive aggregates that fill patches between hematite-rich aggregates. In places the sericite is intergrown with carbonate and quartz.

Sulphides occur in only accessory amount. Chalcopyrite forms sparsely distributed ragged patches up to ~1 mm in size but ranging down to micron size, intergrown with quartz and carbonate. Pyrite is very rare, occurring as small subhedral crystals in chalcopyrite.

Interpretation:

This sample has preserved microtextural evidence that magnetite crystallised early in the mineral paragenesis. It may have been accompanied by quartz, carbonate, and sericite but subsequent replacement of magnetite by hematite and the development of patchy, discontinuous veinlets have destroyed much of the primary hydrothermal texture and structure.

The sample appears to have been an Fe-rich hydrothermal deposit that suffered a history of vigorous deposition, replacement, and veining.

SAMPLE: VIV 3 (204.06-204.14)

Large polished thin section: C54213

Rock Name:

(Bi-)Cu-mineralised hematite-magnetite ironstone

Hand Specimen:

The drill core rock sample is composed mainly of abundant, fine-grained magnetite that responds strongly to the hand magnet. Interspersed through the magnetite are fine-grained patches of white carbonate. Cutting the magnetite are veins and veinlets ranging from cm to mm thickness, filled mainly by lustrous hematite, but also containing white carbonate and yellow chalcopyrite.

The sample fails to react with dilute HCl, suggesting that calcite is absent.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Magnetite	67	hydrothermal
Hematite	15	hydrothermal
Carbonate (dolomitic)	15	hydrothermal
Chlorite	<1	hydrothermal
Chalcopyrite	3	hydrothermal
Quartz	Tr	hydrothermal
Bismuthinite	Tr	hydrothermal
Pyrite	Tr	hydrothermal

In polished thin section, this sample displays a granular hydrothermal crystalline texture modified by late veining and replacement.

Magnetite is abundant. It occurs as massive crystalline aggregates of variable grain size ($\sim <0.05$ - ~ 0.6 mm). Smallest subhedral equant crystals occur within carbonate.

Hematite occurs mainly within a thick vein of cm width. In the vein, hematite occurs as sheaves of curved blades up to ~ 1 mm long, and euhedral prismatic bladed crystals of similar size freely growing in carbonate. A significant proportion of the hematite occurs as irregular replacement patches through magnetite. The replacement patches are of variable form and size; some are irregularly shaped patches up to ~ 2 mm in size, while others are discontinuous veins and veinlets ranging in width from ~ 1 mm to <0.05 mm. A minor amount of hematite occurs as small (<0.05 mm) bladed laths, commonly developed around borders of carbonate patches in magnetite.

Carbonate occurs mainly as fine-grained patches distributed through the magnetite. It also occurs as coarser-grained, lenticular patches in the hematite-rich vein.

Chlorite occurs in small amount as fine-grained aggregates, concentrated in some carbonate-rich patches.

Quartz is present in only trace amount, as fine-grained patches intergrown with carbonate in the hematite-rich vein.

Chalcopyrite is the most abundant sulphide. It occurs mainly as coarse-grained patches in discontinuous veins associated with the hematite-rich vein. Mineralogical zoning of the chalcopyrite-rich veins is evident, with chalcopyrite in cores, and hematite-rich rims along magnetite walls. Chalcopyrite occurs elsewhere throughout the rock, displaying a tendency to occur as fine-grained patches in carbonate, and as minute inclusions within hematite.

Pyrite is rare, occurring as small (<0.1 mm) euhedral crystals within carbonate and as slightly larger crystals (~ 0.1 mm) in chalcopyrite.

Bismuthinite has a pale greenish grey colour in reflected light, and is strongly anisotropic. It is closely associated with the chalcopyrite as anhedral patches.

Interpretation:

The sample represents a hydrothermal Fe-rich deposit with minor Cu. Microtextural features suggest that:

- i) The rock formed by crystallisation from hydrothermal fluids more-or-less in a single event.
- ii) Microtextural features permit the recognition of the following paragenetic mineral relationships during the hydrothermal event:

magnetite + carbonate + chalcopyrite + chlorite
hematite + chalcopyrite + pyrite + carbonate + quartz

The first assemblage represents the bulk of the sample. The second, and later assemblage represents the veins and veinlets that formed from hydrothermal fluids that were more oxidising compared with the earlier fluids. Because the later veins have diffuse contacts with the magnetite-rich body of the rock, it is inferred that they formed when the body of the rock was not completely solidified.

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SAMPLE: VIV 3 (198.37-198.45)

Large polished thin section: C54212

Rock Name:

Cu-mineralised hematite-magnetite ironstone

Hand Specimen:

The drill core rock sample is composed of abundant magnetite and lesser quartz that is strongly responsive to the hand magnet. Mineral layering in the magnetite-quartz rock is cut by later veins and veinlets dominated by lustrous grey hematite, with coarse-grained yellow chalcopryrite and quartz.

The rock fails to respond to dilute HCl, suggesting that calcite is absent.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Quartz	50	hydrothermal
Magnetite	20	hydrothermal
Hematite	20	hydrothermal
Chalcopryrite	6	hydrothermal
Carbonate (dolomitic)	2	hydrothermal
Pyrite	2	hydrothermal

In polished thin section, this sample displays a granular hydrothermal vein texture that has been modified by late veining and replacement.

Quartz is abundant. It occurs mainly as coarse-grained (~1-6 mm) aggregates of anhedral grains that display strong strain extinction and, in places, partial recrystallisation into finer-grained mosaics along deformation planes. In parts of the sample, mineral layering is defined by subparallel bands of mm to cm thickness alternately dominated by quartz and magnetite. A minor amount of quartz occurs as less-strained, subhedral crystals in thin veinlets accompanied by hematite and chalcopryrite.

Magnetite occurs in massive, ill-defined bands composed of fine-grained (~0.1-0.2 mm), closely packed aggregates. At their margins, the crystals of these bands are intergrown with coarse-grained, strained quartz described above.

Hematite is present in similar proportions to magnetite. The hematite occurs in two principal forms: as ragged, anhedral replacement patches in magnetite, and as euhedral lath-like crystals that fill discordant veins and veinlets. Crystal size of hematite ranges widely (<0.1 - ~0.6 mm), and coarser-grained patches display a strongly intergrown platy appearance.

Chalcopryrite is present in significant amount. Most occurs in large patches up to ~1 cm in size, associated with vein quartz and hematite. Small inclusions of chalcopryrite ranging down to micron size also occur in hematite.

Pyrite is present in minor amount. It forms aggregates of subhedral crystals ranging $\sim 0.2 - < 0.05$ mm in size. In places, the finer-grained aggregates are intimately associated with hematite in diffuse replacement patches in magnetite.

Carbonate (dolomitic) is present in minor amount. It occurs as crystalline aggregates that most commonly occur in the thin, discordant veins dominated by hematite.

Interpretation:

This sample represents an Fe-rich hydrothermal deposit. Microtextural features clearly reveal the following evolution:

- i) Early deposition of magnetite + quartz;
- ii) Fracturing of the rock body, together with the generation of replacement and vein minerals hematite + chalcopyrite + pyrite + quartz + dolomitic carbonate.

SAMPLE: VIV 3 (255.03-255.11)

Large polished thin section: C54214

Rock Name:

(Bi-)Cu-mineralised hematite-magnetite ironstone

Hand Specimen:

The drill core rock sample displays banding on the cm scale. Bands are defined by differing mineral abundances: chlorite-rich bands are dark greenish grey, and magnetite-carbonate-rich bands are dark brownish grey with white patches.

The sample responds strongly to the hand magnet, but fails to effervesce in reaction with dilute HCl.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Carbonate (dolomitic)	44	hydrothermal
Chlorite	15	hydrothermal
Magnetite	20	hydrothermal
Hematite	20	hydrothermal
Chalcopyrite	1	hydrothermal
Pyrite	Tr	hydrothermal
Bismuthinite	Tr	hydrothermal
Quartz	<1	hydrothermal

In polished thin section, this sample displays a variable crystalline hydrothermal texture with banded structure. Bands are ill-defined, and the mode given above is an average over the entire thin section.

Carbonate (dolomitic) is abundant, especially in one major band that forms more than half of the section. It occurs as a granoblastic mosaic that ranges in grain size from <0.1 mm to >2 mm, and is intergrown with magnetite and hematite. In places, calcite is absent from some bands, and may fill thin widely spaced fractures that cut the rock.

Chlorite is moderately abundant. It occurs in abundance in one cm-wide band toward one end of the section. It forms a fine-grained, massive mosaic intergrown with magnetite and hematite. Where cut by late conjugate fractures, it has been recrystallised along the fractures.

Magnetite is moderately abundant. It occurs in abundance in one thin band ~2-3 mm wide, where it forms closely-packed, small (~0.05 mm) equant crystals of subhedral to anhedral form, in a matrix of fine-grained chlorite. In the carbonate-rich band, magnetite occurs as small (~0.05-0.10 mm) subhedral equant crystals dispersed in diffuse aggregates. In places, magnetite forms larger (~0.2-0.4 mm) equant cubic crystals with atoll structure and carbonate infillings.

Hematite occurs mainly as subhedral to euhedral laths ~0.1 mm in size. They are more-or-less uniformly distributed with hematite through the carbonate-rich band, but in places the hematite forms fringes around magnetite atolls. A lesser amount of hematite occurs as obvious replacements of magnetite, leaving relict anhedral islands of magnetite. The incidence of anhedral replacement and primary lath-like hematite is variable from place to place in the rock.

Chalcopyrite is the most abundant sulphide. It occurs as anhedral patches ranging widely in size from micron size to ~1 mm. The chalcopyrite is irregularly distributed through the rock, showing a tendency to be concentrated in the vicinity of the fine-grained, magnetite-rich band.

Pyrite occurs in trace amount as small (~0.1-0.2 mm) subhedral cubic crystals that tend to be associated with chalcopyrite, which has partly replaced the pyrite along fractures.

Bismuthinite is present in trace amount as anhedral patches ranging from ~0.2 mm to micron size, generally associated with chalcopyrite and hematite.

Quartz is rare, occurring only as fine-grained fracture fillings in one portion of the rock.

Interpretation:

The sample retains a mineralogical banding that is interpreted to represent primary hydrothermal banding. Principal bands are dominated by the assemblages

dolomite + magnetite + hematite
chlorite + magnetite + hematite
magnetite + chlorite

Minor chalcopyrite accompanies all mineralogies, and tends to be most abundant in the vicinity of a thin band dominated by magnetite + chlorite.

The presence of equigranular, intergrowth textures in the bands suggests that the dominant minerals in each band crystallised more-or-less synchronously. However, somewhat later crystallisation of hematite is indicated by its occurrence around margins of magnetite atolls, and by its partial replacement of magnetite.

Late fracturing of the rock body has allowed fractures to be filled by recrystallised carbonate and chlorite. One fracture contains introduced fine-grained quartz.

SAMPLE: VIV 5 (268.90-268.98)

Large polished thin section: C54215

Rock Name:

(Bi-)Cu-mineralised hematite-magnetite ironstone

Hand Specimen:

The drill core rock sample is composed of cm-wide bands dominated by magnetite or hematite, with thinner bands, veinlets and wisps of yellow chalcopyrite that are subparallel to the banding.

The sample is strongly magnetic, but fails to react with dilute HCl suggesting that calcite is absent.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Magnetite	50	hydrothermal
Hematite	30	hydrothermal
Chalcopyrite	8	hydrothermal
Pyrite	5	hydrothermal
Bismuthinite	1	hydrothermal
Chlorite	5	hydrothermal
Quartz	1	hydrothermal

In polished thin section, this sample displays a granular to colloform hydrothermal texture that has been modified by replacement and veinlet development.

Magnetite is abundant. It occurs as massive granular areas, but in places it displays a colloform structure composed of very fine-grained, granular annuli. The presence of the colloform structure suggests that the magnetite formed by crystallisation in an open-space, fluid-filled environment.

Hematite occurs in two forms: as anhedral replacement patches and veins within magnetite, and as well-crystallised lath-like crystals (~0.05-0.2 mm long) in veins and in chlorite-filled interstices between colloform magnetite masses. The magnetite clearly has formed late, having replaced earlier magnetite and having formed euhedral crystals in late open spaces.

Chalcopyrite is present in significant amount. It forms massive patches in veins associated with hematite, pyrite, and chlorite, and it forms patches in chlorite-rich interstices between colloform magnetite masses. It also occurs as interstitial patches in pyrite-rich portions of veins.

Pyrite occurs mainly as aggregates of subhedral, equant crystals ~0.2 mm in size, generally restricted to veins. A trace of pyrite occurs as small disseminated crystals in magnetite, where it is invariably associated with hematite.

Bismuthinite forms anhedral patches, displaying its characteristic pale grey bireflectance and strong anisotropism. It generally occurs in ragged patches accompanied by hematite and chalcopyrite, but it also fills thin veinlets that cut magnetite. It is possible that this phase is not bismuthinite sensu stricto, but the term is used to cover the range of Bi-bearing S-Se sulphosalts.

Chlorite is the principal silicate phase. It occurs as radiating crystalline aggregates, commonly in interstices between colloform magnetite masses, where it may be intergrown with hematite laths and chalcopyrite patches.

Quartz occurs in only minor amount. It forms small ragged patches within magnetite.

Interpretation:

The sample represents an Fe-rich hydrothermal deposit. Microtextural features support the following paragenesis:

- i) Early crystallisation of colloform magnetite + quartz;
- ii) Later crystallisation of hematite + chalcopyrite + pyrite + bismuthinite + chlorite. These phases partly filled remaining open spaces interstitial to colloform magnetite, partly replaced earlier magnetite, and partly filled thin, discontinuous fractures.

SAMPLE: VIV 5 (272.50-272.59)

Large polished thin section: C54216

Rock Name:

(Au-Bi-)Cu-mineralised hematite-magnetite ironstone

Hand Specimen:

The drill core rock sample is composed of abundant dark magnetite, interspersed with patches and veins of yellow chalcopyrite with associated silvery yellow pyrite.

The sample responds strongly to the hand magnet, but fails to react to dilute HCl suggesting that calcite is absent.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Magnetite	30	hydrothermal
Hematite	16	hydrothermal
Chlorite	30	hydrothermal
Pyrite	20	hydrothermal
Chalcopyrite	3	hydrothermal
Bismuthinite	1	hydrothermal
Feldspar	Tr	hydrothermal
Native gold	Tr	hydrothermal

In polished thin section, this sample displays a granular hydrothermal texture that has been partly modified by late hydrothermal replacement and ill-defined veining.

Magnetite is abundant. It occurs as equant, fine-grained, subhedral crystals (average grain size ~0.1 mm) that are concentrated in dense masses throughout the rock.

Hematite is moderately abundant. It occurs mainly as well-crystallised laths ~0.1-0.2 mm in size with a tendency to be concentrated in chloritic patches interstitial to magnetite masses. A lesser proportion of the hematite occurs as replacement patches and laths within magnetite.

Chlorite is abundant, and is the principal silicate phase in the rock. It occurs as fine-grained, flaky green aggregates interstitial to magnetite masses. A weakly defined mineralogical banding is defined by subparallel patches of chlorite and elongated aligned masses of magnetite. This banding is considered to be of primary hydrothermal origin.

Pyrite is moderately abundant. It occurs mainly as euhedral to subhedral crystals that range in size from <0.1 to ~ 2 mm (average grain size ~ 0.4 mm). The crystals are concentrated within the chloritic patches, they may contain euhedral inclusions of magnetite, and on the hand-specimen scale pyritic zones appear to cut earlier magnetite-chlorite banding. Elsewhere, irregular patches of pyrite have partly replaced magnetite. These features indicate that pyrite crystallised later than magnetite.

Chalcopyrite occurs in a variety of forms. The greatest proportion occurs as anhedral patches that enclose pyrite and magnetite, and tend to be associated with chloritic patches. Lesser chalcopyrite occurs as networks of veinlets that have partly replaced pyrite crystals. A minor proportion of chalcopyrite occurs as thin discontinuous veinlets that cut the principal phases, a feature that emphasises the relatively late formation of chalcopyrite in the paragenetic sequence.

Bismuthinite is present in minor amount. It occurs as anhedral, ragged patches that are associated with chlorite, chalcopyrite, and hematite. Less commonly it is observed to replaced pyrite.

Feldspar is rare, occurring as small (~ 0.1 mm) blocky subhedral crystals. It is limited to small areas of the rock where it tends to occur within chloritic patches in magnetite.

Native gold is present in trace but significant amount. It forms small ($\sim 2-40$ μm) grains that have subhedral, equant forms where they occur in chalcopyrite, but angular, elongate forms where they occur in hematite-chlorite alteration patches in magnetite. The clear association of native gold with the later-forming phases indicates that the native gold is also relatively late in the paragenetic sequence. Note that the native gold is very irregularly distributed in this sample: all observed grains are located at one end of the section in $\sim 10\%$ of the sample.

Interpretation:

This sample represents a hydrothermal Fe-rich deposit that displays macro- and micro-textural relationships consistent with the following paragenetic interpretation:

- i) Early crystallisation of magnetite, with interstitial chlorite and minor feldspar, in ill-defined bands.
- ii) Later crystallisation of pyrite, hematite, chalcopyrite, bismuthinite, and native gold. These phases filled interstitial patches, partly replaced earlier magnetite, and filled discontinuous veinlets in the rock body.

SAMPLE: VIV 5 (277.71-277.80)

Large polished thin section: C54217

Rock Name:

(Bi-)Cu-mineralised hematite-magnetite ironstone

Hand Specimen:

The drill core rock sample displays portion of a colloform banded structure. Bands are not clearly defined, but are observed to be green (chlorite-rich), yellow and silvery yellow (chalcopyrite- and pyrite-rich), dark brownish black (magnetite-rich), and lustrous metallic grey (hematite-rich).

The sample responds strongly to the hand magnet.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Chlorite	25	hydrothermal
Quartz	5	hydrothermal
Magnetite	20	hydrothermal
Hematite	25	hydrothermal
Chalcopyrite	10	hydrothermal
Pyrite	15	hydrothermal
Bismuthinite	Tr	hydrothermal

In polished thin section, this sample displays a colloform banded structure that has been modified by partial replacement, veining, and recrystallisation.

Chlorite is the dominant silicate mineral. It occurs as fine-grained massive bands, within which coarser-grained irregular patches occur.

Quartz occurs in minor amount in two distinct forms. Within chloritic bands, it forms subhedral crystals and granoblastic mosaics that have been pervasively replaced by very fine-grained chlorite. Elsewhere, fine-grained clear quartz fills thin discontinuous veinlets. One thicker vein (~2-3 mm wide) is discordant with respect to the colloform banding, and is filled by elongated quartz crystals oriented more-or-less perpendicular to the vein walls. The vein quartz is strongly deformed and partly recrystallised.

Magnetite occurs as granular aggregates. In some bands, the magnetite forms densely packed small euhedral crystals ~<.1 mm in size. In the sulphide-rich band, the magnetite forms well-crystallised bladed aggregates that are quite coarse-grained (average size ~1 mm). Rarely, magnetite occurs in bladed aggregates that have a fanned structure that further supports a colloform hydrothermal origin.

Hematite occurs in different forms. Much occurs as small (~0.1 mm) well-crystallised laths randomly oriented in a matrix of chlorite and quartz. Elsewhere, hematite patches and laths have clearly replaced earlier magnetite, in places resulting in hematite-rich bands.

Chalcopyrite occurs mainly as coarse patches in sulphide-rich bands, commonly interstitial to magnetite and pyrite. In these bands, minor chalcopyrite occurs as small globular inclusions in magnetite, indicating that at least some chalcopyrite crystallised early with magnetite. A minor amount of chalcopyrite occurs in thin discontinuous veinlets with granular quartz and hematite laths.

Pyrite occurs mainly in sulphide-rich bands, where it forms euhedral crystals ranging in size from ~0.1 mm to ~0.4 mm. In places, microfractures in pyrite have been sealed by thin chalcopyrite veinlets.

Bismuthinite forms rare anhedral patches in chalcopyrite.

Interpretation:

This sample retains evidence of having formed as a colloform-banded hydrothermal deposit.

A simple paragenetic mineral sequence is inappropriate for this sample, as most minerals appear to have crystallised throughout the evolution of the deposit. This is supported by the alternating compositions of the bands, by the euhedral forms of many phases, and by the presence of inclusions of some phases in others (e.g. chalcopyrite inclusions in magnetite, and massive chalcopyrite patches interstitial to magnetite).

However, there is microtextural evidence that significant replacement occurred subsequent to band formation: hematite partly replaced magnetite, and chlorite partly replaced quartz in chloritic bands.

Late veins and veinlets have been filled by assemblages of quartz, chalcopyrite, and hematite.

This sample, therefore, provides evidence for the following paragenetic sequence, from earliest to latest:

- i) Hydrothermal deposition of colloform bands composed of the following principal mineralogies: chlorite + quartz; chalcopyrite + pyrite + magnetite; hematite + chlorite + quartz.
- ii) Development of veins and veinlets filled by assemblages of quartz, chalcopyrite, and hematite. Partial replacement of magnetite by hematite may have occurred at this stage.
- iii) Deformation of the rock body, causing straining and partial recrystallisation of quartz and chlorite. Widely-spaced microfractures and shear planes cut the rock.

SAMPLE: VIV 6 (325.01-324.92)

Large polished thin section: C54218

Rock Name:

(Bi-)Cu-mineralised hematite-magnetite ironstone

Hand Specimen:

The drill core rock sample has an ill-defined banded appearance, with fine-grained dark reddish bands richer in hematite and black band rich in magnetite. Fine-grained yellow chalcopyrite is disseminated throughout. Shear sets in the hematite-rich bands appear to truncate ill-defined laminations in the magnetite-rich band.

The sample responds strongly to the hand magnet. No reaction is evident with dilute HCl, suggesting that calcite is absent.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Magnetite	53	hydrothermal
Hematite	20	hydrothermal
Quartz	10	hydrothermal
Carbonate (dolomitic)	10	hydrothermal
Chalcopyrite	5	hydrothermal
Pyrite	2	hydrothermal
Bismuthinite	Tr	hydrothermal

In polished thin section, this sample displays a granular hydrothermal texture that has been modified by shearing and veinlet development.

Magnetite is abundant, occurring as fine-grained granular and massive aggregates throughout most of the rock.

Hematite is less abundant. It occurs mainly as very fine-grained laths (<0.05 mm in average size) that are concentrated in carbonate-rich shear zones centimetres apart. Elsewhere, hematite occurs as equally small flakes in quartz-rich interstitial areas between magnetite patches. Less commonly, hematite forms small replacement patches and veinlets that cut magnetite.

Quartz occurs as fine-grained, granoblastic patches interstitial to magnetite aggregates. In the central portion of the section, a crude alignment of elongated quartz-rich areas and magnetite-rich areas contributes to a weak lamination. Most of the quartz displays moderately strong stain extinction.

Carbonate (dolomitic) occurs as granular aggregates of variable grain size, concentrated in aligned, lenticular aggregates in shear zones.

Chalcopyrite occurs mainly as anhedral, interstitial patches ranging in size from ~1 mm down to micron size. It tends to occur with quartz and hematite in interstitial patches between magnetite aggregates. It also occurs in elongated patches within the dolomite-hematite shear zones, and fills late veinlets.

Pyrite occurs as subhedral to euhedral crystals (<0.05-0.2 mm in grain size) in quartz or in chalcopyrite.

Bismuthinite is present in accessory amount. It occurs as subhedral to anhedral patches up to ~0.2 mm in size in late veinlets, and occurs as minute (micron-sized) inclusions in hematite.

Interpretation:

The sample represents an Fe-rich hydrothermal deposit that has suffered late shearing and incipient alteration. The paragenetic mineral associations are:

- i) Early crystallisation of magnetite.
- ii) Later interstitial fillings of quartz, chalcopyrite, hematite and trace bismuthinite. Minor replacement of magnetite by hematite occurred.
- iii) Deformation of the rock body, with shear planes being filled by carbonate and chalcopyrite. Late veinlets are filled by chalcopyrite.

SAMPLE: VIV 6 (327.90-328.00)

Large polished thin section: C54219

Rock Name:

Cu-mineralised magnetite ironstone

Hand Specimen:

The drill core rock sample displays an ill-defined banded structure in which one pink-stained siliceous band ~1 cm thick lies subparallel to numerous other bands dominated by dark green chlorite and dark brownish black magnetite. Diffuse veins containing yellow chalcopyrite cut the banding.

The sample fails to react with dilute HCl, but responds strongly to the hand magnet.

Petrography and Mineragraphy:

Mineral	Vol.%	Origin
Magnetite	52	hydrothermal
Chlorite	20	hydrothermal
Quartz	20	hydrothermal
Carbonate (dolomitic)	1	hydrothermal
Chalcopyrite	5	hydrothermal
Hematite	2	hydrothermal
Pyrite	<1	hydrothermal

In polished thin section, this sample displays a crystalline texture with gross banded structure, modified by brittle deformation and partial recrystallisation. Note that the mineral abundances vary between bands and from place to place: the mode given above represents an average over the entire section.

Magnetite is abundant. It occurs mainly as relatively coarse-grained, massive aggregates. In places, fine-grained magnetite subhedra <0.1 mm in average grain size are distributed through chlorite- or quartz-rich matrix. Some radiating, sheaf-like magnetite aggregates occur in chlorite-rich bands.

Chlorite is moderately abundant. It forms a very fine-grained matrix, and in places is concentrated in chlorite-rich bands of cm thickness. The presence of foliated beards of chlorite filling fractures between magnetite aggregates indicates that at least some of the chlorite crystallised (or recrystallised) during deformation and brittle fragmentation of the magnetite.

Quartz is present in amounts similar to chlorite. It is concentrated in one quartz-rich band ~1 cm thick, where it occurs as anhedral, granoblastic grains ~0.4 mm in size, displaying severe strain extinction in places. Turbid, very fine-grained pinkish ferruginous staining pervades some areas of the quartz band. Elsewhere throughout the rock, fine-grained quartz occurs as fracture- and veinlet-fillings in brittle deformed magnetite.

Carbonate occurs in only minor amount as discontinuous fracture fillings of variable grain size. Its failure to react with dilute HCl in hand specimen suggests it is dolomitic in composition.

Chalcopyrite is the dominant sulphide phase. It occurs mainly as anhedral patches of variable size (micron size to >1 mm) within quartz and chlorite. In places, these phases clearly occupy discordant vein networks that cut magnetite.

Pyrite is rare, occurring as subhedral crystals <0.4 mm in size, invariably associated with chalcopyrite. Fractures in pyrite are filled by chalcopyrite.

Hematite is present in minor amount. Most occurs as small (<0.1 mm) subhedral lath-like crystals in quartz, but a trace amount occurs as replacement patches and thin veinlets in magnetite.

Interpretation:

The mineralogy and texture of the sample is consistent with initial formation of the rock as a banded hydrothermal deposit rich in magnetite, chlorite and quartz. Some chalcopyrite may have occurred as irregular disseminations through quartz and chlorite. Deformation of the rock body caused brittle fracturing of the magnetite, and filling of the fractures by quartz, chlorite, chalcopyrite, and minor dolomitic carbonate.

A minor degree of hematitic alteration of magnetite occurred at this stage. The small amount of hematite in this sample distinguishes it from others in this suite.

APPENDIX 2

DRILL LOGS AND DOWN HOLE MAGNETICS:

VIV-8, VIV-9A, VIV-9B

VIV-8 DRILL LOGS

DRILLING RECORD

Hole No. VIV-8

PROJECT PHILLIP CREEK - NT 28 TITLE VIVID
 LOCATION VIVID PROSPECT LOCATED 11 KM NW OF THREEWAYS ROADHOUSE (NTH OF TENNANT CREEK), 9 KM NE OF GECCK MINE SITE, 8 KM SUE WEST OF STUART HIGHWAY.
 COLLAR CO-ORDS 10 070 MN 998 ME COLLAR R.L. _____
 BEARING AT COLLAR 0° grid 985 175° mag _____ true _____
 DIP AT COLLAR -70°5 TOTAL DEPTH 408 m.
 OBJECT OF HOLE TO INTERSECT MINERALIZATION (GOLD PDB) ALONG STRIKE + DOWN PLUNGE FROM PREVIOUS INTERSECTIONS IN VIV-5 AND VIV-6 AND INCREASE KNOWN STRIKELENGTH + DOWNPLUNGE EXTENT OF THE VIVID IRONSTONE + OREBODY
 REMARKS INTERSECTED MINERALIZED IRONSTONE 278.5 - 353 m d.l. (74.5 m)
BASE OF OXIDIZATION ~ 99 m d.l.

BOREHOLE SURVEYS

METHOD DOWNHOLE CAMERA

depth (m)	bearing		dip (degrees)
	(mag)	(grid)	
24 m OPEN HOLE	176°		-70°
42 m " "	175.75°		-69.5°
72 m " "	177.5°		-69°
96 m " "	177.5°		-69°
120 m IN RESS			-69°
153 m OPEN HOLE	175.5°		-68.75°
179.2 m " "	173°		-69.5°
207 m " "			-70.25°
230 m " "	165°		-70.75°
255 m " "	165°		-70.25°
279 m " "	161° →	IN IRONSTONE	-70.25°
302 m " "	155° →	"	-70.75°
327 m " "	156° →	"	-71°
351 m " "	?	"	-71°
375 m " "	157° →	NEAR IRONST.	-69°
408 m " "	155.5°		-67.5°

DRILLING RIG GOMEX RCB 150 / LONGTEAR
 OPERATOR G. DIER / LES PATERSON (JTMLOTE)
 DATE STARTED 8/10/90 + 19/10/90
 DATE COMPLETED 9/10/90 + 2/11/90
 CORE SIZES. 5 1/2" RC HAMMER TO 183.5 m
Then NO CORE TO 408 m (EDH).

WEDGES PLACED

50 mm PVC CASING INSTALLED TO 401 m.

SUMMARY OF RESULTS

from	to	length	geological description
0 m	11 m	11	SURFACE SOIL, TRANSPORTED SANDS, GRAVEL + CALCAREOUS
11	63	52	HEMATITIC SILTSTONE + CLAYSTONE - INTERBEDDED, IN PART WITH BLEACHING.
63	87	24	CHEARTY (SILICIFIED) WK-MOD CHLORITIC SEDIMENTS (ORIGINALLY HEMATITIC).
87	97	10	HEMATITIC CLAYSTONE ± SILTSTONE, PATCHY CHLOR AL ± SILICIFICATION IN PART (WEATHERED)
97	138	41	FRESH, SLIGHTLY CHLORITIC CLAYSTONE + OR SILTSTONE, WACKES ± ? TUFF BANDS.
138	150	12	HEMATITIC SILTSTONE + MINOR PATCHY CHLOR ALTER.
150	181.25	31.25	SHEARED ± BRECCIATED HEMATITIC SEDIMENT ± QV. SILICIFIED, V. CLAYEY i/p.
181.25	203.80	22.55	HEMATITIC SEDIMENTS WITH LOCAL SHEARING ± BRECCIATION + SILICIFICATION, BANDED
203.80	220.35	16.55	WEAKLY BLEACHED + CHLORITIC (± SILICIFIED) HEMATITIC SILTSTONE, UNBANDED, MASSIVE
220.35	245.30	24.95	STRONGLY SHEARED ± BRECCIATED HEMATITIC SEDIMENTS (MAJOR SHEAR) STR FRACT.
245.30	277.70	32.40	BANDED (INTERBEDDED) HEMATITIC SEDIMENTS, NOT STR FRACTURED OR FOLIATED.
277.70	278.50	0.80	CHLORITE SCHIST ± CARBONATE / QZ VEINING, FRACTURED, SOFT, NIL SULPHIDES.
278.50			HEMATITE ± MAGNETITE HYDROTHERMAL IRONSTONE (CARB ± CHLOR) ABUND CPY ± PYR.
	289.60	11.10	* INCLUDING A MAFIC INTRUSIVE (CHLOR-TREM) SILL 285.92 - 288.56 m.
289.60			HEM ± MAG-SILICA-CARB ± CHLOR IRONSTONE, ABUND RED JASPER * INCLUDES SMALL SILL
	318.20	28.60	INTERFINGER OF CHLOR ± TREMOLITE MAFIC DYKE 290.92 - 291.03 m. RARE SULPHIDES.
318.20	336.15	17.95	HEM-CARB ± SILICA IRONSTONE, RARE MAGNETITE, PATCHY SILICA. MINOR SULPHIDES.
336.15	345.40	9.25	MAGNETITE-HEM-CARB ± SILICA IRONSTONE MODERATE AMOUNT SULPHIDES (4%).
345.40	346.80	1.40	QUARTZ-MAGNETITE ± CHLORITE IRONSTONE, STRONGLY SILICIFIED, OCC JASP, 5% SULPH.

P.T.O.

LOGGED BY S.P. KENNEDYDATE 2/10/90 - 2/11/90

P.T.O.

DRILLING RECORD

Hole No. VIV-8 cont...

COLLAR CO-ORDS _____ COLLAR R.L. _____
 BEARING AT COLLAR _____ grid _____ mag _____ true
 DIP AT COLLAR _____ TOTAL DEPTH _____
 OBJECT OF HOLE _____

REMARKS _____

DRILLING RIG _____
 OPERATOR _____
 DATE STARTED _____
 DATE COMPLETED _____
 CORE SIZES: _____

[illegible]

WEDGES PLACED _____

S U M M A R Y O F R E S U L T S

[illegible]

LOGGED BY _____ DATE _____



Newmont Australia Limited

DRILL LOG

DATE 8 / 10 / 90

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PROJECT NT 28

AZIMUTH 179° MAG

DRILL RIG COMEX KCD-15D

HOLE N°: VIV-8 (PRECOLLAR) 10,070 N 9980 E

PROSPECT VIV-8

DECLINATION -70° S

GEOLOGIST SPIC

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY			SECONDARY LITHOLOGY			ALTERATION	MINERALISATION	COMMENTS	MFG DATE BY NO. G.W. LUTC	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	r d		C 2	s					hem, Brn		rd brn clay + sand + surface soil. (C2s)	60	H									
	2	r d yel		C 2	s					"		a/a but predom yel brn clay + sand.	60										
	3	"		"						"		rd brn ± yel brn clay + silt (transported) + occ mky qtz.	45										
	4	"		"						"		a/a occ - tr mky ± ferrug qtz, occ buff clays	180		0-4	0-4	<1	<1	17	21	26	<10	
	5	b r d		"						hem ± Brn		buff - pl rd brn, blebd transported clay + silt.	45										
	6	b r k		C 2	s		C 2	f		"		a/a w/- 20-30% con - buff calcrete	40										
	7	b r g		C 2	s	g	C 2	f		"		a/a but gravel i/p. (transported).	60										
	8	"		C 2	s	g	C 2	f		"		a/a rd brn - buff clays, sand, gravel + calcrete + occ gv.	60		4-8	4-8	<1	<1	15	18	28	<10	
	9	"		C 2	s	g	C 2	f		"		a/a partially bleached	80										
	10	"		"						"		blebd + oxid, clays, gravels and minor calcrete, qtz	100										
	11	"		C 2	s	g	P s	+	h	"		a/a abund qtz, occ frags of hem siltstone	150										
	12	w h		C 1	a	y				-		wh - con, soft clay - blebd. (PALUD ZONE ↓)	20		8-12	8-12		<1	8	17	17	<10	
	13	w h		"						"		a/a + pulverized wh, blebd claystone, str blebd	15										
	14	w h p k		"			P s	p		tr hem		a/a + rose hem patches (- wh - pink) str blebd	10										
	15	w h p k		"			P s	p		tr hem		a/a tr translucent, soft, str blebd	15										
	16	w h p k		"			"			"		wh - con - pl purple clays + pulverized claystone, blebd.	25		12-16	12-16		<1	4	6	25	<10	
	17	w h p k		"			"			"		a/a wh - con - pl pink, str blebd intru clays/Ps p	20										
	18	p v		P s	p	h				wk hem		pl - med purple, med str blebd, soft (pulverized predom) clayst	25										
	19	p v		P s	p	h				"		a/a predom pulverized, wkly hem (purp) clayst	20										
	20	p v		P s	p	h				"		a/a, occ con - pl grey, str blebd clayst	20		16-20	16-20		<1	<2	10	22	<10	
	21	p v		P s	p	h				mod hem		70% med blebd purple clayst, 30% con - v. pl grey, blebd.	20										
	22	"		"						"		a/a 5-10% str blebd. 90% wk blebd (med purple).	180										
	23	"		P s	p	h	P s	+	h	"		predom med purple, hem clayst. minor siltst.	30										
	24	"		"			"			"		a/a	20		20-24	20-24		<1	<2	8	19	<10	

TIME STARTED 0818

FINISHED 1025

ASSAY LAB CLASSIC

P/O N° NT 1648



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DRILL LOG

DATE 8 / 10 / 90

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PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG GOMEX RED-150

HOLE No: VIV-8 (PRECOURT) 10,070 N 9980 E

PROSPECT VIVID

DECLINATION -70° S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAGNETIC SUSCEPTIBILITY (10 ⁻⁶ SI)	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm		
24	25	P ^u	M W	R s	p h	R s	t h	wk-mod hem		med purple, soft, predom pulverized, clayst + minor siltst	20	H											
	26	"	"	"		"		"		a/a	60		24-28	<0.01									
	27	"	"	"		"		"		a/a being v. wkly blech only.	20												
	28	"	"	"		"		"		a/a w/- 2% thin (<2mm) ironstone stringers - rare oxid.	40				24-28	<0.01	<1	3	13	30	<10		
	29	"	"	R s	t h	R s	p h	"		a/a but being predom siltst, wkly foliated, wk-mod hem	20		28-32	<0.01									
	30	P ^u	M W	R s	t h			mod hem		a/a w/- to trinitic gulls, predom pulverized, soft.	20												
	31	"	M S W	"				mod-modstr h		a/a but med-dk purple, being mod-modstr hem, v. wkly blech	20												
	32	"	"	"				"		a/a v. wkly blech, wkly foliated hem siltstone.	20			28-32	<0.01	28-32	<0.01	<1	3	14	44	<10	
	33	"	"	"				"		a/a med-dk purple, slightly - modly weathered.	15												
	34	"	S W	"				"		a/a but being v. wkly fol, less pulverized.	65												
	35	"	"	"		R s	p h	"		mod soft, med-dk purple, hem siltst, blocky (wkly fol)	30		32-36	<0.01									
	36	"	"	R s	p h	R s	t h	"		a/a but being predom claystone.	30						32-36	<0.01	<1	3	15	62	<10
	37	"	"	R s	p h	R s	t h	"		a/a wk-wil blech.	20												
	38	"	"	"		"		"		a/a w/- 40-50% siltst. med-dk purple, kgv	15		36-40	<0.01									
	39	P ^u	S W	R s	p h	R s	t h	modstr hem, trinitic		a/a w/- 2-5% yel brn limonitic fractures, being harder.	20												
	40	"	"	"		"		"		a/a but ifp mod blech, tr-occ limon fract. mod hard.	75						36-40	<0.01	<1	4	14	36	<10
	41	P ^u	M W	"		"		"	mod limon	being abundantly fract w/- mod limon oxid, softer, & qv	35		40-44	<0.01									
	42	"	"	"		"		"	"	a/a w/- 5% ferrug qv.	30												
	43	"	"	"		"		"	"	a/a 5-8% moly - ferrug qv, fract, softer, limon	40												
	44	"	M W	R s	t h	R s	p h	"		pl purp (mod blech) siltst & clayst + lim fract + 5% qv	30			44-48	<0.01	44-44	<0.01	<1	5	8	39	<10	
	45	"	"	"		"		"	"	a/a pl-med purp + yel brn. fractured zone 1 qv.	20												
	46	"	"	R s	p h	R s	t h	"	"	a/a but only minor siltst. blocky, fract clayst, blech + lim qv	50												
	47	"	"	"		"		"	"	a/a mod abund limon fractures w/- moly & limon qv.	40												
	48	"	"	"		"		"	"	pl-med purp, hem & mod/wkly blech clayst + siltst, limon fractures	20				44-48	<0.01	<1	6	5	42	<10		

nil qv.

TIME STARTED 1025

FINISHED 1125

ASSAY LAB CLASSIC

P/O No NT 1648



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DRILL LOG

DATE 8/10/90

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PROJECT NT 2P

AZIMUTH 175°S

DRILL RIG Gomex RCD-150

HOLE No: VIV-8 (PREVIOUS) 10070 N 99°0 E

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES										
FROM	TO	COLOR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MWD WGT XG FUSE	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm	
48	49	pl ph	MW	ls	ph	ls	th	hem ± lim		pl med purp (hem) siltst 80% + 20% ^{str} bleid pl pink-or clayst ± limon.	35	H	48-52	<0.01								
	50	pl vr	MW	ls	th			" "		85% pl med purp siltst, 15% orange limon + hem (oxid) siltst, frag	35											
	51	pl vr	MW	ls	th			" "		a/a w/- occ buff bleid siltst, + 1-2% mky gv.	30											
	52	pl vr	"	"				" "		a/a	55			48-52	<0.01	<1	5	11	36	<10		
	53	pl vr	"	"				" "		a/a but being ↑ bleid, pl purp-buff, abund mky-brn-fer gv.	60		52-56	<0.01								
	54	bu	MW	ls	ph	ls	th	wk h + 1		buff-v-pl (gm) grey, str bleid clayst + siltst, silt, blocky, frag	35											
	55	bu	"	"		"		mod h + 1		yel brn - or brn, ↓ bleid clayst ± siltst, ↑ oxid, 2-5% gv.	70											
	56	"	"	"		"		"		a/a 50% clayst. 40% siltst. 1-2% gv ↓ 2 fchgs.	45			52-56	<0.01	<1	14	11	74	<10		
	57	"	"	"		"		wk-mod h ± 1		buff-pl or brn, mod str bleid (↑) + 1% ironst stringers	25		56-60	<0.01								
	58	"	"	"		"		" ± chl		a/a occ v. mky pl gm chl alt, 1-2% ironstone stringers.	45											
	59	pl vr	MW	ls	ph			" + occ chl		70% pl-med purp clayst, 2% pl gm (chloritic), 28% plor (bleid)	40											
	60	pl vr	"	ls	ph	ls	p			50% a/a, 20% med rd/p-brn, 30% buff-v-pl gm (bleid)	40			56-60	<0.01	<1	8	<4	49	<10		
	61	bu	MW	ls	th			mod h + 1		predom buff-pl or brn, blocky siltst, oxid, i/p mod str bleid	30		60-64	<0.01								
	62	"	"	ls	th	ls	p	wk h + 1		a/a siltstone grading to clayst bleid	20											
	63	"	"	"		"		wk h + 1		a/a w/- v-pl gm colour i/p. predom mod str bleid	20											
	64	pl vr	MW	ls	c	ls	th	? chlt silic		80% pl-med gm brn chert, 10% buff-bleid siltst/clayst	200			60-64	<0.01	<1	2	<4	86	<10		
	65	pl vr	"	ls	c	ls	p	silic ± chl		60% a/a, 40% soft bleid clayst (cm)	75		64-68	<0.01								
	66	pl vr	"	"		"		" "		a/a. well fract chert	75											
	67	"	SW	"		"		" "		70-80% pl-med gm brn chert (? wk chlor alt), 20% bleid	210											
	68	"	SW	ls	c	ls	p	silic ± chlor		predom well fract chert a/a, bleid clayey portion about fractures	180			64-68	<0.01	<1	<2	<4	150	<10		
	69	"	"	"		"		" "		80-90% pl-med (gm) brn chert + bleid, wk-cm arg in fract	150		68-72	<0.01 <0.01								
	70	"	"	"		"		" "		a/a med-str gm brn chert (? silicified clayst), bleid fract.	340											
	71	pl vr	SW	ls	c			silic ± wk chlor		a/a i/p (5-10%) pl gm (bleid + silic) chert. 2% clayey fract	200											
	72	"	"	"				wk h, s + wk chl		a/a w/- wk partial hem alt. tr pl gm, 1-2% bleid (cm)	300					68-72	<0.01 <0.01	<1	<2	<4	52	<10

TIME STARTED 1125

FINISHED 1408

ASSAY LAB CLASTIC

P/O No NT 1648



Newmont Australia Limited

DRILL LOG

DATE 8/10/90

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PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG GOMEX RCD-150

HOLE No: VIV-8 (PRECOURT) 10 070 N 9980 E

PROSPECT VIVID

DECLINATION -70° 5

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAFIC ULTRAF MAFIC ULTRAF ULTRAF ULTRAF ULTRAF	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	As ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm		
72	73	9 ^h ₆ ^r	S W	L s c				sil + wk chl, tr h med grn brn, wk chloritic chert w/- abund blebd, clayey frags, ^{9^h} mirroring	250	H											
	74	"	"	L s + s	L s c	"	"	40% a/a, 60% pl grn silic flst w/- wk chlor. sli & fracturing.	150												
	75	"	S W	L s c				sil + wk chl 95% med grn brn chert a/a, 5% clayey, crm-wk, blebd frags.	250												
	76	"	"	"		"	"	a/a chert may be silicified / siliceous claystone (or? ^{volcanic} red)	250		72-76		72-76	<0.01	<1	<2	<4	39	<10		
	77	"	"	"		"	"	a/a but being pl grn - pl grn gry (blebd) up to 50%, 10% clays	120												
	78	9 ^h ₆ ^r	S W	"		"	"	1% crm clays, 99% med grn brn ± rd brn (partial hem) chert, & fract	200												
	79	"	"	"		"	"	a/a 70% has wk partial hem (oxid), med wll fract + ^{crm} clays	240												
	80	9 ^h ₆ ^r	F	L s c		S ± chl ± hem		a/a med grn brn ± rd brn chert w/- 5% blebd clayey frags.	220		76-80		76-80	<0.01	<1	<2	5	40	<10		
	81	9 ^h ₆ ^r	F	L s c	L s p c	S ± chl ± h		85% a/a (but & hem), 15% mod silic blebd ± chlor, pl grn Rps	180												
	82	"	"	L s c	L s p c	"	"	75% a/a, 25% pl grn a/a, med wll fract w/- crm clays	200												
	83	"	"	L s c	L s p c	"	"	a/a blocky, str silicified / ? siliceous, cherty.	190												
	84	"	"	L s c	L s + c	S ± chl ± hem		50% med grn gry chert, 50% mod str - mod sil chl siltst, h	170		80-84		80-84	<0.01	<1	<2	<4	39	<10		
	85	9 ^h ₆ ^r	S W	L s p c	L s c	chl ± sil		15% a/a, 85% pl grn (± hem grn), wkly silic siltst / clayst	45												
	86	9 ^h ₆ ^r	S W	L s p c	L s c	wk chl, tr sil		predom pl grn brn - pl or brn, wkly - nil silic clayst, blocky	80												
	87	"	"	L s p c	L s c	wk chl / sil / hem		pl rd brn - pl grn brn, wk - mod ? silic clayst w/- wk chl silt	70												
	88	9 ^h ₆ ^r	"	L s p h	L s p c	"		predom med rd brn, hem ± partial chl (fract) clayst ± wk sil	80		84-88		84-88	<0.01	<1	<2	5	50	<10		
	89	"	"	"	"	"		a/a wk and partial chlorit silt, wk + partial silic?	60												
	90	"	"	"	"	"		a/a wll fractured (partially blebd + clayey) str along gulls	60												
	91	9 ^h ₆ ^r	S W	L s p h	L s p c	wk chl ± sil ± h		blocky 60% pl or brn, wk silic (sli cherty) clayst, 40% ^{clayey} pl grn	50												
	92	9 ^h ₆ ^r	S W	L s p c	L s p h	"		60% v. pl grn (blebd ± chl), 40% or brn (blebd ± wk silic) clayst	30				88-92	<0.01	<1	<2	4	44	<10		
	93	"	"	L s p h	L s p c	"		40% pl or brn + wkly silic clayst (blocky, wk blebd), 10% wk chl	45												
	94	"	"	"	"	"		a/a.	70												
	95	9 ^h ₆ ^r	S W	L s p h	L s + h	wk sil ± mod h		med or brn, nil blebd, wkly silic clayst + siltst, tr chl	90												
	96	9 ^h ₆ ^r	"	L s p h	L s + h	mod str hem		a/a becoming med purp brn hem clayst ± siltst	90				92-96	<0.01	<1	<2	6	51	<10		

TIME STARTED 1408

FINISHED 1505

ASSAY LAB CLASSIC

P/O No NT 1648



Newmont Australia Limited

DRILL LOG

DATE 8-9/10/90

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PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG RCD-150

HOLE N°: VIV-8 (FACCOLM) 10,070 N 9980 E

PROSPECT VIVID

DECLINATION -70° S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAG. WEATHERING	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	As ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
96	97	0.5 g w	S W	LS	P C	LS	P H	wk chl + mud	30% pl or brn hem clayst.	70% pl grn, blechd, ? wk chlor clayst	45	H	96-100	40.01	96-100	40.01	1	2	5	45	10
	98	"	"	"	"	"	"	"	a/a being siltst i/p	50											
	99	0.5 g w	S W	LS	T C	LS	T H	med hem, wk chl	40% a/a 60% pl grn (blechd ± chlor - wk) siltst ± clayst, 1% mky gr	50											
	100	0.5 g w	F	LS	P			v. wk 2 chl, sil	pl grn grg, sli (wkly) ? silic, v. wkly ? chlor claystone, blocky	45		100-104	40.01	100-104	40.01	1	2	5	60	10	
	101	"	F	"				"	a/a sli blechd, pl grn grg - pl grg, & oxid bands	40											
	102	"	"	"				"	a/a. w/- mod abund microcrystals (anisotomosing) of silic	40											
	103	"	"	"				"	a/a being sli cherty i/p. rare oxid fractures	40		104-108	40.01	104-108	40.01	1	2	4	42	10	
	104	"	"	LS	P			"	buff - pl grn brn, v. wkly 2 chlor ± ? silic alt clayst, fresh.	40											
	105	"	"	"				"	a/a wkly - mod blechd, sli cherty, blocky, silica microcrystals	45											
	106	"	"	LS	P	LS	T	"	a/a but 30-40% pl grn siltst. wk silicification.	40		108-112	40.01	108-112	40.01	1	2	4	45	10	
	107	"	"	LS	P			"	a/a but v. rare siltst.	40											
	108	0.5 g w	F	LS	P			v. wk chl + sil.	med grn grg, occ buff - pl or brn, wkly silic (cherty) clayst ± ? chl	70											
	109	"	"	LS	P S			silt ± wk chl	a/a w/- 15% med - dk grn grg, cherty, silic clayst.	95		112-116	40.01	112-116	40.01	1	2	4	48	10	
	110	"	"	"				"	brn grg - pl/med grn grg, wkly chlor ± wk silic clayst (sli cherty)	45											
	111	"	"	"				wk silt + chl, zh	a/a 40% pl grn grg - buff (? blechd), 10% med - dk grn grg.	65											
	112	"	"	"				"	sli w/- to str chlor vults + fract coatings.	50		116-120	40.01	116-120	40.01	1	2	5	54	10	
	113	"	"	"				"	a/a 50% w/- v. wk pervasive hem, cherty.	180											
	114	"	"	LS	P S	LS	α T	"	a/a + rare bands of fgr, porphyritic volcanic (v. thin).	180											
	115	"	"	LS	P S			med sil, wk chl.	predom pl grn grg, wk chl, med silic (mod cherty) clayst, blocky	150		116-120	40.01	116-120	40.01	1	2	5	54	10	
	116	"	"	"				"	a/a & being med grn grg, mod chlor, unblechd clayst (sli) i/p.	90											
	117	"	"	"				wk-med siltst	a/a w/- some str chlor surfaces	95											
	118	"	"	"				"	a/a	90		116-120	40.01	116-120	40.01	1	2	5	54	10	
	119	"	"	"		LS	α T	med str sil, ± chl	a/a ↑ str chlor vults + surfaces, also being v. str silic i/p	85											
	120	"	"	LS	P S			med sil + chl	pl - med grn grg, wk-med sil ± chlor clayst, occ str chl surfaces	50											

TIME STARTED 1505 (8/10) FINISHED 0826 (9/10)

ASSAY LAB CLASSIC P/O N° NT 1648



Newmont Australia Limited

DRILL LOG

DATE 9 / 10 / 90

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PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG GOMEX RCD-150

HOLE N°: VIV-8 (FREEMAN) 10,070 N 9980 E

PROSPECT VIVID

DECLINATION -70° S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAG. SUSCEPTIBILITY (KG/Gauss)	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm	
120	121	7/9	F	P	S	P				mod chl, wk sil	40	H										
	122	"	"	P	S	P				pl-med (occ dk) grn grg, wk-med chlor, mod silic (cherty) clayst.	55		120-124									
	123	"	"	P	S	P	C			a/a mod ant of str chlor surfaces (fractures), blocky.	40											
	124	"	"	P	S	P	C	P	S	T	C			120-124	120-124	<0.01	<1	<2	44	68	<10	
	125	"	"	"				"		mod grn grg, mod chloritic, mod silicified (cherty-saccharoidal) sds	25	WET										
	126	"	"	"				"		a/a but being sli more chlor, + more abund str chl stringers, fr gv.	70	WET										
	127	"	"	"				"		mod grn grg, mod chloritic, mod silicified (cherty-saccharoidal) sds	30	WET										
	128	"	"	"				"		a/a	30	"										
	129	"	"	"				"		predom pl-med grn grg, sli blechd, silic (cherty-sacch) clayst, >> siltst	35	"										
	130	"	"	P	S	P	C			a/a	30	"										
	131	"	"	P	S	P	C			med-dk grn grg, only partially (mod) blechd, sli cherty, chlor clayst	40	"										
	132	9/9	F	P	S	P	C			a/a occ mky-hornfelsic gv, mod-med str silic (cherty)	40	"										
	133	"	"	P	S	P	C			a/a but 60-70% is wkly-med blechd (pl-med grn grg), blkky	40	"										
	134	"	"	P	S	P	C			80% buff-pl grn grg (blechd) wkly silic, 20% str silic, dk grn grg	75	"										
	135	"	"	P	S	P	C	P	S	P	C			128-132	128-132	<0.01	<1	3	9	66	<10	
	136	"	"	P	S	P	C	P	S	P	C											
	137	"	"	"				"		mod grn grg, wk-med blechd chert (ex-sds), wkly chloritic	50	"										
	138	"	"	"				"		a/a ant-wk-med hem oxid, i/p dk grn grg, occ mky gv, sacchar i/p	37	"										
	139	9/9	F	P	S	P	C			wk-med chlor chert (ex-sds), fr gv, fr hem oxid (s)	70	"										
	140	"	"	"				"		a/a but heavy predom saccharoidal (almost qtzitic), mod chlor	55	"										
	141	9/9	F	P	S	P	C	P	S	P	C			132-136	132-136	<0.01	<1	<2	44	64	<10	
	142	"	"	"				"		a/a and occ wkly hem (pl-med brn grg) - siltst/clayst	40	"										
	143	"	"	P	S	P	C	P	S	P	C											
	144	P u	"	"				"		pl grn grg + med brn grg, chl i/p, sacch-hornfelsic ? silic sds	30	"										
	145	"	"	P	S	P	C	P	S	P	C			136-140	136-140	<0.01	<1	3	44	75	<10	
	146	"	"	"				"		a/a but 80% pl grn grg (chl ± blkky), banded hem/chl/blechd sil siltst	50	"										
	147	"	"	P	S	P	C	P	S	P	C											
	148	"	"	P	S	P	C	P	S	P	C											
	149	"	"	P	S	P	C	P	S	P	C											
	150	"	"	P	S	P	C	P	S	P	C											
	151	"	"	P	S	P	C	P	S	P	C											
	152	"	"	P	S	P	C	P	S	P	C											
	153	"	"	P	S	P	C	P	S	P	C											
	154	"	"	P	S	P	C	P	S	P	C											
	155	"	"	P	S	P	C	P	S	P	C											
	156	"	"	P	S	P	C	P	S	P	C											
	157	"	"	P	S	P	C	P	S	P	C											
	158	"	"	P	S	P	C	P	S	P	C											
	159	"	"	P	S	P	C	P	S	P	C											
	160	"	"	P	S	P	C	P	S	P	C											
	161	"	"	P	S	P	C	P	S	P	C											
	162	"	"	P	S	P	C	P	S	P	C											
	163	"	"	P	S	P	C	P	S	P	C											
	164	"	"	P	S	P	C	P	S	P	C											
	165	"	"	P	S	P	C	P	S	P	C											
	166	"	"	P	S	P	C	P	S	P	C											
	167	"	"	P	S	P	C	P	S	P	C											
	168	"	"	P	S	P	C	P	S	P	C											
	169	"	"	P	S	P	C	P	S	P	C											
	170	"	"	P	S	P	C	P	S	P	C											
	171	"	"	P	S	P	C	P	S	P	C											
	172	"	"	P	S	P	C	P	S	P	C											
	173	"	"	P	S	P	C	P	S	P	C											
	174	"	"	P	S	P	C	P	S	P	C											
	175	"	"	P	S	P	C	P	S	P	C											
	176	"	"	P	S	P	C	P	S	P	C											
	177	"	"	P	S	P	C	P	S	P	C											
	178	"	"	P	S	P	C	P	S	P	C											
	179	"	"	P	S	P	C	P	S	P	C											
	180	"	"	P	S	P	C	P	S	P	C											
	181	"	"	P	S	P	C	P	S	P	C											
	182	"	"	P	S	P	C	P	S	P	C											
	183	"	"	P	S	P	C	P	S	P	C											
	184	"	"	P	S	P	C	P	S	P	C											
	185	"	"	P	S	P	C	P	S	P	C											
	186	"	"	P	S	P	C	P	S	P	C											
	187	"	"	P	S	P	C	P	S	P	C											
	188	"	"	P	S	P	C	P	S	P	C											
	189	"	"	P	S	P	C	P	S	P	C											
	190	"	"	P	S	P	C	P	S	P	C											
	191	"	"	P	S	P	C	P	S	P	C											
	192	"	"	P	S	P	C	P	S	P	C											
	193	"	"	P	S	P	C	P	S	P	C											
	194	"	"	P	S	P	C	P	S	P	C											
	195	"	"	P	S	P	C	P	S	P	C											
	196	"	"	P	S	P	C	P	S	P	C											
	197	"	"	P	S	P	C	P	S	P	C											
	198	"	"	P	S	P	C	P	S	P	C											
	199	"	"	P	S	P	C	P	S	P	C											
	200	"	"	P	S	P	C	P	S	P	C											

TIME STARTED 0826

FINISHED 1030

ASSAY LAB CLATTE

P/O N° NT 1698



Newmont Australia Limited

DRILL LOG

DATE 9/10/90

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HOLE No: VIV-8 (PRECOLLAR) 10070 N 9980. E

PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG Comex RCD 150

PROSPECT VIVID

DECLINATION -70°5

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION											SAMPLES												
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY			SECONDARY LITHOLOGY			ALTERATION	MINERALISATION	COMMENTS	MAGNETIC SUSCEPTIBILITY	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm		
144	145	P ^u	F	R	S	T	H				Str h. tr chl	purp rd, str hem, blocky (wkly fol) siltst, tr wkly chl bands, blch	40	WET	144-148	10.0									
	146	"	"	"						" "	a/a rare buff (blchd) & pl gm (blchd + wk chl) bands/fracts	50	"												
	147	"	"	"						" "	a/a tr mky gln vns, occ str chl surfaces + vn selvages.	50	"												
	148	"	"	R	S	P	H	R	S	T	H	a/a but clayst > siltst	180	"		144-148	20.0	21	22	7	40	210			
	149	"	"	R	S	T	H	R	S	P	H	a/a siltst > clayst rare pl gm (blchd + wk chl) frags	60	"	149-153	10.0									
	150	"	"	R	S	T	H			" "	a/a predom red purple hem siltst, wkly foliated	50	"												
	151	P ^u	F	R	S	T	H	R	S	T	H	str h, wk chl	a/a 40% w/- 60% pl gm gry - pl gm brn, chl blchd band	50			"								
	152	"	"	R	S	T	H	R	S	T	H	90% hem siltst & clayst, 5% pl gm gry siltst a/a, 5% mky gln	65	"											
	153	P ^u	F	R	S	T	H	gt	2		" "	40% a/a, 20% pl gm gry, 40% mky gln vns	60	WET		148-153	20.0	21	22	6	64	210			
END OF PRECOLLAR																									

TIME STARTED 1030

FINISHED 1100

ASSAY LAB CLARIC

P/O No NT 1628



Newmont Australia Limited

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AZIMUTH 175° MAG

DRILL RIG LONGYEAR

HOLE N°: VIV-8

10070

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9985E

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E

PROSPECT VIVID

DECLINATION -70° S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING		PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu	Pb	Zn	Bi
153		P ⁴ _g	m	w	l	s	+	x	l	s	+	h	ser ± sil ± chl		NR	PRECOLLAR					
	154												± kaol								
	155																				
	156																				
	157																				
	158																				
	159																				
	160																				
	161	P ^k _g	m	w	B	x															
	162																				
	163																				
	164																				
	165																				

TIME STARTED

FINISHED

ASSAY LAB

P/O N°



Newmont Australia Limited

CORE

DRILL LOG

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HOLE N°: VIV-8

10070

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E

PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS				MAG JUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Au g/t
165		pk gn	M	B x				sil ± chl ± ser									
	166			(EN- E S + h)				153.50 - 181.25 m : SHEARED ± BRECCIATED HEMATITIC SEDS cont				10					
	167							166.50 - 169.00m abundant mky qtz veins various orientations plus mic silic? and abund chlor fractures				5					
	168							predom pink-buff colour, less intensely brecciated.				10					
	169							169.00 - 170.80 buff-pl grey - pl pink, q/a but ↓ str silic? ↓ chlor fractures + fol? surfaces and sb gv.				5					
	170							170.80 - 172.80 q/a but w/ abund mky gv (predom // fol? ≈ 60° ECA) but occasional intervals w/ wk-nil silic? and nil gv and v. broken				5					
	171							and mod str partial chlor + kaol alter? w/ mic shearing (strong - intense)				0					
	172							172.80 - 176.20 Brecciated + intensely sheared, kaolinised + mod chlor alt ± seric, ex - ? sediment				0					
	173	gn y	S W	B x		E m Z c	chl ± ser ± sil + kaol	pl - med gva grey 2 rd (hem) patches nil - rare silic?, nil gv, soft, broken				10					
	174							NIL CORE RECOVERED 172.80 - 174.00m (1.20 m CORE LOSS IN VERY SOFT, CLAYEY SHEARED MATERIAL)				—					
	175							176.20 - 177.30 pink-red, silicified ± chloritic fractured breccia (? sheared sediment) w/ abundant mky qtz veins + local str chlor alt mod blechd, patchy silic? fractured				20					
	176											25					
	177											20					

TIME STARTED

FINISHED

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DRILL RIG LONGYEAR

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS				MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Au g/t
177		9 ^r 9 ^y	S ^W F	B x	P m z	chl + seric + kaol	153.50 - 181.25 m: SHEARED ± BRECCIATED HEMATITIC SEDS (cont.)						NG				
	178											20					
	179						177.30 - 181.25 m pl-med grn - grn grs, chloritic ± sericitic, intensely sheared, soft, kaolinized, brecciated (but not silicified) schist					—					
	180						ex - ? sediment, blockaded, strongly alt + broken, (1.20 m core loss 178.80 - 179.80 m)					—					
	181											20					
	182	9 ^r 9 ^y	S ^W F	P s + h (P m z)	P s p h (P m z)	silic ± chlor	181.25 - 183.80 m: MOD SHEARED ± SILICIFIED HEMATITIC SEDS.					5					
	183						PINK - PALE GREY, WEAKLY - MODERATELY SHEARED, PERVASIVELY SILICIFIED, RARELY W/- STR SHEARING ± BRECCIATION					0					
	184	9 ^d 9 ^y	F	P s + h	P s p h	± chl ± seric + rare silic	HEMATITIC ± CHLORITIC, MODERATELY BLEACHED HEMATITIC CLAYSTONE + SILTSTONE. NO PRIMARY TEXTURES VISIBLE.					5					
	185						RARE MKY QV // FOLIATION. NOT WELL FRACTURED					15					
	186						183.80 - 203.80 m: HEMATITIC SEDIMENTS ± LOCAL SHEARING					35					
	187						GRADATIONAL / INTERFINGERED CHANGE TO 187 m (WITH V-LOCALIZED CHLOR SHEARING + QV IN PLACES) THEN					5					
	188						PREDOM BUFF / PINK / PURPLE / RED Banded, VARIABLY BLEACHED HEM CLAYSTONE + SILTSTONE INTERBEDS, PRIM-					10					
	189						ARY TEXTURE PRESERVED. OCC MKY QV AND AREAS OF					70					

INNER FRACTURING ± FOLIATION W/- CHLORITIC SURFACE COATINGS.
PREDOM MOD FRESH + UNALTERED.

TIME STARTED

FINISHED

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GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS				MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Au g/t
189		pink	F	ps + h	ps + h	± chlor ± ser		* ABOVE 195m NOTE: NO ORIENTATED CORE, VERY BROKEN					NR				
	190							183.80 - 203.80 m: HEMATITIC SEDIMENTS, RARE LOCAL SILICA				25					
	191							RED - RED PURPLE, WELL BANDED (INTERBEDDED) HEMATITIC SILTSTONE + CLAYSTONE, RARE GRAYWACKE, WITH WEAK TO MODERATE FOLIATION, RARE THIN (< 10cm) SHEAR LETS, AND OCCASIONAL MKY - PINK QTZ VEINS AT VARIOUS ANGLES TO LCA. PREDOM HIGHLY FRACTURED WITH MINOR CHLOR ON FRACTURE SURFACES. NIL SILICIFICATION				70					
	192											50					
	193											65					
	194											40					
	195							194.50 - 202.40 EFFECTIVE ORIENTATED CORE - giving well developed bedding @ 130°-140° LCA + shikings ~ grid EW				40					
	196							Bedding basal structures + grading show here that sequence is 'younging downhole' (coarsening uphole)				30					
	197							Weak foliation + most fracturing // bedding				33					
	198							198.00 - 198.50 Local shearing + pink - plagy - mky gln veining sub L bedding (70°-90° LCA)				30					
	199							± chlor alter.				25					
	200											28					
	201											40					

TIME STARTED

FINISHED

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DRILL RIG LONGYEAR

HOLE N°: VIV-8

10070 N 9980 E

PROSPECT VIVIB

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS				MAG JUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Au g/t
201								203.80 - 220.35 m: WKLY BLEACHED + CHLORITIC ±? SILIC. HEM SILTST.					NA	Psth + Poph banded			
	202							PALE PURPLE GREY - MED GRAY, WEAKLY BANDED + MORE MONOTONOUS (+ PREDOM COARSER IN BULK SENSE) COMPARED TO ABOVE SEQUENCE. PREDOM WKLY HEM SILTSTONE WITH MINOR CLAYSTONE AND GREYWACKE. FORMS LESS REGULARLY BEDDED SEQUENCE WITH ↑↑↑ SILTSTONE.				42					
	203							ORIGINAL HEMATITIC NATURE STRONGLY MASKED BY WEAK-MOD BLEACHING AND ALSO WEAK PERVASIVE CHLORITE ALTERATION AND POSSIBLY LOCAL SILICIFIC. MUCH WEAKER IMPOSED FOLIATION.				25					
	204	9 th p ^u	F	P s + (h)	P s p (h)	lk? chl ±? sil		STRONGLY FRACTURED a/a BUT NOT PREDOM ALONG REGULAR FOL. DIRECTIONS (CHAOTICALLY BROKEN).				45		Pst(h) ± Psp(h)			
	205				P s w (h)			OCCASIONAL MKY QTL VEINS (± LOCAL STR CHLOR ACT) DISCORDANT TO BEDDING - VARIOUS ORIENTATIONS (NONE DOMINANT)				20					
	206							210.30 - 215.50m More broken section with more abundant mky gv up to 10cm thick				35					
	207							predom P ~ 130° LCA, but also sub // LCA and L LCA, usually w/- ch chloritic selvages and localized talc alteration (incr foliation significance + severity)				35		Pst(h) ± Psp(h)			
	208											30					
	209											40					
	210											25		Pst(h) ± Psp(h)			
	211											25					
	212											30					
	213											30					

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GEOLOGIST RPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS				MAG JUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Au g/t
213		9/10	F	L s + (h)	L s w (h)	Wk ch ± sil		203.80 - 220.35 m: Wkly bleached + chlor ± silic? hem siltst					NR	Pst(h)			
	214				L s p (h)	(occ talc)		FREDDM SILTST / GREYWACKE SERVICINE ± CLAYST				25					
	215							OVERALL COARSER TEXTURE W/- 9 POROSITY HAS ALLOWED				25					
	216							FLUID INVASION ± RESULTING IN WEAK CHLOR ± SILIC?									
	217							MASKING THE PRIMARY HEMATITIC CHARACTER.				25					
	218							POORLY DEVELOPED FOLIATION OVERALL (LOCALLY STRONGER						Pst(h)			
	219							W/- QV + INCR CHLOR, CHAOTIC i/p) - OCC TALCOSE ALT.				30		± Psp(h)			
	220							215.40 - 220.35 Local thin sheets w/- mky qv i/p				25					
	221							Also increased hem character showing									
	222							(purple) and overall incr in claystone				30					
	223							+ dark siltst									
	224							220.35 - 245.30 m: STRONGLY SHEARED ± BRECCIATED HEM SEAS				20					
	225							MAJOR SHEAR.				20					
	226							PALE TO MEDIUM PURPLE, SOFT, STRONGLY KALINIZED IN				20					
	227							PLACES, FREDDM STR - INTENSELY SHEARED, OFTEN STRONGLY									
	228							(TECTONICALLY) BRECCIATED, EXTREMELY FRACTURED				27					
	229							HEMATITIC SILTSTONE AND CLAYSTONE, WITH MODERATE									
	230							AMOUNT OF MKY QV VEINING, WISFING / CHLORITE				25					
	231							SELVEDGES) VERY STRONGLY FOLIATED IN MOST PLACES.									
	232							OCCASIONAL RELATIVELY UNDISTURBED BANDS (< 1m thick).				15					

TIME STARTED

FINISHED

DOM STR/FOL DIRECTION 60°/130° LCA. (BUT CORE NOT ORIENTATED).
NIL SILICIFICATION.

ASSAY LAB

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10070 N 9980 E

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AZIMUTH 175° MAG

DRILL RIG LONGYEAR

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS				MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Au g/t
225		p u	M W	l s t h	l m z h	sch, tkal		220-35 - 245-30 m: STRONGLY SHEARED & BRECCIATED HEM SEDS					NG				
	226							MAJOR SHEAR				20					
	227							234-40 - 237-90 m becoming relatively much less sheared				20					
	228							has predominantly well cleaved character (regular, not chaotic qtz) and very str				10					
	229							fractured, nil brecciation, nil kaolinized				18					
	230							becoming also claystone - siltstone									
	231							nil - ore char alteration, nil - base									
	232							qtz veining - overall a weaker				15					
	233							zone of shearing									
	234							Also shows some primary red banding				5					
	235							w/- ore buff-pink bleached bands/bt/s									
	236							Basal 1.5m shows some moderate silicification				15					
	237							w/- some pink - pink qtz to 5mm thick									
	238							Foliation - 160-165° LCA. Bedding				10					
	239							more obscure									
	240											15					
	241																
	242											25					
	243																
	244											20					
	245																
	246											30					

TIME STARTED

FINISHED

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GEOLOGIST SPK

DEPTH		LITHOLOGICAL				DESCRIPTION		SAMPLES						
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Au g/t
237		p u	M W	P s t h	P s p h	trch, tr sil		220.35 - 245.30 m: STRONGLY SHEARED & BRECCIATED HEM SEDS		NB				
	238								15					
								237.90 - 240.00 m q/a but w/ no silicified bands, mic						
	239							cleavage strength, occasional intensely	25					
								sheared & brecciated bands w/ quartz						
	240							(OVERALL ↑ SHEARED CHARACTER) and	35					
								more strongly fractured.						
	241							Predom cleavage / fol direction 165° LCA	50					
								NOTE * OVER THE LAST 20 m THE FOLIATIONS HAVE						
	242							BECOME FLATER WRT LCA, THOUGH WE HAVE	45					
								NO REAL CORE ORIENTATIONS, BECAUSE THE HOLE						
	243							IS STEEPENING (ACCORDING TO SURVEYS) WE CAN	15					
								DEDUCE THAT WE ARE DRILLING DOWN STRUCTURE						
	244							(IF FOLIATION IS 165° LCA AND NOT 15° LCA)	20					
								ie * AS DRAWN IS CORRECT						
	245								30					
								240.00 - 240.48 m LOCAL ZONE of mod silicific, ↓ fract						
	246	p u F		P s p h	P s t h	trch, tr sil		and ↑ siltst, ↓ clayst.	30					
	247							245.30 - 277.70 m: BANDED (INTERBEDDED) HEMATITIC SEDS.	25					
	248							MED-DARK PURPLE - RED PURPLE, WEAKLY FOLIATED, BANDED	30					
								HEMATITIC SILTSTONE + CLAYSTONE BEDS WITH OCCASIONAL						
	249							MINOR SHEAR AND OCC - MOD AMT BLEACHED BANDS	35					

TIME STARTED

FINISHED

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GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS				MAG SUSC.	BIT TYPE	GRAPHIC LOG	AU g/t	SAMPLE N°	AU g/t
249		p	u	F	p	s	p	h	p	s	t	h	trch, trsil	245.30 - 277.70m: BANDED (INTERBEDDED) HEMATITIC SEDS (cont)			
	250												30	Ng			
														Esph + Esph			
	251												40				
	252												30				
	253												30				
	254												35				
	255												40				
	256												35				
	257												40				
	258												30				
	259												30				
	260												30				
	261												40				

TIME STARTED

FINISHED

ASSAY LAB

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DRILL RIG LONGYEAR

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PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS NOTE: ORIENTATED CORE	MAG SUCC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	Bi ppm			
273		p u	F	P s t h	P s p h	wk chl, silic		245.30 - 277.70 m BANDED (INTERBEDDED) HEMATITIC JESS		NR	PsH +										
	274								20		Psph										
								268.70 - 277.70 m cont..													
	275							Predom bedding/banding direct ⁿ	25												
								130°-140° LCA													
	276							Basal 70 cm is very fractured (11 beds)	20		PsH +										
								and interbedded claystone + siltstone with			Psph										
	277							mod abund bleached bands (beds) and	30												
								incr chlor alt on bed ⁿ + bedding surfaces.													
	278	g n	F	P m z c		str chlor ± sil			35/35												
						± veins		277.70 - 278.50 m: CHLORITE SCHIST ± CARB/QTL VEINING		Bottom		0.13	277.5-278.5	<1	18	7	430	<10			
	279	b k g n	F	P x i c /	P x i d	chl, sil, carb			300			0.45	278.5-279	<1	953	23	63	26			
						ABUND SULPHUR		DARK GREEN GREY - BLACK, HIGHLY FOLIATED / SHEARED + FRACT,													
	280							MOD SOFT, CHLORITE SCHIST (? EX-SEDIMENT) ± TALCOSE	21,000	GT		0.48	279-280	2	4.12	370	230	10			
								ALTERATION IN PART, AND MOD ABUND MKY QTL VEINING	850												
	281							PREDOM SUB // FOLN. DOMINANT FOLN DIRECTION 115° LCA	500			0.20	280-281	<1	2.54	25	19	35			
								ABRUPT (KNIFE EDGE) UPPER + LOWER CONTACTS. NIL SULPHIDES	45												
	282								91K			0.55	281-282	2	2.76	470	280	4			
								278.50 - 285.92 m: HEMATITE ± MAGNETITE IRONSTONE (CARB/CHLOR)	550			0.43									
	283							DARK (GAY) GREY - BLACK, HIGHLY FOLIATED (PREDOM CHAOTIC) HEM	2000			1.04	282-283	3	3.78	710	165	10			
								HYDROTHERMAL IRONSTONE (SUBORDINATE TO MINOR MAGNETITE + OCC MASS MAGNETITE	450			1.13									
	284							PATCHES + BANDS) - ABUNDANT COARSE XTALINE BOLDMITE	15			0.12	283-284	<1	3700	19	20	30			
								PATCHES, VEINS AND WISPING THROUGHOUT AND MOD ABUND	30												
	285							DISSEMI (+ WISPY TO BANDED) STR CHLOR ALTER. ALSO PATCHY	400			0.55	284-285	2	4.00	350	45	25			

TIME STARTED

FINISHED

MOD SILICIFICATION (PREDOM ASSOC W/ - CARB)

VERY ABUNDANT CPY ± FIR (± 2 FERRUGINOUS) PATCHES

DISSEMI (+ WISPY TO BANDED) STR CHLOR ALTER. ALSO PATCHY

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PROSPECT VIVID

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DECLINATION -70° S

DRILL RIG LONGYEAR

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Ag g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm
261		p u	F	l s p h	l s t h	tr chl, tr sil		245.30 - 277.70m: Banded (interbedded) hematitic sediments cont.		NR	l s p h ± l s t h						
	262								40								
	263							263.60 - 268.70m Area of much increased fracturing parallel to both bedding + foliation. Also significant increase in pl pink bleaching (bands, spots and patches) and softer, more foliated character.	35		many thin bleached bands/beds, foliated						
	264								35								
	265								25								
	266								35								
	267								40	BOTTOM	abundantly bleached ± foliated						
	268								35	OK							
	269	p u	F	l s t h	l s p h	wh chl, ± silic?		268.70 - 277.70m Zone of less interbedded hematitic sediments (predom siltstone massive beds with some areas of claystone/siltst interbedding and partial bleaching). Predom with weak pervasive silicification ± weak chloritization (slight garnet grey tinge in overall purple colour).	35	OK							
	270								40		partially whly silicified						
	271								20		l s t h ± l s p h (v wh chl)						
	272								40								
	273								35								

TIME STARTED

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DRILL RIG LONGYEAR

HOLE N°: VIV-8

10070 N

9980 E

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY			SECONDARY LITHOLOGY			ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	Bi ppm
285												285.92 - 288.56m : FINE GRAINED MAFIC INTRUSIVE (CHL + TREM)	350	NA								
	286	g n	F	l b	i b				chl, minor dolom		MED GREEN, FINE GRAINED, MOTTLED AGGREGATE OF CHLOR - TACMOZITE	180		-35		285 - 286	2	394%	220	54	9	
	287										FELDSPAR ± SILICA FORMING MAFIC SILL (BOUNDARIES + FOL? CONCORD WITH FOL? OF SURROUNDING IRONSTONE). MOD AMOUNT OF WHITE	50		<.01		286 - 287	<1	760	13	590	<1	
	288										CARB VEINS + WISPS VARIOUSLY ORIENTATED - MINOR TO RARE CPT	70		<.01		287 - 288	<1	1700	10	620	<1	
											ALL AISEL W/- ALL MKT RV // FOLN BASALTIC TO V.F. GR DOLER TEXTURE	710										
												60										
	289	b k g n	F	l x	i h				chl ± sil ± talc		288.56 - 290.42m : HEMATITE IRONSTONE, CHLORITIC ± SILICA ± CARB	25		.19		288 - 289	<1	3220	16	400	32	
									± dolomite		HYDROTHERMAL IRONST W/- STR TALL ± CHL + CARB ALT (PATCHES) TO 289.6m	30										
	290										THEN FREDDOM CHLOR W/- V. STR SILICIFIC i/p + RED JASPER	35	Bottom of core	.57		289 - 290	<1	7690	9	21	10	
											PATCHES. MOD AMT CPT TO 289.6m. FOLN 135° LCA.	55		.43								
	291	g n	F	l b	i b				chl			210		.02		290 - 291	<1	2620	7	450	15	
											290.42 - 291.03m : FINE GRAINED MAFIC INTRUSIVE (CHL + TREM)	17,000										
	292	g b k r d	F	l x	i s	l x	i j		str sil; carb ± chl		AT PER 285.92 - 288.56m CONCORDANT ABOVE MKT RV TO	210	Core	<.01		291 - 292	<1	4700	17	99	10	
											3cm THICK W/- VARIOUS ORIENTATIONS, RARE CPT ON SOME FOLIATIONS	8,000										
	293											93,000		.01		292 - 293	<1	1000	27	36	15	
											291.03 - 318.20m : HEM ± MAGNETITE - SIL - CARB ± CHL IRONSTONE	45										
	294										BLACK/RED/WHITE/PINK, VARICOLOURED, FREDDOM CHAOTIC	40K		.11		293 - 294	<1	1990	33	12	11	
											TEXTURED AND BRECCIATED, FREDDOM STRONGLY SILICIFIED W/-	27K										
	295										ALSO ABUNDANT RED JASPER PATCHES. ABUNDANT WH-PINK	32K		<.01		294 - 295	<1	750	52	14	30	
											WISPS VEINS AND PATCHES OF DOLOMITE (SOME SHOWING	3000										
	296										COLLOFORM BANDING (ESPECIALLY FROM 303m). FREDDOM	27K		<.01		295 - 296	<1	200	10	17	41	
											HEMATITE, LESSER ADMIXED MAGNETITE. MINOR AREAS OF	30K										
	297										PATCHY, STRONG CHLOR ALT (LOCAL SHEARING). PTO.	32K	0.13	296 - 297		<1	1580	125	42	15		

TIME STARTED

FINISHED

ASSAY LAB CLASSIC

P/O N° NT 1652



Newmont Australia Limited

CORE DRILL LOG

DATE 27/10/90

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PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

HOLE N°: VIV-8 10070 N 9980 E

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES						
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	Bi ppm
297		9/4 bk	F	E x i s	E x i j	shrd, jasp.		297-03 - 318-20 m: HEM + MAGNETITE - SIL - CARB + CHL IRONST	16K	N&	Exij (red)							
	298	rd				+ carb ± chl		cont.	15K		Exij (red)	<.01	297-298	<1	690	67	14	<10
						± talc		Abund jasper 293.90 - 294.90 + 301.80 - 305.00 m	64K		Exij (red)	<.01						
	299							Rare - minor sulphides in matrix, occ chalcopy veins + wisps at various orientations often asstg w/- 2° spec hem.	5,000		Exij (red)	<.01	298-299	<1	1870	30	14	90
	300							or glz/carb veining @ 60°-80° LCA ± 120° LCA. (Chasie + breccia feat + some fol. / fract/vein orientations @ 40°-60° LCA, 1 LCA and 140° LCA. (very variable).	1000		Exij (red)	<.06	299-300	<1	790	30	16	180
	301							Colloform carb patches becoming 2 jasper + silic from 302 m	85K		Exij/m	<.05	300-301	<1	2270	18	9	50
	302							Occ thin sheets of chl + knol alt (to 5cm thick) + predom orientated @ 70°-90° LCA.	800		Exij/m	<.06	301-302	<1	1190	17	10	125
	303							305.00 - 306.30 i/p silic + i/p colloform carb with hem ironst ± talc	700	bottom of core	Exij (red)	<.04	302-303	<1	1260	8	29	100
	304							306.30 - 306.65 large breccia clast of colloform banded carb	40		Exij (red)	<.04	303-304	<1	950	21	17	100
	305							306.65 - 307.70 strongly silicified hem-jasper + gv ironst + occ thin talc + chlor shearlets. (near magnetite i/p)	2500		Exij (red)	<.01	304-305	<1	190	<4	45	35
	306							307.70 - 309.15 talc + colloform carb + hem ironst + w/- minor red jasper patches + occ pinky gv chasie fol and colloform banding at various orientations (as are occ talc-chlor shears to hem and gv)	70		Exij (red)	<.01	305-306	<1	850	20	61	35
	307							309.15 - 310.00 strongly silicified throughout + abundant red jasper, highly brecciated appearance	40		Exij (red)	<.04	306-307	<1	530	18	22	20
	308							nil colloform carb. ironst component (predom hem ≥ silica + carb) sil	24K		Exij (red)	<.01	307-308	<1	400	15	23	10
	309							incr in sulphides wnt above interval (2.1)	60		Exij (red)	<.01	308-309	<1	210	9	37	15
									25		Exij (red)	<.01						

TIME STARTED

FINISHED

ASSAY LAB CLASSIC

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Newmont Australia Limited

CORE DRILL LOG

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PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGTEAR

HOLE N°: VIV-8 10070 N 9980 E

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES							
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	Bi ppm	
309		97 bk rd	F	L x i s	L x i j	str sil jasp ± carb ± chl		291.03 - 318.20 m: HEM ± MAGNETITE - SIL - CARB ± CHL IRONST.	60	N&	97 bk - Lxij (sil) s o o a o								
	310					± talc		310.00 - 315.40 m predom gy - gn gry ± rd, hem ± magnetite	85		oxid Lxij	<.01	309 - 310	<1	1090	<4	25	<10	
	311							(dissem/admixed) w/- abund wh - con carbonate	85		oxid Lxij falc chl	<.01	310 - 311	<1	230	6	94	20	
	312							patches + wisping (i/p w/ colloform banding)	4000		oxid								
								Also mod amount talcose ± chlor alter ⁿ locally	600		oxid falc chl	<.01	311 - 312	<1	1820	10	29	35	
	313							w/- inter falc ⁿ / ? shring - wh - mod silicified	300		oxid								
								and occ bands w/- inter red jasper (inner margin)	4000		oxid Lxij falc chl	<.01	312 - 313	<1	255	10	23	15	
	314							ie. 310.10 - 310.30 + 312.80 - 313.10 +	2700		oxid Lxij falc chl								
								314.75 - 315.15 m Also mod abundant 2°	65	BOTTOM	oxid falc chl	<.01	313 - 314	<1	1200	6	18	13	
	315							specular hem veining + patches Occ cpy	50		oxid falc chl								
								veining + aggregates (2-5%) predom quartz	40		oxid falc chl	0.05	314 - 315	<1	830	11	29	20	
								w/- small talcose shearlets + falc ⁿ Texture	400	OF	oxid falc chl								
	316							overall chaotic + i/p brecciated, falc ⁿ variable	20	CORE	oxid falc chl	<.01	315 - 316	<1	2600	11	22	48	
								in orientation.	75		oxid falc chl								
	317							315.40 - 318.20 m predom strongly silicified w/- mod amt to	25		oxid falc chl	0.10	316 - 317	<1	1860	32	38	270	
								mod abund red jasper, 4 carb (rarely colloform)	5500		oxid falc chl								
	318							brecciated + chaotic, patchy (2-3%) cpy (w/-	200		oxid falc chl	0.02	317 - 318	<1	2160	10	26	82	
		97 pk	F	L x i d		str carb ± sil		wkpy gv) @ various orientations, occ talc shis	20		oxid falc chl								
	319					± talc locally			35		oxid falc chl	0.05	318 - 319	<1	1000	7	24	33	
								318.20 - 336.15 m: HEM-CARB ± SILICA IRONSTONE, RARE MAGNETITE	30		oxid falc chl								
	320								25		oxid falc chl	0.07 0.08	319 - 320	<1	540	7	51	171	
								P.T.U.	25		oxid falc chl								
	321								25		oxid falc chl	0.04	320 - 321	<1	210	5	51	103	

TIME STARTED

FINISHED

ASSAY LAB CLASSIC

P/O N°



Newmont Australia Limited

CORE DRILL LOG

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HOLE N°: VV-8

10 070 N 9980 E

PROJECT NT 27

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES							
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS		MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	
321		pk	F	l x i d				1/4 carb 3 silica	318.20-336.15 m: HEM-CARB ± SILICA IRONSTONE, RARE MAGNET	45	NR	oxid silica							
	322							± talc locally		25		(hem)	0.9	321-322	<1	1120	10	39	
	323							PINK + WHITE + GREY - BLACK, MOD HARD - HARD, HIGHLY BRECCIATED AND FOLIATED (CHAOTIC) EXTREMELY		55		mk	0.6	322-323	<1	830	11	48	
	324							CARBONATE (DOLOMITE) RICH / ALTERED HEMATITIC		30									
								HYDROTHERMAL IRONSTONE WITH RARE TO VERY MINOR		40		talc	0.1	323-324	<1	650	<4	63	
								MAGNETITE CONTENT. PREDOM W/ - W/ - MOD JTA		25									
	325							(PATCHY) SILICIFICATION. CARBONATE ≥ HEM / MAGNETITE		30		oxid silica	0.1	324-325	<1	2540	4	54	
								IN BULK - RARE - DOL CHALCOPIR LIPS, VEINETS		25	BOTTOM OF CORE								
	326							AND BLEBS (+ RARE VUGGY INCLUSIONS) - PREDOM		40		oxid silica	0.1	325-326	<1	560	7	54	
								ASSOC W/ - THIN TALE (± CHLOR) SHEARS OR QZ OF		30									
	327							ARKY CARBONATE VEINING. MOD ABUND THIN (± 1 cm)		45		oxid silica	<0.1	326-327	<1	520	<4	39	
								TALC ± CHLOR SHEARS AT VARIOUS ORIENTATIONS		25									
	328							FOL. IS PREDOM CHAOTIC & VARIOUSLY ORIENTATED		25		oxid silica	<0.1	327-328	<1	355	<4	43	
								BUT OFTEN IS DEVELOPED @ 40°/CA AND SOMETIMES		25									
	329							@ 80°/CA. (THESE DIRECTIONS ALSO COMMONLY THOSE		20		oxid colloform	<0.1	328-329	<1	1000	<4	50	
								OF ARKY BY AND CARB VEINING. - THOUGH THE VEINING		40									
	330							IS MORE RANDOM THAN FOLIATION)		500			<0.1	329-330	<1	660	<4	43	
								OCCASIONALLY THE CARBONATE SHOWS COLLOFORM		20									
	331							BANDING (eg 319 m, 329-60 m, 330-50 m, 334-10 m)		35		oxid	<0.1	330-331	<1	480	8	92	
								SOME AREAS SHOW MORE INTENSE BRECCIATION THAN		25									
	332							OTHERS (eg 321-50 m, 324-375.50, 327 m, 329 m, 330-05,		55		oxid silica	<0.1	331-332	<1	620	6	59	
								331-50 - 336.15 m) THOUGH THE ENTIRE INTERVAL IS		30									
	333							BRECCIATED TO SOME EXTENT. DOL AND JASPER PATCHES		25		oxid silica	<0.1	332-333	<1	1180	10	59	

TIME STARTED

FINISHED

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Newmont Australia Limited

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PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

HOLE N°: VIV-8

10070 N 9980 E

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS		MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	B: ppm		
333		9/10	F	P x i d				str carb ± silic	318.20 - 336.15 m: HEM-CARB ± SILICA IRONSTONE. RARE MAGNETITE	10	NA	pxid talc									
	334							± talc locally		20		pxid talc	<0.1	333-334	<1	1070	18	76	11		
									331.30 - 336.15 showing greater abundance of thin talc	30		pxid talc									
	335								shearlets and increased brecciation also	65		pxid talc	<0.1	334-335	<1	570	18	105	12		
									incr degree of silicification (mod st)	60		pxid talc									
	336								and decr ironst w/ carbonate	45		pxid talc	0.37	335-336	5	3280	48	93	330		
										20K		pxid talc									
	337	9/10	F	P x i m	P x i d			carb ± sil ± talc	336.15 - 340.50 m: MAGNETITE - HEM-CARB ± SILICA IRONSTONE	20K		pxid talc	0.08	336-337	3	6030	32	51	115		
									AS ABOVE EXCEPT MAGNETITE APPEARS AS A MAJOR COMPONENT	20K		pxid talc									
	338								(≥ HEMATITE IN MANY PLACES) AND THE MAG + HEM ARE	35	BOTTOM	pxid talc	0.81	337-338	3	1800	8	40	19		
									NOW PREDOM > CARB (BULK). DIC COLLOFORM. CAPT. OIL	25		pxid talc									
	339								RED CARB +/- JASPER (338-338.60). MOD ABUND PRCHY TALC	4000		pxid talc	<0.1	338-339	4	1310	15	82	<10		
									SILICA CPY (~3-4%). LESS CHAOTIC i/p - FOL'S ORIENT	2000	CORE	pxid talc									
	340								(N140°-160° LCA)	2000		carb	<0.1	339-340	1	930	22	105	<10		
										3000		carb									
	341	6/10	F	P x i m				± carb ± sil	340.50 - 345.40 m: MAG-HEM ± CARB ± SIL IRONSTONE	50K		pxid talc	<0.1	340-341	2	1430	16	72	<10		
								occ chlor	AS ABOVE BUT MAGNETITE ↑↑, HEM ↓, CARB ↓↓	2100		pxid talc									
	342								CARB ONLY OCC DEVELOPED BEYOND 344 m AND SILICA RT	2100		pxid talc	<0.1	341-342	<1	950	9	67	<10		
									BECOMES STRONGER & MORE ABUND FROM 344 m	60K		pxid talc									
	343								TEXTURE STILL V. CHAOTIC BUT NOT AS BRECCIATED NOW.	75K		pxid talc	<0.1	342-343	<1	1150	5	98	<10		
									PREDOM FOL'D DIRECTION (WHERE NOT COMPACTED) @ 125° LCA	50K		pxid talc									
	344								SOME BY @ 60° LCA (SOME W/ CPY FLECK & SILVERGESS)	7000		pxid talc	<0.1	343-344	<1	1700	11	62	<10		
									OCC PATCHY MOD STR CHLORITE RT OVERALL ↑ CPY (4%)	1000		pxid talc									
	345								MAG >> HEM > CARB	2100		pxid talc	<0.1	344-345	<1	1110	<4	27	15		

TIME STARTED

FINISHED

ASSAY LAB

CLARIC

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Newmont Australia Limited

CORE DRILL LOG

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HOLE N°: VIV-8

10070 N 9980 E

PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION												SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	MAG JUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	Bi ppm
345														345.40 - 346.80 m: QTZ - MAG ± CHLORITE IRONSTONE.	100 K	NA	2.1m 345.30							
	346	lk gn wh	F	P	x	i	m	P	x	i	g		str sil, occ chlor	BLACK/WHT ± RD ± GRN. STRONGLY SILICIFIED BURNED - MAGNETITE ± HEM IRONSTONE w/ MINOR PATCHES MOD STR CHLOR ALT. AND	70K		2.1m 345.30	<.01	345-346	<1	4620	5	68	11
	347	lk gn	F	P	x	i	mc	P	x	i	c		str chl, wks sil	AGE RED JASPER. NIL - TRACE CARB. VERY CHAOTIC w/ ABUND	100 K		2.1m 345.30	<.01	346-347	<1	4840	4	46	15
	348													MKY QTZ AND ↑ CPY (~4-5%) MAINT ASSOC w/ CHLOR ALT AND ↓ SILICA LOCALITY.	>100 K		2.1m 345.30	<.01	347-348	<1	5600	15	85	11
	349													346.80 - 353.00 m: MAGNETITE-CHLORITE ± QTZ IRONSTONE	>100 K	191	2.1m 345.30	2.90 2.70 3.76	348-349	<1	4090	280	88	12
	350													BLACK + DK GRN. MOD SOFT, FREDDOM UNDISCIFIED, HIGHLY FRAC	70K	Bottom	2.1m 345.30	-22	349-350	<1	5790	37	89	45
	351													EXTREMELY CHAOTIC + PRECIPITATED MAGNETITE-CHLOR ± HEM ± QTZ IRONSTONE (EXIMC) OCC PATCHES w/ ↑ SILICA	60K		2.1m 345.30	-62 -80	350-351	<1	7120	280	230	14
	352													(± JASPER) AS 348.7-349 m. VARIABLE (BUT FREDDOM MOD ABUND) CPY ± PYR AGGREGATES + WISPS (BULK ~5-8%)	60K	60K	2.1m 345.30	-52	351-352	<1	8620	430	210	50
	353	gn lk	F	P	m	z	c	P	x	i	c		str chl	NO DOMINANT FOL. DIRECTION - Y CHAOTIC THROUGHOUT.	70K		2.1m 345.30	1.00 -66	352-353	<1	1920	320	155	34
	354												occ sil	RARE MKY QV @ 60° 70° ± 100° LCA. STRONG CHLOR ALT THROUGHOUT. LOWER BOUNDARY GRADATIONAL/TRANS	60K		2.1m 345.30	1.58 1.38	353-354	11	3080	4100	195	20
	355													TIONAL TO CHLORITE - MAG - HEM SCHIST BELOW.	70K	191	2.1m 345.30	-82	354-355	8	7580	960	120	12
	356													FREDDOM w/ ABUND WISPY TO BLOTCHY (± OIL VEINLETS) BISMUTHINITE.	40K		2.1m 345.30	6.58 5.76 5.90	355-356	3	1287	155	120	87
	357													353.00? - 358.14 m: CHLOR - MAG - HEMATITE SCHIST	20K		2.1m 345.30	-68	356-357	2	6770	40	130	118
														DK GRN GRAY + BLACK ± WH (QTZ) SOFT STR FRIT + FOL	20K		2.1m 345.30							
														EXTREMELY CHLORITE ALTERED, MOD STR PRECIPITATED	20K		2.1m 345.30							
														SHEARED SCHIST UNIT BOUNDING IRONSTONE POST. MOD	25K	60K	2.1m 345.30							
														ABUND MKY QV // FOLC (1A 120° - 130° LCA BUT NOTE	60K		2.1m 345.30							
														CORE ORIENTATION QUESTIONABLE DUE TO BROKEN PIECES	6000		2.1m 345.30							

TIME STARTED

FINISHED

MOD ABUND SULPHIDES (CPY ± PYR) ~ 3-4% THROUGHOUT.
(FREDDOM ASSOC w/ QV) + ABUND (+ VARIATIONS) BISMUTHINITE.
PRECIPITATED + ...

ASSAY LAB CLASSIC

P/O N° NT 1652



Newmont Australia Limited

CORE DRILL LOG

DATE 31 / 10 / 1990

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HOLE N°: VIV-8

10 070

N

9980

E

PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY			SECONDARY LITHOLOGY			ALTERATION	MINERALISATION	COMMENTS ORIENTATED CORE OK	MAG JUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm		
357											358.14 - 372.36 m: CHLORITIC CLAYSTONE + SILTSTONE	70	NR										
	358											40	10A			3.76	357-358	3	298%	37	135		
		g ~	F	l s p c	l s + c	mod sh chlor				MED-DK GRN GREY, HARD, SLI BLEACHED i/p, WELL BEDDED, MOD	10				4.59								
	359										STRONGLY CHLOR ALTERED SEDIMENTS. REGULAR FISSILE /	20				3.76							
											BANDED NATURE - PREDOM ORIENTATION @ 50° OR 130° LCA	20					358-359	14	2100	23	70		
	360										(CORE ORIENTATION EQUINOXIAL). TR-DIC FINE BLEACH	20											
											CPY (+ SURFACE COATINGS ON FRACTURES) EPM NOT STRONGEST	15											
	361										FRACTURED. OR MKY BV PREDOM OBLIQUE TO BEDDING	20											
											AND // POORLY TO MOD DEFINED CLEAVAGE (ie. ~90° BEDDING)												
	362										CLAYSTONE >> SILTSTONE. OR PYRITIC SEIVEDGES + AGGREGATES	25											
											W/- SOME MKY BV OBLIQUE TO LCA. (+ CPY i/p).												
	363											35											
	364											25											
											369.15 - 369.40 m MASSIVE mky gv sub // fl" (ie. ~												
	365										140° LCA) WITH abund (20%) MASSIVE AGGREGATE pur.	20											
											+ CPY												
	366											35											
	367											25											
	368											25											
	369											30											

TIME STARTED

FINISHED

ASSAY LAB CLASIC

P/O N° NT 1652



Newmont Australia Limited

CORE DRILL LOG

DATE 1 / 11 / 90

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HOLE N°: VIV-8

10070 N 9980 E

PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES					
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	AU g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm
369		g p k c m	F	B x /	P s + h/c	chlor ± silica		372-36 - 373-91 m: BRECCIATED + SHEARED SEDIMENT		NA							
	370			P m 2 c		± kaol		PINK-LAM-GRN GRAY-GRN, HIGHLY BRECCIATED AND SHEARED, PARTIALLY KAOLINIZED, FREDDON STRONGLY	30		Esph Pste	0.08 0.05	369-370	5	970	<4	105
	371							CHLOR ALTERED, PARTIALLY HEMATITIC (PRIMARY HEM SEDIMENT) AND i/p SILICIFIED SEDIMENT GRABING	30								
	372							TO SCHIST ... SOME JASPER INFILLINGS, WELL SHEARED 373m	30								
	373							373-91 - 389-23 m: BEDDED/RANDED ± FOLIATED HEM SILTST	26								
	374	r d p u	F	P s + h	P s p h	fine chlor ± seric		RED - PURPLE, WELL BEDDED HEMATITIC SILTSTONE + LESSER HEM CLAYSTONE. INITIALLY (TO 384m) MODER- ATELY WELL FOLIATED (SUB// BEDDING) w/ MOD ABUND	26								
	375							MANY BTZ LENSES + VEINLETS BOTH SUB// FOL AND SUB// LCA. THE PRIMARY BEDDING/LAYERING IS PARTIALLY	22								
	376							OBSCURED BY THIS FOL + WISPIG. BUT BEYOND 384m PRIMARY BEDDING BECOMES MORE PRONOUNCED AND FOL	20								
	377							MARKEDLY DECREASES AND QV ONLY OCCASIONAL.	22								
	378							DEC CHAOTIC ZONES OF ↑ FOLM. THROUGHOUT AND ALSO DEC THIN CHLOR ± SERICITIC SHEARZONES (TO 2cm THICK)	25								
	379							BEDDING @ 140° LCA. FOL LESS CONSISTENT (~130° LCA) THIN SHEARS AT VARIOUS ORIENTATIONS.	17								
	380								22								
	381								20								

TIME STARTED

FINISHED

ASSAY LAB CLAYTON

P/O N° NT



Newmont Australia Limited

CORE DRILL LOG

DATE 1 / 11 / 90

PAGE N° 20 / 22

HOLE N°: VIV-8

10070 N 9980 E

PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY			SECONDARY LITHOLOGY			ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm
381		rd p	F	l	s	+ h	p	s	p	h	rare chl	373.91 - 389.23 m: BEDDED / BANDED ± FOLIATED HEM SILTS		NA							
	382										seric.	cont..	20		Psth ±						
	383											From 386 m becoming more purple, and progressively paler also. Mod str bled (pl purp) from 388.80 m.	25		Psp						
	384											From 387.05 m becoming banded with abundant	20								
	385											dk grn gry chlor altered beds to 1cm thick. These green gry chloritic bands also have strongly bleached	20								
	386											margins (~1mm).									
	387											Bedding well pronounced @ 120°-130° LCA. Fol. // to sub // bedding (mod well cleaved).	35		Psth ± Psp.						
	388											389.23 - 397.20 m: CHLORITIC ± BLEACHED BANDED SEDIMENTS	30	TOE OF CORE	well banded / bedded						
	389											MED-DK GRN GREY + BUFF (BANDED) CHLORITIC + PARTIALLY BLEACHED SILTSTONE ± CLAYSTONE. WELL BANDED	25								
	390	gy b	F	l	s	+ c	l	s	p	c	mod str chl	LAYERS. BLEACHED BANDS SHOW V. PL PURPLE (WHEN)	30		Psp /						
	391						l	s	p	h	throughout	COLOURATION i/p ∴ PROBABLY ORIGINALLY HEM SEDS WITH CHLOR + BLEACHING SUPERIMPOSED	25		Pstc						
	392											BEDDING @ 120° - 140° LCA (Sub // Fol.).	60		(bleached bands)						
	393											392 - 393.20 Becoming more strongly foliated & cleaved. (@ ~ 150°-160° LCA i/p) + occ mky or	20								

TIME STARTED

FINISHED

ASSAY LAB CLASTIC

P/O N°



Newmont Australia Limited

CORE DRILL LOG

DATE 2 / 11 / 190

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PROJECT NT 28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

OLE N°: VIV-8

10 070 N 9980 E

PROSPECT VIVID

DECLINATION -70° S

GEOLOGIST JAK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	Bi ppm	
393		9 m	F	L s	t c	L s	p c	mod str chl	393.20 - 394.10	monotonous dk grn grey chlor siltst + bleb		NQ									
	394	b u				L s	p h	throughout +	394.10 - 397.20	strongly cleaved chloritic ± wky hem	35										
								occ talc in		sediment with abundant buff bleached											
	395							foliation		bands + patches. Well foliated + chaotic	30										
										to brecciated i/p. Mod abund mky gv. Occ-											
	396									mod abund talc alter. with more intense fol.	60										
										Some parasitic folding											
	397								397.20 - 408.03m (EOH):	HEMATITIC SILTSTONE + CLAYST.	27										
	398	P u	F	L s	t h	L s	p h	occ chlor		PREDOM PL-MED PURPLE, MONOTONOUS, SILTSTONE +	40										
										CLAYSTONE INTERBEDDED SEQUENCE (MOD HEMATITIC)											
	399									SOME MOD BLEACHING + STR BLEACHED BANDS (BUFF) TO	40										
										398m THEN ONLY RARE BLEACHED BANDS.											
	400									BEDDING @ 135° LCA (SUB// FOL.), MOD CLEAVED	40										
										RARE QV AT VARIOUS ORIENTATIONS (INCL // BEDDING +											
	401									FOL.) OCC AREAS OF WK-MOD CHLOR ALI (PERVASIVE)	40										
										- MOD GRN GREY											
	402										36										
										401.31 - 402.05m											
	403									Zone of strong brecciation and											
										some wk-mod chlor alt. and also	32										
										some patchy bleaching (buff) +											
	404									mky gv + LCA.	35										
	405										30										

TIME STARTED

FINISHED

ASSAY LAB CLASSIC

P/O N°



Newmont Australia Limited

CORE DRILL LOG

DATE 3 / 11 / 90

PAGE N° 22 / 22

PROJECT NT28

AZIMUTH 175° MAG

DRILL RIG LONGYEAR

HOLE N°: VIN-8

10070 N 9980 E

PROSPECT VIVID

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING		PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAG SUSC.	BIT TYPE	GRAPHIC LOG	Au g/t	SAMPLE N°	Ag g/t	Cu ppm	Pb ppm	Zn ppm	
405		p u	F		l s	f h	l s	p h	see chlr	397.20 - 408.03 m (EOH);	HEMATITIC SILTST + CLAYST cont...		NQ								
	406									405.50 - 405.70 m	MASSIVE mky gh vein + local chlr	32									
	407										alter: sub ⊥ bedding + fol ⁿ	35									
											(~ 50° LCA)										
	408											40									
	(EOH)									406.35 - 408.03 m	paler purp colour w/ some mod chlr			EOH							
											alter ⁿ (paragenetic) + mod abund wk-mod										
											blebbed (buff) patches and occ mky gr										
											sub ⊥ LCA. Also some local										
											brecciation 407.15 - 407.50 m.										
		</																			

TIME STARTED

FINISHED

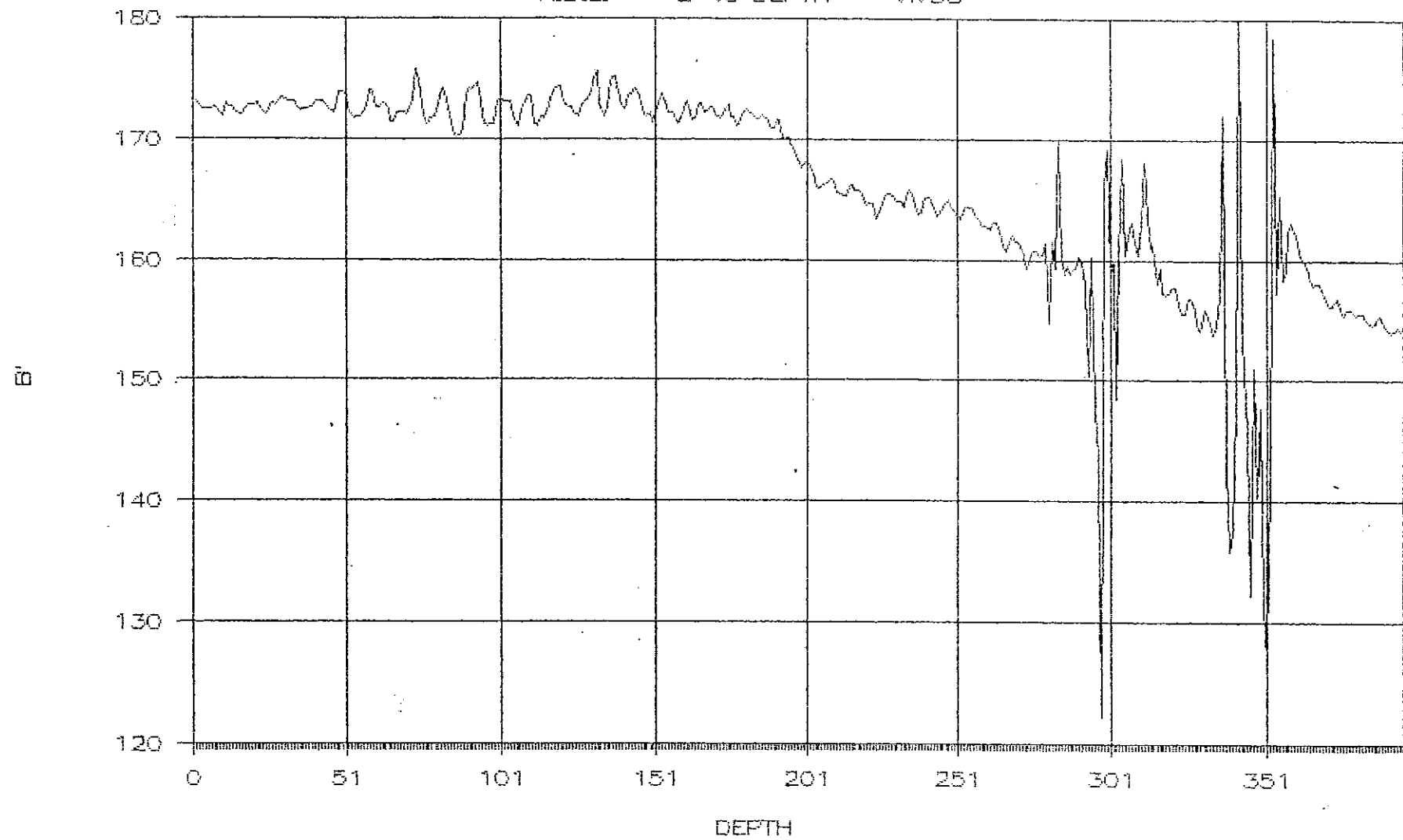
ASSAY LAB CLASSIC

P/O N°

VIV-8 DOWN HOLE MAGNETICS

SURTRON TECHNOLOGIES PTY LTD

A.D.L. B' vs DEPTH VVDS

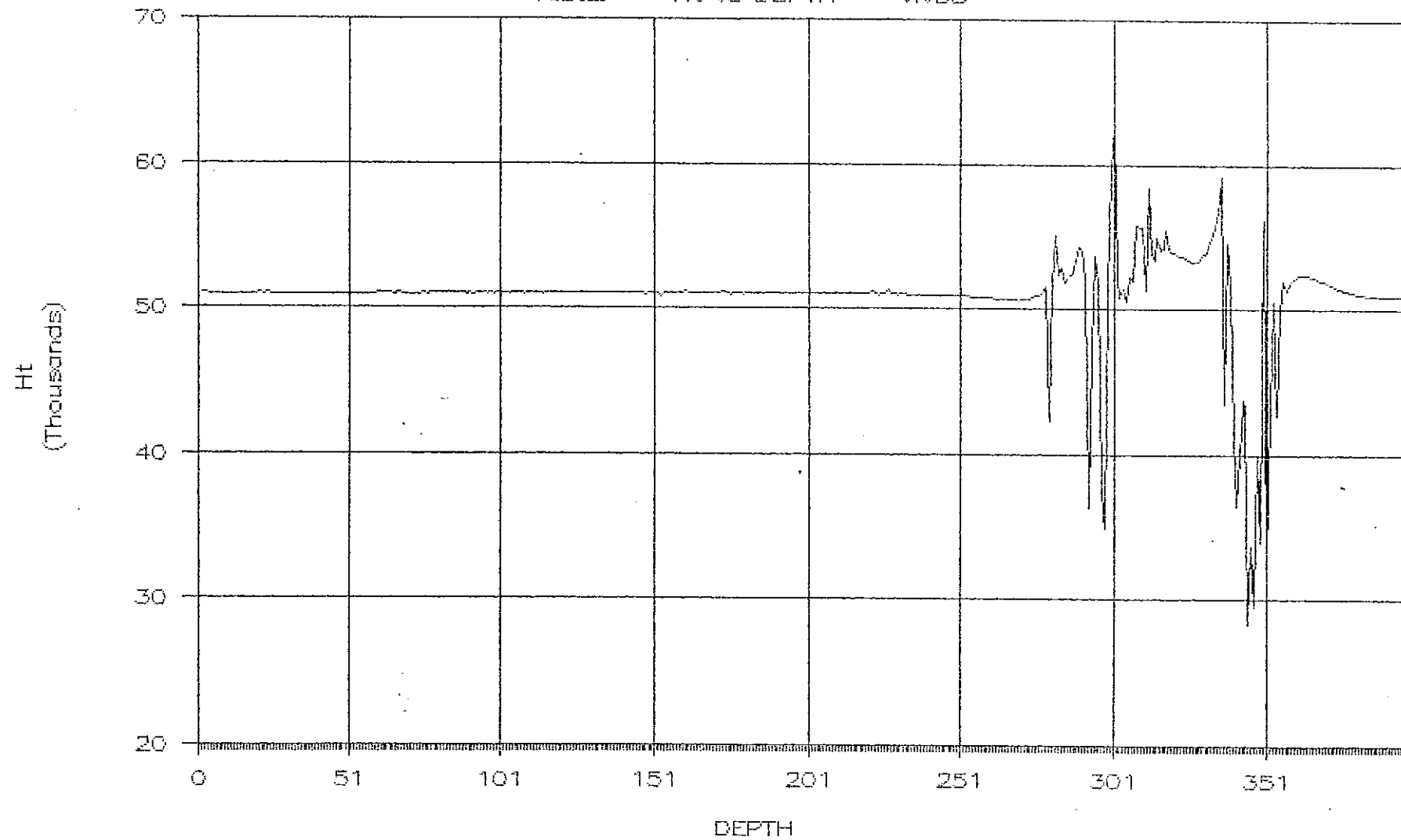


SURTRON TECHNOLOGIES PTY LTD

A.D.L.

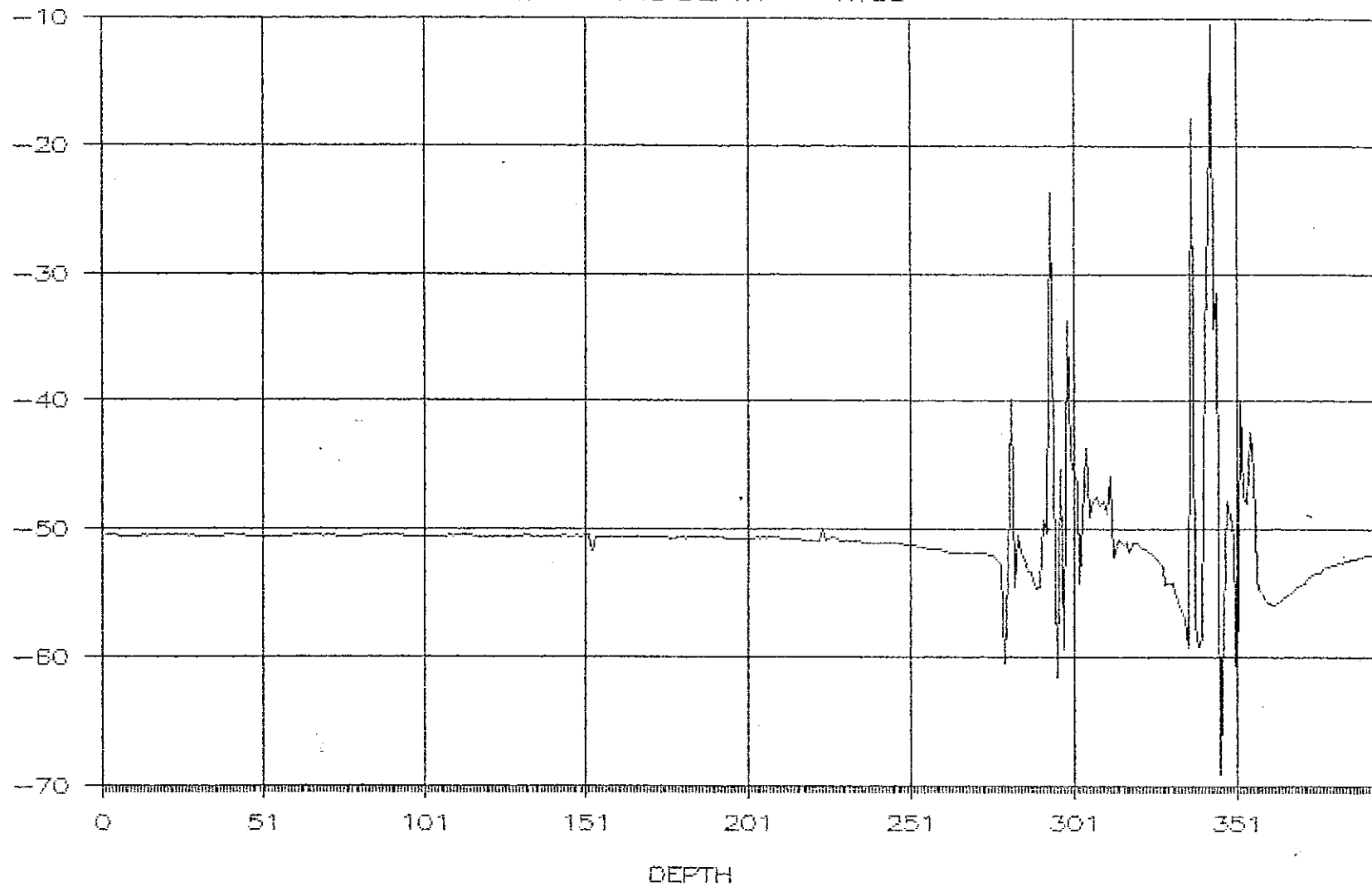
Ht vs DEPTH

VIVDS



SURTRON TECHNOLOGIES PTY LTD

A.D.L. 1 vs DEPTH VVD8



POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???		NORTHING ???			RL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
4	2	13480	11106	-47944	-304.3	-151.3	939.5	36.61
6	3	2343	17342	-47909	-121.6	-315.6	940.2	36.68
8	4	-9505	14985	-47773	106.1	-316.3	942.1	36.68
10	5	-17627	-120	-47847	325.7	-77.8	941.6	36.92
12	6	-16239	-7041	-47811	327.9	55.8	942.4	37.04
14	7	-10459	-14352	-47745	-252.6	212.7	943.3	37.16
16	8	-7952	-15939	-47763	210.8	252.7	943.3	37.16
18	9	-2735	-17569	-47667	128.1	304.3	943.2	37.35
20	10	8707	-15477	-47776	-86.2	319.0	942.5	37.35
22	11	14219	-10439	-47772	-208.6	259.6	941.9	37.35
24	12	16282	-6775	-47798	-270.6	194.1	941.7	37.35
26	13	17762	-1074	-47768	-315.8	96.5	943.0	37.41
28	14	17707	770	-47805	-326.2	64.2	941.9	37.41
30	15	17633	1063	-47833	-327.5	64.0	941.6	37.41
32	16	17860	387	-47824	-325.4	77.6	941.4	37.35
34	17	17549	-298	-47862	-323.8	91.2	940.7	37.29
36	18	17466	1775	-47842	-332.5	48.4	940.8	37.22
38	19	17475	725	-47871	-330.5	64.2	940.4	37.35
40	20	17300	-1349	-47919	-322.9	104.7	939.3	37.16
42	21	17300	-1805	-47948	-319.6	113.4	939.7	37.29
44	22	17337	1053	-47918	-334.2	58.3	939.8	37.10
46	23	17291	1126	-47946	-335.3	59.6	939.1	36.98
48	24	16005	6815	-47945	-336.3	-51.4	939.2	37.10
50	25	7625	15703	-47880	-221.5	-257.0	940.0	36.92
52	26	-6139	16202	-47951	38.0	-339.3	939.5	36.86
54	27	-12752	11812	-47964	192.9	-282.0	939.5	36.74
56	28	-12484	12114	-47917	160.9	-286.1	940.3	36.74
58	29	-13048	11611	-47889	195.4	-274.7	940.9	36.68
60	30	-17228	2155	-47921	318.8	-113.3	940.7	36.61
62	31	-17052	-2557	-47951	339.3	-25.4	939.8	36.43
64	32	-16664	-4064	-47970	342.0	3.9	939.1	36.49
66	33	-16229	-5333	-48008	341.5	31.3	938.4	36.31
68	34	-15054	-7999	-48037	332.5	87.6	938.1	36.37
70	35	-6804	-15590	-48064	211.6	273.1	937.1	36.19
72	36	-5796	-15954	-48073	197.0	285.2	937.1	36.25
74	37	-1300	-17155	-47986	109.2	324.0	938.7	35.94
76	38	8199	-15028	-48020	-84.3	332.6	938.3	36.13
78	39	13804	-10109	-48035	-218.7	265.7	937.7	36.00
80	40	17171	-1556	-47983	-323.2	111.9	938.5	35.88

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVDS
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD&A.ADL

EASTING???			NORTHING ???			RL ???		
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
82	41	17106	-24	-48020	-334.5	80.9	937.9	35.70
84	42	14895	8577	-47990	-328.2	-99.0	938.5	35.76
86	43	1956	17032	-47993	-115.5	-324.0	938.3	35.70
88	44	-11548	12490	-48037	169.8	-301.7	937.6	35.64
90	45	-13805	10141	-48001	219.7	-265.4	938.3	35.52
92	46	-17070	247	-48005	-332.3	-91.2	938.0	35.39
94	47	-16700	-2858	-48063	346.5	-32.1	937.2	35.39
96	48	-16783	-3132	-48024	344.2	-16.1	938.4	35.21
98	49	-10410	-13446	-48054	260.4	224.0	938.4	35.27
100	50	-6368	-15588	-48090	193.9	287.8	938.8	35.15
102	51	-5499	-15879	-48118	182.7	297.2	936.0	35.09
104	52	-1762	-16926	-48041	118.8	323.8	937.8	34.97
106	53	4777	-16400	-48029	-5.1	344.7	937.8	34.97
108	54	10891	-13198	-48025	-138.7	315.8	937.2	34.84
110	55	8884	-14542	-48036	-94.0	333.3	936.9	34.72
112	56	9208	-14185	-48082	-103.1	333.1	936.0	34.54
114	57	8570	-14487	-48139	-93.6	337.0	935.6	34.48
116	58	9439	-13828	-48129	-119.5	330.5	935.2	34.23
118	59	12538	-11013	-48174	-211.1	279.8	935.4	34.17
120	60	16709	-1247	-48141	-335.8	97.3	935.6	33.93
122	61	17097	-525	-48055	-331.8	94.6	937.5	33.81
124	62	16903	-1210	-48112	-330.6	109.7	936.4	33.50
126	63	16728	-379	-48177	-339.6	92.0	934.6	33.32
128	64	16626	78	-48215	-344.2	83.5	933.9	33.14
130	65	16570	1274	-48242	-349.9	63.8	933.8	32.95
132	66	16062	4990	-48137	-352.9	-3.7	934.7	32.71
134	67	12760	10905	-48136	-324.2	-141.5	934.4	32.53
136	68	497	16665	-48196	-104.2	-339.6	934.2	32.40
138	69	-9464	13615	-48220	117.6	-336.8	933.4	32.22
140	70	-11591	11851	-48220	172.4	-311.2	934.1	31.91
142	71	-10712	12573	-48210	149.1	-325.1	933.5	31.79
144	72	-14254	8105	-48288	256.1	-251.9	932.6	31.61
146	73	-13856	8552	-48297	254.4	-255.0	932.4	31.49
148	74	-14004	9475	-48098	255.0	-232.0	937.7	31.37
150	75	-16695	-1083	-48159	346.6	-38.5	936.6	31.24
152	76	-14568	-7939	-48245	342.1	87.5	934.2	31.12
154	77	-5375	-15728	-48187	205.2	289.2	933.9	31.00
156	78	2394	-16452	-48203	55.6	351.0	933.6	30.94
158	79	8664	-14328	-48171	-90.2	340.3	934.6	30.82

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???			NORTHING ???			RL ???		
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
160	80	9487	-13715	-48208	-112.7	335.4	933.8	30.76
162	81	9376	-13624	-48255	-115.5	336.1	933.4	30.57
164	82	13140	-10005	-48281	-227.8	271.6	933.6	30.63
166	83	16275	-4003	-48174	-316.5	148.6	935.4	30.51
168	84	16885	1349	-48106	-344.4	51.1	936.2	30.51
170	85	15822	6260	-48095	-346.1	-38.2	936.0	30.33
172	86	16876	865	-48125	-340.2	92.5	934.5	30.33
174	87	16710	-1098	-48191	-327.9	139.4	932.7	30.27
176	88	16423	-2222	-48239	-320.6	162.6	931.8	30.21
178	89	16479	-697	-48286	-337.2	128.7	931.3	30.14
180	90	15997	6498	-47953	-334.7	-61.0	938.9	30.14
182	91	7194	15666	-48001	-198.2	-277.8	938.6	30.08
184	92	-3236	16506	-48137	-1.6	-349.1	936.2	30.08
186	93	-5652	15289	-48318	56.6	-354.3	932.4	29.96
188	94	-6426	13616	-48433	130.0	-340.3	930.5	29.96
190	95	-12171	11458	-48180	193.6	-293.0	935.3	29.90
192	96	-15713	6442	-48088	270.6	-220.5	936.3	29.96
194	97	-16675	-845	-48176	342.9	-89.3	934.3	29.84
196	98	-16555	-1539	-48223	348.4	-73.8	933.6	29.84
198	99	-16453	2040	-48222	325.1	-146.3	933.4	29.90
200	100	-15380	6296	-48230	287.5	-205.9	934.6	29.84
202	101	-15722	5182	-48249	303.0	-182.6	934.5	29.78
204	102	-16610	2040	-48193	329.1	-123.3	935.6	29.66
206	103	-16592	-1128	-48213	347.5	-59.6	934.9	29.78
208	104	-15972	-4415	-48224	353.3	11.2	934.7	29.78
210	105	-7677	-14588	-48261	246.3	258.0	933.0	29.60
212	106	304	-16562	-48240	99.7	342.3	933.1	29.72
214	107	5529	-15663	-48228	-11.3	355.6	933.2	29.78
216	108	9857	-13458	-48207	-127.5	328.5	934.5	29.78
218	109	15091	-6888	-48212	-278.9	218.1	933.7	29.78
220	110	16340	-1802	-48304	-337.1	116.5	932.9	29.78
222	111	16460	-697	-48314	-344.5	95.2	932.3	29.78
224	112	16516	3467	-48152	-350.5	32.0	934.9	29.78
226	113	9700	13614	-48236	-284.4	-214.1	933.4	29.78
228	114	1118	16683	-48210	-120.2	-333.5	934.2	29.78
230	115	-9462	13779	-48178	110.1	-336.8	934.4	29.78
232	116	-14326	8507	-48210	247.5	-252.9	934.7	29.78
234	117	-14899	7392	-48238	272.1	-224.5	934.9	29.72
236	118	-15214	6534	-48248	289.0	-202.7	934.8	29.66

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???		NORTHING ???			EL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
238	119	-16018	3849	-48278	321.1	-150.1	934.2	29.72
240	120	-16074	3365	-48297	327.2	-139.8	934.0	29.78
242	121	-16518	1401	-48280	337.5	-106.1	934.6	29.78
244	122	-16601	-78	-48222	343.1	-84.2	934.9	29.66
246	123	-16222	-3410	-48242	353.6	-16.6	934.5	29.78
248	124	-15371	-6131	-48281	352.0	44.2	934.0	29.78
250	125	-5309	-15517	-48327	204.0	294.4	932.3	29.78
252	126	1257	-16388	-48334	73.7	351.1	931.7	29.90
254	127	6121	-15333	-48294	-46.1	351.7	933.4	29.90
256	128	11281	-11969	-48319	-175.9	309.2	932.8	29.84
258	129	14120	-8579	-48289	-252.4	249.1	933.4	29.84
260	130	14860	-6898	-48326	-285.0	213.0	933.1	29.84
262	131	16331	161	-48380	-352.4	57.4	932.7	29.96
264	132	14823	7483	-48274	-334.1	-109.4	934.9	29.84
266	133	12909	10640	-48208	-318.2	-152.9	934.5	29.96
268	134	15668	4991	-48322	-355.2	-8.4	933.0	29.96
270	135	12779	10494	-48321	-323.3	-146.6	933.7	29.90
272	136	5714	15510	-48256	-188.6	-299.9	934.1	29.90
274	137	-5171	15491	-48346	53.8	-353.1	933.5	29.96
276	138	-9610	13186	-48330	158.2	-319.9	933.3	30.02
278	139	-12068	11147	-48303	205.4	-290.2	934.0	29.84
280	140	-12615	10298	-48351	213.0	-291.0	932.0	30.02
282	141	-10423	12537	-48368	150.8	-327.8	931.9	29.96
284	142	-7964	14612	-48243	98.3	-338.8	934.9	30.02
286	143	-9055	13853	-48254	126.4	-331.2	934.6	30.02
288	144	-8324	14137	-48329	116.0	-337.6	933.4	30.14
290	145	-8361	14191	-48291	111.8	-337.8	933.8	30.21
292	146	-9970	13122	-48311	140.3	-327.7	933.4	30.08
294	147	-12597	10663	-48285	199.3	-296.6	933.1	30.21
296	148	-10618	12664	-48217	145.5	-327.2	933.1	30.08
298	149	-10044	13021	-48330	134.4	-332.2	932.4	30.21
300	150	-10294	12866	-48292	131.0	-333.8	932.4	30.14
302	151	-12948	10078	-48332	213.6	-289.8	931.8	30.14
304	152	-15381	4945	-48401	307.9	-193.4	930.7	30.27
306	153	-13836	5476	-48523	299.7	-209.4	930.1	30.21
308	154	-15491	4095	-48496	319.5	-178.3	930.6	30.27
310	155	-15898	2990	-48411	325.6	-162.3	930.6	30.21
312	156	-15889	3575	-48383	318.0	-173.1	931.3	30.27
314	157	-16259	1858	-48336	332.5	-137.6	932.4	30.27

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???		NORTHING ???			RL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
316	158	-16472	-97	-48318	342.7	-104.7	932.7	30.39
318	159	-16074	3319	-48336	316.7	-170.0	932.1	30.33
320	160	-14465	7456	-48400	266.9	-242.2	931.9	30.39
322	161	-12939	9777	-48550	227.9	-279.7	931.8	30.39
324	162	-13892	8589	-48333	247.5	-260.8	932.5	30.33
326	163	-16102	2844	-48336	320.9	-163.1	932.3	30.33
328	164	-15667	4269	-48401	307.3	-191.9	931.3	30.33
330	165	-15769	4095	-48364	314.8	-174.1	932.5	30.39
332	166	-16185	2077	-48346	333.5	-131.5	932.8	30.39
334	167	-14937	6789	-48335	274.4	-229.8	933.1	30.51
336	168	-16139	4040	-48270	308.7	-171.0	934.8	30.51
338	169	-16232	2442	-48327	328.0	-139.8	933.3	30.57
340	170	-15973	4095	-48336	310.8	-173.9	933.8	30.63
342	171	-16537	752	-48280	336.4	-114.2	934.2	30.57
344	172	-16065	2524	-48403	325.5	-156.0	931.3	30.63
346	173	-15936	2653	-48535	326.2	-161.9	930.7	30.69
348	174	-16398	1483	-48327	335.2	-119.3	933.8	30.63
350	175	-16463	-2434	-48243	349.8	-34.4	935.5	30.57
352	176	-15039	-6332	-48291	357.8	41.3	931.6	30.57
354	177	-12727	-9708	-48490	341.2	129.3	929.6	30.76
356	178	-9028	-14006	-48206	271.4	224.6	935.0	30.63
358	179	-7123	-15145	-48196	232.5	262.1	935.9	30.63
360	180	-5551	-15655	-48073	201.7	290.4	933.9	30.76
362	181	-2110	-16237	-48365	136.4	330.4	932.8	30.82
364	182	8849	-13725	-48398	-106.6	342.1	932.3	30.88
366	183	13001	-10060	-48338	-212.6	286.8	932.7	30.82
368	184	13454	-9977	-48244	-212.8	279.3	935.0	30.94
370	185	13649	-9411	-48310	-224.4	275.0	933.4	30.88
372	186	14860	7501	-48304	-347.7	-67.3	933.9	31.00
374	187	-1962	16699	-48213	-57.1	-346.7	935.5	30.88
376	188	-10859	12746	-48237	142.3	-323.3	934.9	30.94
378	189	-13698	9758	-48201	211.2	-281.7	934.9	30.94
380	190	-14891	7931	-48212	246.0	-251.3	935.5	31.00
382	191	-16408	3419	-48242	309.1	-168.0	935.4	30.94
384	192	-16362	3455	-48223	309.1	-168.2	935.2	31.00
386	193	-17185	-910	-48036	331.3	-93.7	938.2	31.12
388	194	-17046	-527	-48121	331.7	-104.0	936.9	31.06
390	195	-16676	-2745	-48150	345.1	-59.6	935.4	31.06
392	196	-16232	-5411	-48094	346.9	-10.0	937.3	31.06

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???			NORTHING ???			RL ???		
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
394	197	-11988	-12247	-48104	315.6	144.2	936.6	31.18
396	198	-6022	-16103	-48083	235.3	254.0	936.8	31.06
398	199	-6975	-16168	-47923	245.8	234.4	939.1	31.06
400	200	-2545	-17269	-47969	176.3	293.4	938.5	31.24
402	201	6999	-15946	-48012	-7.1	343.1	938.1	31.18
404	202	12326	-12243	-48018	-129.1	319.9	937.2	31.24
406	203	14814	-9145	-48026	-193.2	287.4	936.7	31.24
408	204	17662	-1938	-47871	-289.2	182.6	938.4	31.24
410	205	17736	1733	-47861	-316.8	120.3	938.6	31.37
412	206	17292	4134	-47870	-333.7	75.5	938.3	31.30
414	207	17107	4353	-47908	-336.4	69.8	937.5	31.43
416	208	13842	11052	-47896	-334.2	-77.5	938.0	31.49
418	209	-1103	17631	-47873	-124.5	-319.4	938.8	31.30
420	210	-6975	16311	-47866	-11.2	-341.1	939.2	31.30
422	211	-12857	12452	-47832	111.7	-321.0	939.5	31.43
424	212	-13976	11036	-47842	142.1	-310.7	939.0	31.37
426	213	-15512	8578	-47882	190.3	-286.9	938.3	31.49
428	214	-16668	5929	-47893	233.9	-253.3	938.0	31.49
430	215	-17176	4276	-47875	261.3	-220.2	938.9	31.61
432	216	-17334	3911	-47846	266.8	-210.3	939.9	31.55
434	217	-17704	-1715	-47839	317.8	-121.3	939.7	31.61
436	218	-17306	-3705	-47868	330.4	-86.6	939.0	31.73
438	219	-16658	-5759	-47896	339.8	-47.6	938.3	31.61
440	220	-10592	-14017	-47925	313.9	145.1	937.3	31.55
442	221	-6939	-16443	-47792	266.7	211.2	939.2	31.67
444	222	-5255	-17391	-47782	235.7	236.9	941.7	31.67
446	223	3466	-17776	-47712	98.6	320.4	941.2	31.73
448	224	7942	-17005	-47351	29.2	337.1	940.0	31.73
450	225	14046	-11119	-47791	-126.4	317.5	938.7	31.85
452	226	17579	3239	-47833	-324.4	106.8	938.5	31.79
454	227	12732	12950	-47936	-321.3	-107.2	939.6	31.85
456	228	1375	17944	-47740	-173.7	-288.4	940.7	31.79
458	229	-9094	15524	-47727	19.6	-335.5	940.8	31.91
460	230	-12728	12635	-47738	103.1	-321.1	940.6	31.91
462	231	-14763	9967	-47797	159.1	-300.8	939.6	31.91
464	232	-15790	8204	-47798	191.6	-283.0	939.2	31.98
466	233	-17278	5152	-47686	236.6	-238.6	941.3	31.85
468	234	-15780	8578	-47712	189.0	-276.1	941.6	31.98
470	235	-17334	4184	-47762	258.3	-215.2	941.3	32.10

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???			NORTHING ???			RL ???		
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
472	236	-16973	-5339	-47785	332.4	-56.5	940.6	32.04
474	237	-14042	-10898	-47785	335.4	52.8	939.8	32.16
476	238	-6726	-16480	-47764	289.9	207.4	939.3	32.04
478	239	-1723	-17818	-47706	194.9	275.5	940.0	32.16
480	240	3225	-17804	-47647	95.1	315.4	943.1	32.22
482	241	14184	-10927	-47697	-141.6	302.1	941.6	32.22
484	242	13555	-11256	-47801	-127.9	315.0	939.3	32.04
486	243	16626	-5885	-47789	-225.4	258.2	938.9	32.22
488	244	18161	-1573	-47570	-271.7	188.5	942.4	32.22
490	245	17301	5193	-47635	-325.8	74.7	941.5	32.28
492	246	17218	4206	-47739	-326.9	91.9	939.2	32.34
494	247	15044	9108	-47788	-340.4	-16.7	939.0	32.28
496	248	6138	16405	-47797	-256.5	-225.2	939.0	32.34
498	249	-1899	17439	-47771	-134.0	-314.3	938.3	32.40
500	250	-9908	14738	-47661	24.9	-336.4	940.5	32.28
502	251	-14486	10013	-47731	141.4	-310.9	938.9	32.28
504	252	-15642	7921	-47761	181.2	-291.7	938.8	32.46
506	253	-15522	8039	-47761	185.5	-285.8	939.4	32.40
508	254	-16706	4687	-47771	241.0	-242.7	938.9	32.34
510	255	-17029	-1623	-47849	315.3	-145.0	937.2	32.46
512	256	-16687	-3230	-47878	328.3	-115.8	936.5	32.59
514	257	-16752	-4107	-47784	328.1	-103.8	938.1	32.53
516	258	-15744	-6928	-47784	342.1	-49.4	938.0	32.65
518	259	-14625	-9456	-47690	341.4	2.2	939.1	32.53
520	260	-15189	-8361	-47718	342.7	-22.8	938.8	32.65
522	261	-14449	-9273	-47766	346.6	-3.7	937.5	32.71
524	262	-10585	-13434	-47756	330.4	108.1	937.0	32.65
526	263	-5882	-16205	-47707	267.1	213.5	938.3	32.59
528	264	-1501	-16969	-47744	210.1	273.0	937.4	32.71
530	265	4085	-16553	-47713	118.0	325.9	936.9	32.71
532	266	10189	-13872	-47634	-0.4	347.2	936.6	32.71
534	267	14739	-8891	-47612	-130.2	322.8	935.9	32.83
536	268	16154	-6351	-47554	-189.8	283.3	938.7	32.77
538	269	16848	-4122	-47553	-229.2	250.5	939.6	32.83
540	270	17356	882	-47495	-289.4	180.2	938.8	32.77
542	271	15543	7592	-47569	-338.9	55.8	937.7	32.89
544	272	15747	7246	-47569	-337.9	68.4	937.8	32.89
546	273	14628	9774	-47493	-341.8	25.2	938.2	32.95
548	274	11678	13269	-47550	-338.2	-58.3	938.1	32.77

DOWNHOLE MAGNETOMETER SURVEY

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???		NORTHING ???			RL ???			TEMP
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	
550	275	3271	17444	-47571	-247.4	-227.3	940.9	32.89
552	276	-3906	17063	-47754	-134.0	-311.1	940.2	32.95
554	277	-10066	14144	-47918	-6.6	-341.3	939.1	33.01
556	278	-13756	10415	-48186	90.6	-330.3	938.9	33.07
558	279	-15411	7227	-48727	156.8	-305.7	938.5	33.01
560	280	-8682	1991	-41404	-165.0	-301.4	938.3	33.07
562	281	-17779	2933	-48540	189.2	-280.0	940.7	33.01
564	282	-27176	10193	-46905	226.9	-253.9	939.8	33.01
566	283	-16151	-235	-49817	260.0	-225.3	938.3	33.20
568	284	-16798	6504	-49777	262.3	-224.1	937.9	33.14
570	285	-18195	2768	-48493	238.9	-235.2	941.4	33.07
572	286	-18149	-2081	-48977	281.8	-180.7	941.3	33.20
574	287	-16872	-3788	-49431	302.0	-152.3	940.4	33.32
576	288	-16558	-5459	-49600	314.8	-129.8	939.5	33.26
578	289	-15078	-7914	-50614	333.5	-60.3	938.4	33.38
580	290	-13052	-10332	-51768	341.6	-21.6	938.6	33.44
582	291	-14198	-8607	-51418	334.9	-48.6	940.1	33.32
584	292	-18630	-8310	-47891	333.7	-66.7	939.3	33.26
586	293	-13283	-4122	-33454	312.3	-120.4	941.7	33.38
588	294	-35962	4039	-30462	245.6	-226.9	942.0	33.38
590	295	-24531	1556	-47739	274.2	-192.8	941.5	33.44
592	296	-9381	-10183	-49922	306.0	-143.4	940.6	33.44
594	297	-18268	-5442	-32179	265.6	-211.7	939.9	33.50
596	298	-8622	-12392	-31374	260.1	-215.0	940.8	33.56
598	299	-29548	11003	-40578	254.9	-209.6	943.7	33.50
600	300	-26249	5847	-53206	288.5	-165.7	942.5	33.56
602	301	-28069	-2903	-55971	295.2	-158.2	941.7	33.50
604	302	-22867	-2734	-47012	301.5	-146.2	941.6	33.62
606	303	-16661	-8034	-47371	287.3	-175.8	941.1	33.68
608	304	-20092	1451	-47284	262.6	-211.1	941.0	33.68
610	305	-19631	12957	-44698	204.3	-257.0	944.0	33.50
612	306	-20804	3258	-47786	243.9	-219.6	943.7	33.68
614	307	-21258	2902	-47294	260.3	-204.2	942.6	33.68
616	308	-23115	2270	-50756	275.0	-184.3	943.0	33.68
618	309	-22597	-1510	-50796	297.1	-154.1	941.7	33.87
620	310	-22847	2754	-50615	257.4	-215.2	941.0	33.81
622	311	-19195	6702	-47169	220.1	-247.7	943.0	33.75
624	312	-20663	14226	-52682	193.4	-267.2	943.4	33.81
626	313	-16549	7965	-50525	181.4	-276.1	943.1	33.75

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???		NORTHING ???			RL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
628	314	-18186	6612	-49751	194.6	-267.6	943.0	33.87
630	315	-18962	7232	-51028	192.3	-268.8	943.5	33.93
632	316	-17890	9251	-50223	132.7	-303.4	943.0	33.87
634	317	-16197	12203	-50287	93.7	-315.8	943.4	33.81
636	318	-17159	10731	-51660	98.0	-317.9	942.6	33.93
638	319	-15291	13664	-50154	46.3	-328.1	942.5	33.93
640	320	-15957	12714	-49975	66.1	-323.5	942.9	33.93
642	321	-16050	11983	-50051	77.7	-324.3	942.2	34.05
644	322	-16170	11253	-49957	67.2	-323.4	941.6	34.11
646	323	-15828	12623	-49692	56.0	-320.0	944.9	33.99
648	324	-15576	12523	-49607	46.1	-325.3	943.7	34.17
650	325	-14080	13711	-49624	12.4	-331.2	943.1	33.99
652	326	-14848	12341	-49701	49.9	-323.2	944.1	34.11
654	327	-15828	10586	-49815	78.6	-319.3	943.7	34.17
656	328	-14126	12460	-49824	25.9	-328.7	943.1	34.17
658	329	-13266	12570	-50116	-0.3	-324.3	945.2	33.99
660	330	-14200	11802	-50448	14.0	-326.4	944.6	34.17
662	331	-13931	11620	-50770	27.5	-327.6	944.0	34.17
664	332	-15032	9400	-51310	66.5	-322.7	943.5	34.23
666	333	-15152	8733	-51935	63.6	-325.1	943.3	34.30
668	334	-13292	11191	-52823	-8.9	-331.2	943.0	34.36
670	335	-12598	11594	-53995	-19.5	-326.1	944.8	34.23
672	336	-11903	9631	-57079	2.2	-327.0	944.2	34.30
674	337	-4011	34697	-25863	-16.5	-323.4	945.6	34.30
676	338	-16854	9015	-51141	-35.5	-325.0	944.6	34.30
678	339	-17993	5260	-48248	-34.3	-325.8	944.2	34.23
680	340	-14400	3958	-38239	-10.2	-325.5	945.0	34.36
682	341	-17282	15370	-28210	32.0	-326.8	944.0	34.42
684	342	-2336	28452	-28021	31.5	-326.6	944.0	34.23
686	343	-20347	33102	-19948	11.1	-323.5	945.6	34.42
688	344	-20859	18289	-33234	56.0	-320.2	944.8	34.42
690	345	-16759	10001	-20493	84.7	-316.6	944.3	34.48
692	346	-6345	-4073	-32375	50.3	-324.3	943.8	34.60
694	347	-8708	3442	-28003	67.8	-319.6	944.8	34.54
696	348	-19045	5342	-34779	79.6	-318.7	943.9	34.48
698	349	-12619	8407	-30405	26.5	-328.3	943.4	34.54
700	350	-27557	4202	-48744	46.1	-324.0	944.2	34.60
702	351	-11047	-2350	-30067	21.2	-330.9	942.6	34.60
704	352	-21598	13595	-35033	28.8	-331.1	942.4	34.54

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONS

DEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???			NORTHING ???			RL ???		
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
706	353	-1504	20152	-46308	8.8	-327.0	944.2	34.66
708	354	-11774	13932	-38671	18.3	-328.4	943.8	34.66
710	355	-9616	22373	-43719	3.3	-331.4	942.8	34.66
712	356	-11085	21148	-46160	-37.2	-327.6	943.2	34.48
714	357	-10002	13496	-48489	-18.9	-329.1	943.0	34.66
716	358	-9096	12866	-49170	0.3	-331.6	942.8	34.72
718	359	-8097	13159	-49614	-14.9	-329.6	943.0	34.84
720	360	-10066	11295	-49927	32.6	-330.7	942.6	34.72
722	361	-9641	11670	-50060	9.2	-331.7	942.6	34.72
724	362	-11195	10508	-50042	38.9	-327.7	943.2	34.78
726	363	-11870	9613	-50052	57.0	-329.0	941.9	34.78
728	364	-11657	10133	-49967	40.8	-332.2	941.8	34.91
730	365	-10844	11968	-49672	-2.2	-325.5	944.3	34.91
732	366	-11898	11147	-49589	21.6	-326.8	944.4	34.78
734	367	-11639	11503	-49465	15.1	-328.2	943.8	34.91
736	368	-13165	9858	-49352	59.4	-324.5	943.2	34.78
738	369	-13952	8962	-49183	76.8	-324.1	942.1	34.91
740	370	-11011	12810	-49001	-25.0	-332.2	942.2	34.97
742	371	-9318	14693	-48725	-67.8	-317.8	944.9	35.09
744	372	-5868	16303	-48657	-139.1	-299.3	943.3	34.97
746	373	-3547	16908	-48609	-181.3	-280.9	941.4	34.97
748	374	-2196	17402	-48409	-193.2	-265.2	943.7	34.97
750	375	-3066	17575	-48230	-183.5	-269.9	944.3	35.15
752	376	-5369	17217	-48099	-149.9	-289.3	944.7	35.09
754	377	-2151	17859	-48031	-198.0	-260.3	944.1	35.15
758	379	-2844	17712	-47946	-192.7	-271.5	942.4	35.15
760	380	-2678	17776	-47870	-197.6	-269.9	941.6	35.03
762	381	-2345	17868	-47804	-205.8	-265.4	941.0	35.15
764	382	467	17898	-47841	-248.9	-232.1	939.3	35.21
766	383	531	17870	-47803	-251.4	-232.3	938.5	35.33
768	384	-181	18189	-47633	-239.8	-237.6	940.2	35.21
770	385	-1143	18143	-47615	-231.8	-249.9	939.4	35.27
772	386	596	18126	-47605	-260.9	-226.0	937.3	35.33
774	387	1502	18218	-47519	-265.2	-214.2	939.1	35.33
776	388	726	18209	-47557	-254.8	-228.3	938.7	35.33
778	389	1225	18072	-47576	-263.9	-223.3	937.3	35.39
780	390	-995	18189	-47501	-236.6	-251.3	937.9	35.39
782	391	-2040	18215	-47492	-226.1	-262.7	937.1	35.27
784	392	-403	18354	-47454	-253.3	-239.4	936.3	35.39

POSEIDON GOLD LIMITED
AUSTRALIAN DEVELOPMENT OPERATIONSDEPARTMENT: EXPLORATION
HOLE NO: VIVD8
LEASE: VIVID
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORYDATE: 9-11-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: VIVD8A.ADL

EASTING???		NORTHING ???			RL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
786	393	2446	18201	-47453	-290.1	-196.9	935.6	35.45
788	394	2936	18128	-47462	-294.1	-190.1	935.6	35.58
790	395	2372	18183	-47481	-287.8	-201.1	935.6	35.39
792	396	8217	16389	-47470	-341.5	-92.5	934.4	35.52
794	397	14470	11088	-47516	-350.5	68.3	932.8	35.52

SPREAD VALUES REPORT
POSEIDON GOLD
Version - 1.31

Company: POSEIDON GOLD
Probe #: 2061
Location: VIVID
Field: TENNANT CREEK MT
Well no: VIVD8
Operator: GRAHAM EDWARDS
Time: Thu Nov 08 15:38:33 1990
Filename: VIVD8
Comments:

Htotal Max ->	62683 gammas	Shot number - 602
Htotal Min ->	28299 gammas	Shot number - 690
Htotal Spread ->	34384 gammas	
Gtotal Max ->	999.8 mg	Shot number - 666
Gtotal Min ->	996.4 mg	Shot number - 256
Gtotal Spread ->	1.4 mg	
Dip Angle Max ->	-10.47 degrees	Shot number - 666
Dip Angle Min ->	-69.13 degrees	Shot number - 692
Dip Angle Spread ->	58.71 degrees	

Arming Information from Probe:

Mode : Multi Shot Mode
Shot Interval : 10 Seconds
Holdoff Time : 5 Minutes
Averaging factor : 8

DATA VERIFICATION REPORT
POSEIDON GOLD
Version - 1.31

Probe number - 2061

File Name - VIVDS

Shot	Depth	Inc	Az	HS	MTF	STotal	HTotal	Dip	Temp (C)	Bat
4	2.0	19.89	173.04	153.56	323.60	999.0	51023	-50.37	37	16
6	3.0	19.78	172.84	111.08	283.92	999.2	51005	-50.43	37	16
8	4.0	19.50	172.43	71.46	243.94	999.4	50962	-50.43	37	16
10	5.0	19.53	172.54	13.44	165.98	999.3	50991	-50.50	37	16
12	6.0	19.44	172.52	350.34	162.66	999.4	50982	-50.54	37	16
14	7.0	19.29	172.46	319.90	132.33	999.4	50940	-50.50	37	16
16	8.0	19.23	172.72	309.82	122.54	999.1	50977	-50.59	37	16
18	9.0	19.25	172.53	292.51	105.04	999.0	50976	-50.59	37	16
20	10.0	19.32	172.24	254.88	87.12	996.7	50969	-50.61	37	16
22	11.0	19.47	171.91	231.22	43.13	999.0	50925	-50.61	37	16
24	12.0	19.46	172.94	215.64	28.53	998.3	50948	-50.54	37	16
26	13.0	19.30	172.51	195.99	9.51	999.1	50975	-50.56	37	16
28	14.0	19.44	172.31	191.13	31.73	998.9	50985	-50.51	37	16
30	15.0	19.51	172.15	191.03	3.21	998.9	50981	-50.55	37	16
32	16.0	19.56	172.08	193.41	5.48	999.1	50982	-50.50	37	16
34	17.0	19.68	172.07	135.72	7.80	999.0	50979	-50.53	37	16
36	18.0	19.66	172.43	138.25	0.71	999.0	50962	-50.51	37	16
38	19.0	19.70	172.34	190.99	3.82	998.8	50966	-50.52	37	16
40	20.0	19.87	172.81	137.87	10.78	998.8	50964	-50.51	37	16
42	21.0	19.84	172.77	199.54	12.30	999.0	51005	-50.51	37	16
44	22.0	19.85	172.89	189.89	2.77	999.2	50989	-50.51	37	16
46	23.0	19.93	172.67	190.13	2.76	998.9	50981	-50.50	37	16
48	24.0	19.91	172.35	171.31	343.97	998.9	51004	-50.47	37	16
50	25.0	19.84	172.07	130.75	302.82	999.4	50983	-50.47	37	16
52	26.0	19.97	172.39	83.61	256.00	999.6	50965	-50.49	37	16
54	27.0	19.98	172.96	55.63	228.59	999.7	50971	-50.52	37	16
56	28.0	19.80	172.77	57.71	230.47	999.3	50977	-50.54	37	16
58	29.0	19.71	173.09	54.58	227.88	999.4	50974	-50.51	37	16
60	30.0	19.78	173.37	14.53	182.94	999.7	50970	-50.55	37	16
62	31.0	19.90	173.21	4.08	177.50	999.5	50957	-50.58	36	16
64	32.0	20.01	173.12	359.34	172.47	999.4	50944	-50.58	36	16
66	33.0	20.08	173.20	354.77	167.06	999.1	50957	-50.60	36	16
68	34.0	20.13	173.67	345.25	159.32	999.1	50972	-50.60	36	16
70	35.0	20.24	172.80	307.77	139.37	998.7	50981	-50.59	36	16
72	36.0	20.30	172.37	304.63	117.00	999.1	50982	-50.59	36	16
74	37.0	20.01	172.46	288.63	101.09	999.0	50977	-50.53	36	16
76	38.0	20.10	172.44	255.78	68.22	999.2	50980	-50.51	36	16
78	39.0	20.15	172.49	230.54	43.03	998.9	50991	-50.56	36	16
80	40.0	20.02	172.66	199.09	11.75	998.9	50987	-50.52	36	16
82	41.0	20.15	172.91	193.60	9.51	999.0	50976	-50.53	36	16

DATA VERIFICATION REPORT
POSEIDON GOLD
Version - 1.31

Probe number - 2081

File Name - VIV78

Shot	Depth	Inc	Az	HR	MTF	STotal	STotal	Pip	Temp	OC	Bat
84	42.0	20.07	173.07	183.21	338.29	999.1	50976	-50.50	36	16	
86	43.0	20.13	173.14	109.81	252.75	999.4	50963	-50.48	36	16	
88	44.0	20.27	173.01	80.34	233.85	999.5	50960	-50.52	36	16	
90	45.0	20.16	172.81	50.38	222.99	999.8	50966	-50.52	36	16	
92	46.0	20.17	172.40	15.34	187.74	999.3	50950	-50.53	35	16	
94	47.0	20.37	172.22	5.29	177.50	999.7	50961	-50.56	35	16	
96	48.0	20.16	173.06	2.68	175.74	999.7	50969	-50.54	35	16	
98	49.0	20.11	173.96	319.30	133.26	999.3	50973	-50.62	35	16	
100	50.0	20.33	173.92	303.97	117.86	999.0	50953	-50.59	35	16	
102	51.0	20.44	173.56	301.53	115.14	999.9	50968	-50.55	35	16	
104	52.0	20.19	172.58	290.14	102.72	999.2	50966	-50.62	35	16	
106	53.0	20.19	171.94	269.16	81.10	999.1	50976	-50.61	35	16	
108	54.0	20.20	171.71	246.29	58.01	998.7	50982	-50.58	35	16	
110	55.0	20.28	171.63	254.05	66.07	998.9	50969	-50.57	35	16	
112	56.0	20.43	171.82	252.80	64.63	998.8	50970	-50.59	35	16	
114	57.0	20.50	172.22	254.48	66.70	998.6	50997	-50.59	34	16	
116	58.0	20.59	172.53	250.12	62.71	999.0	50958	-50.55	34	16	
118	59.0	20.54	174.02	232.96	48.98	998.9	50983	-50.57	34	16	
120	60.0	20.49	173.88	196.16	10.04	998.8	50973	-50.54	34	16	
122	61.0	20.20	172.59	195.91	8.50	999.0	51009	-50.52	34	16	
124	62.0	20.40	172.60	198.36	10.96	999.1	51009	-50.51	34	16	
126	63.0	20.63	172.90	195.16	8.06	998.7	51000	-50.52	33	16	
128	64.0	20.77	172.92	193.84	2.56	998.8	51001	-50.51	33	16	
130	65.0	20.85	172.52	191.84	2.66	999.3	51025	-50.48	33	16	
132	66.0	20.69	171.46	178.89	350.85	999.1	50991	-50.49	33	16	
134	67.0	20.73	171.33	158.42	327.75	999.1	50979	-50.50	33	16	
136	68.0	20.82	172.13	107.06	279.25	999.4	50998	-50.47	32	16	
138	69.0	20.82	172.13	70.74	242.87	999.2	50991	-50.49	32	16	
140	70.0	20.85	172.21	61.01	233.21	999.3	50990	-50.55	32	16	
142	71.0	20.96	172.02	65.37	237.39	999.6	50961	-50.52	32	16	
144	72.0	21.06	172.52	44.53	217.05	999.3	50986	-50.53	32	16	
146	73.0	21.12	173.32	45.07	218.32	999.5	50968	-50.53	31	16	
148	74.0	20.19	175.72	40.30	216.02	999.0	50984	-50.55	31	16	
150	75.0	20.42	174.82	8.34	181.17	999.4	50982	-50.56	31	16	
152	76.0	20.71	172.76	345.55	158.41	998.7	51016	-50.63	31	16	
154	77.0	20.79	171.61	303.36	116.97	999.0	50973	-50.60	31	16	
156	78.0	20.84	171.23	279.00	90.22	998.9	50969	-50.60	31	16	
158	79.0	20.64	171.64	253.16	68.20	998.7	50998	-50.61	31	16	
160	80.0	20.75	171.60	251.42	63.22	998.6	51011	-50.58	31	16	
162	81.0	20.84	172.11	251.04	63.16	998.8	51011	-50.62	31	16	

DATA VERIFICATION REPORT

POSEIDON GOLD

Version - 1.31

Probe number - 2061

File Name - VIVDS

Shot	Depth	Inc	Az	HS	MTF	GTotal	HTotal	Dip	Temp (C)	Bat
164	82.0	20.79	173.55	230.02	43.57	998.6	51028	-50.58	31	16
166	83.0	20.50	174.17	205.16	13.32	998.7	51006	-50.52	31	16
168	84.0	20.40	173.26	188.44	1.69	998.8	51001	-50.47	31	16
170	85.0	20.40	172.05	173.71	345.76	998.7	51016	-50.48	30	16
172	86.0	20.67	170.67	195.20	5.87	998.8	51005	-50.50	30	16
174	87.0	20.91	170.19	203.03	13.22	998.4	51018	-50.52	30	16
176	88.0	21.09	170.33	206.90	17.23	998.7	51006	-50.53	30	16
178	89.0	21.18	170.73	200.89	11.63	998.8	51025	-50.50	30	16
180	90.0	19.91	173.76	169.67	343.43	998.6	50967	-50.50	30	16
182	91.0	19.98	174.27	125.50	299.77	998.7	51002	-50.45	30	16
184	92.0	20.45	174.13	90.27	264.40	999.2	50991	-50.49	30	16
186	93.0	21.05	174.39	60.93	235.32	999.0	50993	-50.51	30	16
188	94.0	21.38	174.67	69.10	243.77	999.2	51011	-50.51	30	16
190	95.0	20.58	173.19	56.55	229.74	999.1	50997	-50.56	30	16
192	96.0	20.45	171.25	39.17	210.42	999.3	50999	-50.55	30	16
194	97.0	20.77	171.08	14.80	185.68	999.2	50987	-50.60	30	16
196	98.0	20.88	171.24	11.95	163.19	999.2	51009	-50.57	30	16
198	99.0	20.90	171.31	24.23	185.54	999.1	50992	-50.59	30	16
200	100.0	20.72	173.20	37.61	208.81	999.2	51013	-50.54	30	16
202	101.0	20.74	173.46	31.07	204.56	999.2	51010	-50.58	30	16
204	102.0	20.59	173.06	20.53	193.53	999.4	51018	-50.55	30	16
206	103.0	20.66	173.05	9.73	162.76	999.2	51001	-50.60	30	16
208	104.0	20.71	173.06	353.19	171.25	999.3	50991	-50.61	30	16
210	105.0	20.92	171.97	11.68	125.64	999.9	50998	-50.62	30	16
212	106.0	20.91	171.25	286.24	97.49	999.3	51004	-50.61	30	16
214	107.0	20.87	171.06	258.18	79.24	998.7	51008	-50.62	30	16
216	108.0	20.86	172.33	248.79	61.12	998.7	51011	-50.61	30	16
218	109.0	20.77	173.14	218.03	31.17	998.6	50988	-50.53	30	16
220	110.0	20.92	173.57	199.06	12.63	998.8	51025	-50.54	30	16
222	111.0	20.97	173.44	195.45	8.89	998.4	51045	-50.46	30	16
224	112.0	20.63	171.22	165.21	356.43	998.9	51028	-50.52	30	16
226	113.0	20.87	171.07	143.03	314.09	999.0	51051	-50.50	30	16
228	114.0	20.78	171.84	109.82	281.67	999.2	51028	-50.49	30	16
230	115.0	20.77	171.65	71.89	243.54	999.3	50995	-50.52	30	16
232	116.0	20.74	172.40	45.82	218.01	999.4	51007	-50.55	30	16
234	117.0	20.67	173.31	39.52	212.82	999.3	51025	-50.56	30	16
236	118.0	20.69	173.99	35.95	209.95	999.2	51010	-50.59	30	16
238	119.0	20.78	174.16	25.03	199.21	999.1	51011	-50.59	30	16
240	120.0	20.86	174.30	23.13	197.43	999.5	51013	-50.57	30	16
242	121.0	20.73	173.53	17.45	191.04	999.4	51028	-50.56	30	16

DATA VERIFICATION REPORT
FOREIGN GOLD
Version - 1.31

Probe number - 2061

File Name - VIWD8

Shot	Depth	Inc	Az	H2	MTF	GTotal	HTotal	Dip	Temp (C)	Pat
244	122.0	20.70	172.84	13.79	136.63	999.4	51000	-50.61	30	16
246	123.0	20.74	172.60	2.69	175.29	999.2	51011	-50.62	30	16
248	124.0	20.80	172.61	352.84	163.44	999.1	51038	-50.62	30	16
250	125.0	21.01	172.05	304.72	115.78	998.7	51034	-50.63	30	16
252	126.0	21.06	171.85	251.86	93.71	998.4	51052	-50.58	30	16
254	127.0	20.81	172.76	262.54	73.30	998.5	51038	-50.64	30	16
256	128.0	20.88	173.11	240.38	53.47	998.4	51042	-50.62	30	16
258	129.0	20.80	173.24	224.83	37.87	998.5	51027	-50.59	30	16
260	130.0	20.87	174.03	216.77	30.73	998.7	51027	-50.62	30	16
262	131.0	20.95	175.08	189.25	4.32	998.7	51062	-50.55	30	16
264	132.0	20.61	175.58	161.87	337.43	998.9	51050	-50.53	30	16
266	133.0	20.70	172.93	154.34	327.26	998.9	51053	-50.47	30	16
268	134.0	20.85	171.83	178.64	350.47	998.4	51105	-50.56	30	16
270	135.0	20.82	172.41	155.61	323.01	998.9	51072	-50.64	30	16
272	136.0	20.77	173.94	122.17	296.11	999.0	51009	-50.55	30	16
274	137.0	20.94	175.09	81.23	256.42	999.5	51030	-50.55	30	16
276	138.0	20.93	175.10	63.89	238.79	999.2	51010	-50.57	30	16
278	139.0	20.84	173.93	54.72	223.64	999.4	51025	-50.59	30	16
280	140.0	21.15	172.73	53.80	228.54	999.3	51019	-50.57	30	16
282	141.0	21.17	172.51	65.29	237.80	999.3	51042	-50.56	30	16
284	142.0	20.67	173.67	73.82	247.49	999.3	51033	-50.54	30	16
286	143.0	20.77	173.76	69.12	242.88	999.6	51015	-50.53	30	16
288	144.0	20.93	174.20	71.03	245.23	999.3	51038	-50.53	30	16
290	145.0	20.86	173.84	71.33	245.53	999.3	51023	-50.54	30	16
292	146.0	20.90	172.91	60.82	239.73	999.2	51044	-50.53	30	16
294	147.0	20.95	172.00	56.10	228.10	999.2	51027	-50.57	30	16
296	148.0	21.00	171.93	63.03	237.95	999.4	50970	-50.49	30	16
298	149.0	21.02	172.15	67.33	240.13	998.9	51051	-50.57	30	16
300	150.0	21.03	171.33	68.57	239.90	999.0	51026	-50.59	30	16
302	151.0	21.12	172.13	53.61	226.74	998.9	51041	-50.51	30	16
304	152.0	21.34	172.93	32.14	205.06	999.2	51036	-50.52	30	16
306	153.0	21.46	173.72	34.94	208.66	999.4	50753	-51.76	30	16
308	154.0	21.41	173.98	26.39	201.98	999.5	51075	-50.62	30	16
310	155.0	21.35	172.17	33.49	196.86	999.1	51043	-50.57	30	16
312	156.0	21.24	173.10	26.56	200.87	999.2	51050	-50.55	30	16
314	157.0	21.10	172.01	22.49	194.50	999.4	51031	-50.59	30	16
316	158.0	21.02	171.29	16.99	188.28	999.1	51049	-50.63	30	16
318	159.0	21.09	171.70	28.22	190.92	999.0	51046	-50.59	30	16
320	160.0	21.14	172.55	40.23	214.78	999.2	51063	-50.62	30	16
322	161.0	21.17	173.18	50.83	224.91	999.2	51187	-50.66	30	16

DATA VERIFICATION REPORT
POSEIDON GOLD
Version - 1.31

Probe number - 2061

File Name - VIVDS

Shot	Depth	Inc	Az	HE	MTF	STotal	HTotal	Dip	Temp	Bat
324	162.0	21.08	172.62	46.50	219.11	999.4	51018	-50.59	30	16
326	163.0	21.11	171.54	26.94	196.46	999.4	51027	-50.65	30	16
328	164.0	21.25	171.89	31.98	203.68	999.2	51053	-50.64	30	16
330	165.0	21.10	172.62	28.94	201.76	999.5	51034	-50.61	30	16
332	166.0	21.02	172.89	21.52	194.41	999.3	51025	-50.64	30	16
334	167.0	20.98	172.22	39.94	212.16	999.4	51043	-50.64	31	16
336	168.0	20.86	172.39	26.98	201.37	999.2	51056	-50.65	31	16
338	169.0	20.91	172.89	23.08	195.77	999.1	51039	-50.66	31	16
340	170.0	20.86	172.50	23.23	201.73	999.4	51071	-50.63	31	16
342	171.0	20.82	171.82	13.75	190.57	999.4	51039	-50.66	31	16
344	172.0	21.16	171.71	25.60	197.31	998.8	51062	-50.65	31	16
346	173.0	21.37	171.98	26.29	198.38	999.4	51164	-50.60	31	16
348	174.0	20.66	172.72	19.53	192.31	999.2	51055	-50.66	31	16
350	175.0	20.59	172.84	5.61	178.45	999.3	51033	-50.69	31	16
352	176.0	21.13	171.69	353.42	163.30	999.0	50974	-50.61	31	16
354	177.0	21.43	171.87	329.25	151.12	998.6	51064	-50.73	31	16
356	178.0	20.64	171.02	320.39	131.41	999.2	51005	-50.77	31	16
358	179.0	20.53	171.59	311.55	123.16	999.3	51020	-50.75	31	16
360	180.0	20.73	172.22	304.78	117.00	998.8	50662	-50.57	31	16
362	181.0	20.96	172.46	292.43	104.89	998.9	51061	-50.69	31	16
364	182.0	21.02	172.25	252.69	84.94	998.7	51079	-50.71	31	16
366	183.0	20.95	172.09	233.45	43.54	998.7	51057	-50.66	31	16
368	184.0	20.58	171.73	231.70	44.43	998.7	51069	-50.68	31	16
370	185.0	20.82	171.79	211.76	46.57	998.6	51075	-50.65	31	16
372	186.0	20.77	171.95	189.04	340.99	998.6	51092	-50.61	31	16
374	187.0	20.59	171.75	99.36	271.11	999.3	51061	-50.59	31	16
376	188.0	20.70	171.43	68.24	237.72	999.4	51031	-50.60	31	16
378	189.0	20.64	170.93	53.14	224.07	999.0	51051	-50.62	31	16
380	190.0	20.60	170.96	45.82	216.57	999.4	51079	-50.69	31	16
382	191.0	20.61	171.41	26.53	199.94	999.3	51071	-50.67	31	16
384	192.0	20.62	171.49	23.56	200.04	999.2	51041	-50.68	31	16
386	193.0	20.15	170.11	1.79	185.20	999.4	51026	-50.70	31	16
388	194.0	20.36	170.03	17.40	127.43	999.3	51054	-50.71	31	16
390	195.0	20.53	170.12	9.80	179.32	999.3	51030	-50.71	31	16
392	196.0	20.32	169.52	1.64	171.17	999.5	51047	-50.73	31	16
394	197.0	20.33	169.01	335.45	144.46	998.8	51065	-50.76	31	16
396	198.0	20.19	168.33	312.80	121.14	998.7	51065	-50.83	31	16
398	199.0	19.68	167.68	315.37	124.05	998.6	51056	-50.75	31	16
400	200.0	20.04	168.00	361.00	103.00	999.0	51046	-50.77	31	16
402	201.0	20.09	168.08	286.82	76.60	998.9	51073	-50.77	31	16

DATA VERIFICATION REPORT
POSEIDON GOLD
Version - 1.31

Probe number - 2061

File Name - VIWD5

Shot	Depth	Inc	Az	HS	MTF	GTotal	HTotal	Dip	Temp (C)	Est
404	202.0	20.21	167.76	246.02	55.78	996.7	51064	-50.75	31	16
406	203.0	20.29	167.15	236.09	43.24	998.7	51064	-50.73	31	16
408	204.0	20.02	166.06	212.27	16.33	998.7	51062	-50.69	31	16
410	205.0	19.95	165.89	200.67	6.56	998.5	51071	-50.73	31	16
412	206.0	20.03	165.96	192.75	358.71	998.7	51065	-50.69	31	16
414	207.0	20.13	166.15	191.72	357.87	996.5	51056	-50.72	31	16
416	208.0	20.09	166.35	186.94	333.29	996.7	51068	-50.66	31	16
418	209.0	20.06	166.72	111.30	273.01	999.4	51026	-50.67	31	16
420	210.0	19.97	166.58	91.68	256.43	999.3	51048	-50.69	31	16
422	211.0	19.89	165.58	70.81	236.39	999.1	51071	-50.73	31	16
424	212.0	19.89	165.44	65.42	230.26	999.2	51049	-50.76	31	16
426	213.0	20.15	165.33	56.44	221.77	999.5	51057	-50.74	31	16
428	214.0	20.18	165.25	47.28	212.53	999.4	51055	-50.77	31	16
430	215.0	20.00	166.01	40.12	208.13	999.1	51042	-50.60	32	16
432	216.0	19.87	166.27	36.25	204.52	999.4	51039	-50.79	32	16
434	217.0	19.90	165.79	20.89	186.69	999.4	51038	-50.81	32	16
436	218.0	19.99	165.67	14.89	180.36	999.2	51035	-50.86	32	16
438	219.0	20.09	165.59	7.97	173.57	999.1	51036	-50.87	32	16
440	220.0	20.25	165.11	335.19	140.29	999.1	51043	-50.68	32	16
442	221.0	19.91	164.51	321.63	126.15	998.9	51015	-50.93	32	16
444	222.0	19.54	164.64	314.86	119.50	999.3	51119	-50.90	32	16
446	223.0	19.60	164.62	287.11	91.73	999.1	51034	-50.67	32	16
448	224.0	19.80	163.33	174.95	78.20	999.1	50935	-50.05	32	16
450	225.0	20.01	163.69	248.29	52.12	999.0	51036	-50.83	32	16
452	226.0	20.00	164.58	198.23	2.81	998.8	51063	-50.82	32	16
454	227.0	19.82	165.31	161.54	326.85	996.8	51261	-50.60	32	16
456	228.0	19.69	165.49	121.06	286.55	999.1	51020	-50.79	32	16
458	229.0	19.66	165.30	86.68	251.96	999.0	51005	-50.25	32	16
460	230.0	19.72	165.13	72.20	237.33	999.3	50996	-50.68	32	16
462	231.0	19.91	164.66	62.12	227.00	999.3	51008	-50.91	32	16
464	232.0	19.99	164.73	55.90	220.83	999.5	51002	-50.66	32	16
466	233.0	19.64	164.40	45.23	209.63	999.5	50960	-50.95	32	16
468	234.0	19.56	163.25	55.60	220.35	999.3	50981	-50.97	32	16
470	235.0	19.66	163.79	39.30	205.60	999.6	50982	-50.95	32	16
472	236.0	19.72	163.36	9.65	175.00	999.2	50971	-51.01	32	16
474	237.0	19.66	164.47	351.05	163.52	999.3	50965	-51.05	32	16
476	238.0	19.92	163.73	322.46	126.19	999.1	50973	-51.10	32	16
478	239.0	19.75	163.89	305.27	109.16	998.7	50954	-51.09	32	16
480	240.0	19.25	165.11	286.77	91.38	999.0	50967	-51.11	32	16
482	241.0	19.51	165.14	244.90	56.03	998.9	50947	-51.09	32	16

DATA VERIFICATION REPORT
POSEIDON GOLD
Version - 1.31

Probe number - 2061

File Name - VIVD8

Shot	Depth	Inc	Ac	HC	MTF	GTotal	HTotal	Dip	Temp (C)	Bat
484	242.0	19.90	164.91	247.90	52.81	998.9	50945	-51.13	32	16
486	243.0	19.97	164.41	226.66	33.06	999.0	50940	-51.12	32	16
488	244.0	19.33	163.54	214.76	18.30	998.7	50943	-51.11	32	16
490	245.0	19.55	163.80	192.91	353.72	996.1	50944	-51.08	32	16
492	246.0	19.68	164.19	195.89	359.88	998.7	50923	-51.13	32	16
494	247.0	19.95	164.84	177.19	342.03	998.9	50919	-51.12	32	16
496	248.0	19.98	164.97	138.72	303.89	999.1	50905	-51.16	32	16
498	249.0	20.01	164.38	113.09	277.48	998.6	50890	-51.19	32	16
500	250.0	19.73	163.97	85.77	249.75	999.2	50862	-51.23	32	16
502	251.0	19.99	163.50	65.54	229.04	999.1	50876	-51.27	32	16
504	252.0	20.10	163.37	58.14	221.51	999.4	50877	-51.30	32	16
506	253.0	19.93	164.21	57.02	221.23	999.2	50859	-51.35	32	16
508	254.0	20.02	164.36	45.19	209.55	999.3	50825	-51.40	32	16
510	255.0	20.32	164.27	24.89	186.96	999.4	50815	-51.44	32	16
512	256.0	20.39	164.22	19.43	183.65	999.1	50808	-51.51	33	16
514	257.0	20.14	163.51	17.55	181.06	999.2	50801	-51.55	33	16
516	258.0	20.23	163.23	6.21	171.44	999.6	50788	-51.58	33	16
518	259.0	19.98	162.72	359.63	162.35	999.2	50770	-51.63	33	16
520	260.0	20.09	162.75	3.81	166.55	999.7	50771	-51.62	33	16
522	261.0	20.29	162.57	0.61	163.18	999.5	50758	-51.68	33	16
524	262.0	20.36	162.43	341.88	144.31	999.4	50722	-51.74	33	16
526	263.0	20.02	163.11	311.37	124.43	998.7	50704	-51.79	33	16
528	264.0	20.18	163.00	7.58	110.57	998.7	50692	-51.84	33	16
530	265.0	20.30	162.39	269.90	92.29	996.9	50668	-51.82	33	16
532	266.0	20.34	161.02	269.94	70.96	998.9	50843	-51.67	33	16
534	267.0	20.40	160.68	248.03	48.71	998.5	50628	-51.88	33	16
536	268.0	19.96	161.56	236.17	37.74	998.7	50623	-51.33	33	16
538	269.0	19.87	162.02	227.54	29.55	999.0	50618	-51.89	33	16
540	270.0	19.96	161.48	211.91	16.39	998.6	50574	-51.85	33	16
542	271.0	20.12	161.31	169.34	350.85	998.8	50617	-51.67	33	16
544	272.0	20.18	160.91	191.44	352.35	999.1	50629	-51.86	33	16
546	273.0	20.07	159.74	184.22	343.98	998.9	50647	-51.89	33	16
548	274.0	20.10	159.24	170.23	319.46	998.9	50613	-51.89	33	16
550	275.0	19.65	160.11	137.42	297.53	999.1	50774	-52.11	33	16
552	276.0	19.81	160.67	113.30	273.98	999.4	50861	-52.11	33	16
554	277.0	19.97	160.68	91.10	251.78	999.2	50986	-52.20	33	16
556	278.0	20.04	160.31	74.68	234.37	999.5	51182	-52.45	33	16
558	279.0	20.11	160.49	62.85	223.34	999.4	51614	-52.83	33	16
560	280.0	20.11	161.40	61.30	222.70	999.2	42332	-60.43	33	16
562	281.0	19.78	155.00	55.95	210.95	999.5	51776	-53.26	33	16

DATA VERIFICATION REPORT
POSEIDON GOLD
Version - 1.31

Probe number - 2051

File Name - VIVD8

Shot	Depth	Inc	As	HS	NTF	STotal	HTotal	Dis	Temp (C)	Bat
564	282.0	19.92	161.45	48.22	209.67	999.6	55159	-39.84	33	16
566	283.0	20.13	159.30	40.91	200.21	999.4	52370	-54.48	33	16
568	284.0	20.19	169.79	40.51	210.20	999.3	52936	-50.51	33	16
570	285.0	19.80	160.40	44.55	204.95	999.3	51868	-51.86	33	16
572	286.0	19.58	158.78	32.67	191.45	999.1	52273	-52.36	33	16
574	287.0	19.78	159.46	26.76	186.22	999.4	52368	-53.31	33	16
576	288.0	19.92	158.88	22.41	181.29	999.3	52784	-53.32	33	16
578	289.0	20.08	159.10	13.54	172.65	999.2	53402	-53.89	33	16
580	290.0	20.03	159.23	3.62	162.85	999.0	54378	-54.73	33	16
582	291.0	19.80	160.29	8.26	168.55	999.1	54032	-54.59	33	16
584	292.0	19.91	159.73	11.31	171.04	999.0	52055	-49.12	33	16
586	293.0	19.56	158.13	21.08	179.21	999.3	36329	-50.28	33	16
588	294.0	19.54	150.36	42.73	193.09	999.5	47302	-23.62	33	16
590	295.0	19.60	160.26	35.10	195.36	999.3	53696	-44.96	33	16
592	296.0	19.76	147.60	25.12	172.72	999.5	51806	-61.60	33	16
594	297.0	19.87	143.56	33.55	182.11	999.3	37401	-45.25	34	16
596	298.0	19.73	122.04	39.58	161.62	999.5	34817	-53.35	34	16
598	299.0	19.27	166.12	39.43	205.54	999.9	51388	-33.64	34	16
600	300.0	19.44	169.19	39.98	199.06	999.5	56616	-44.28	34	16
602	301.0	19.53	155.80	28.19	186.99	999.5	62683	-45.73	34	16
604	302.0	19.59	159.92	25.67	185.79	999.4	52350	-46.21	34	16
606	303.0	19.69	148.52	31.46	179.98	999.5	50654	-54.16	34	16
608	304.0	19.70	160.04	36.79	193.63	999.5	51396	-49.24	34	16
610	305.0	19.18	166.48	51.51	219.98	999.5	50509	-43.66	34	16
612	306.0	19.18	160.43	42.00	202.43	999.1	52202	-43.87	34	16
614	307.0	19.34	161.89	36.11	200.00	999.1	51933	-47.84	34	16
616	308.0	19.34	163.09	33.52	196.92	999.4	33318	-47.44	34	16
618	309.0	19.57	161.53	27.41	188.99	999.4	55616	-48.07	34	16
620	310.0	19.62	160.37	39.91	200.23	999.0	55800	-47.81	34	16
622	311.0	19.36	163.02	48.37	211.36	999.5	51264	-48.74	34	16
624	312.0	19.27	168.05	54.11	222.16	999.4	58350	-45.93	34	16
626	313.0	19.30	163.32	53.70	220.02	999.3	53760	-52.20	34	16
628	314.0	19.34	161.11	53.97	215.08	999.3	53382	-51.25	34	16
630	315.0	19.31	161.14	54.48	215.56	999.7	54918	-50.82	34	16
632	316.0	19.35	158.01	66.38	224.38	999.5	54111	-51.25	34	16
634	317.0	19.25	159.34	73.47	232.81	999.2	54222	-50.94	34	16
636	318.0	19.44	157.29	72.66	230.16	999.6	55433	-51.83	34	16
638	319.0	19.37	157.16	81.97	239.13	999.1	54185	-51.13	34	16
640	320.0	19.30	157.30	78.45	235.75	999.1	53980	-51.13	34	16
642	321.0	19.40	157.68	76.52	234.20	999.4	53910	-51.13	34	16

DATA VERIFICATION REPORT
POSEIDON GOLD
Version - 1.31

Probe number - 2061

File Name - VIVD8

Shot	Depth	Inc	As	FB	MTF	GTotal	HTotal	Dip	Temp	Bat
644	322.0	19.58	157.71	74.91	232.83	999.4	53701	-51.48	34	16
646	323.0	18.97	156.35	80.07	236.33	999.2	53657	-51.62	34	16
648	324.0	19.20	155.57	81.34	237.50	999.2	53482	-51.84	34	16
650	325.0	19.36	155.59	87.68	243.45	999.6	53374	-52.07	34	16
652	326.0	19.10	156.86	81.23	236.09	999.1	53319	-52.38	34	16
654	327.0	19.21	156.60	76.18	232.78	999.4	53331	-52.68	34	16
656	328.0	19.27	155.84	85.50	241.34	999.1	53265	-53.05	34	16
658	329.0	18.94	154.74	90.65	244.80	999.3	53344	-54.32	34	16
660	330.0	19.08	154.13	87.54	241.67	999.5	53721	-54.29	34	16
662	331.0	19.20	155.61	85.19	241.00	999.6	53914	-54.25	34	16
664	332.0	19.25	155.75	78.35	234.11	999.4	54287	-54.38	34	16
666	333.0	19.35	154.80	78.93	233.73	999.8	54600	-55.57	34	16
668	334.0	19.36	153.89	91.53	245.44	999.5	55607	-56.27	34	16
670	335.0	19.08	154.55	93.42	247.97	999.7	56644	-58.28	34	16
672	336.0	19.10	156.98	89.61	246.59	999.2	59097	-59.19	34	16
674	337.0	18.90	171.97	92.93	264.90	999.5	43461	-17.83	34	16
676	338.0	19.09	142.92	96.24	269.16	999.8	54596	-57.40	34	16
678	339.0	19.13	135.82	96.00	231.82	999.4	51762	-59.25	34	16
680	340.0	19.02	137.37	91.80	229.17	999.5	41052	-58.52	34	16
682	341.0	19.18	148.18	84.41	232.59	999.5	36479	-35.28	34	16
684	342.0	19.16	130.65	84.48	265.13	999.4	40001	-25.30	34	16
686	343.0	18.90	153.44	83.04	241.48	999.4	43878	-19.47	34	16
688	344.0	18.98	150.89	80.08	230.97	999.2	43291	-34.30	34	16
690	345.0	19.14	145.69	75.03	229.72	999.5	28299	-31.47	34	16
692	346.0	19.17	132.19	81.19	213.37	999.3	33880	-89.18	35	16
694	347.0	19.07	150.93	78.02	226.96	999.7	29527	-57.04	35	16
696	348.0	19.19	140.28	75.93	216.26	999.4	46010	-47.77	34	16
698	349.0	19.25	147.79	85.09	230.13	999.3	33977	-48.91	35	16
700	350.0	19.11	131.43	81.91	213.34	999.3	56152	-50.65	35	16
702	351.0	19.38	127.04	86.33	213.37	999.2	32119	-64.16	35	16
704	352.0	19.42	142.17	85.03	227.20	999.3	43343	-49.09	35	16
706	353.0	19.11	178.39	88.47	266.65	999.2	50525	-47.33	35	16
708	354.0	19.21	157.47	86.62	244.29	999.4	42757	-47.90	35	16
710	355.0	19.37	185.25	89.43	254.69	999.3	50043	-42.48	35	16
712	356.0	19.26	156.42	96.43	254.90	999.1	51969	-45.48	34	16
714	357.0	19.27	159.10	92.93	252.26	998.9	51316	-54.00	35	16
716	358.0	19.38	162.30	89.94	252.24	999.4	51633	-54.65	35	16
718	359.0	19.29	163.03	92.56	253.61	999.9	51964	-55.06	35	16
720	360.0	19.42	162.42	84.37	246.80	999.5	52169	-55.55	35	16
722	361.0	19.40	161.53	88.41	249.94	999.3	52298	-55.60	35	16

APPENDIX 3
REGIONAL GRAVITY DATA EL5066

AMG		AHD		OBSERVED	BOUGUER ANOMALY at DENSITY:			
EAST	NORTH	LATITUDE	LONGITUDE	ELEV	GRAVITY	2.00g/cc	2.20g/cc	2.67g/cc
408652.0	7857046.0	-19.37871	134.13013	320.00	977121.69	-22.583	-25.266	-31.572
405933.0	7856949.0	-19.37946	134.10423	322.60	977124.56	-19.157	-21.862	-28.219
406071.0	7856540.0	-19.38316	134.10553	325.10	977123.50	-19.912	-22.638	-29.044
406481.0	7856183.0	-19.38640	134.10941	327.90	977122.06	-20.885	-23.634	-30.096
406758.0	7855734.0	-19.39047	134.11203	328.40	977120.12	-22.916	-25.670	-32.141
407070.0	7855339.0	-19.39406	134.11497	327.80	977119.75	-23.614	-26.363	-32.822
407354.0	7854906.0	-19.39799	134.11766	327.70	977118.81	-24.816	-27.564	-34.022
408652.0	7857046.0	-19.37871	134.13013	320.00	977121.81	-22.463	-25.146	-31.452
408652.0	7857046.0	-19.37871	134.13013	320.00	977121.56	-22.747	-25.430	-31.736
408304.0	7855530.0	-19.39239	134.12674	324.10	977119.62	-24.497	-27.215	-33.601
407972.0	7855931.0	-19.38875	134.12360	323.30	977120.87	-23.256	-25.967	-32.338
407553.0	7856325.0	-19.38517	134.11963	327.30	977120.50	-22.476	-25.221	-31.670
407062.0	7856588.0	-19.38277	134.11496	334.20	977119.62	-21.682	-24.485	-31.070
406670.0	7856737.0	-19.38141	134.11124	328.20	977121.31	-21.307	-24.059	-30.526
406933.0	7856949.0	-19.37950	134.11375	322.10	977124.50	-19.367	-22.068	-28.415
408652.0	7857046.0	-19.37871	134.13013	320.00	977121.69	-22.568	-25.251	-31.557
408652.0	7857046.0	-19.37871	134.13013	320.00	977121.56	-22.750	-25.433	-31.739
408652.0	7857046.0	-19.37871	134.13013	320.00	977121.62	-22.671	-25.354	-31.660
408652.0	7857046.0	-19.37871	134.13013	320.10	977118.69	-25.571	-28.255	-34.563
408652.0	7857046.0	-19.37871	134.13013	319.50	977121.62	-22.772	-25.451	-31.747
408652.0	7857046.0	-19.37871	134.13013	319.10	977121.56	-22.902	-25.577	-31.865
408652.0	7857046.0	-19.37871	134.13013	319.20	977121.69	-22.755	-25.432	-31.722
408214.0	7855021.0	-19.39699	134.12585	325.60	977119.12	-24.945	-27.676	-34.092
405243.0	7856182.0	-19.38636	134.09763	323.50	977124.25	-19.666	-22.378	-28.753
405029.0	7856365.0	-19.38469	134.09560	324.90	977124.56	-18.966	-21.690	-28.093
404537.0	7856117.0	-19.38691	134.09090	327.10	977124.19	-18.960	-21.703	-28.149
404105.0	7855940.0	-19.38849	134.08678	329.60	977124.06	-18.607	-21.371	-27.866
403942.0	7854703.0	-19.39966	134.08516	342.50	977122.12	-18.280	-21.152	-27.901
408652.0	7857046.0	-19.37871	134.13013	319.30	977121.62	-22.820	-25.497	-31.789
404972.0	7854849.0	-19.39839	134.09497	335.70	977121.62	-20.224	-23.039	-29.654
405396.0	7854855.0	-19.39835	134.09901	349.10	977117.87	-20.970	-23.897	-30.776
405899.0	7854852.0	-19.39841	134.10381	335.80	977118.19	-23.637	-26.453	-33.070
406449.0	7854919.0	-19.39783	134.10904	332.40	977118.19	-24.376	-27.163	-33.713
406955.0	7854765.0	-19.39924	134.11386	326.90	977118.12	-25.751	-28.492	-34.934
408652.0	7857046.0	-19.37871	134.13013	318.70	977121.50	-23.067	-25.739	-32.019
408652.0	7857046.0	-19.37871	134.13013	319.50	977121.62	-22.781	-25.460	-31.756
408943.0	7857690.0	-19.37290	134.13293	316.30	977122.12	-22.692	-25.344	-31.577
407768.0	7857776.0	-19.37207	134.12175	316.10	977123.37	-21.388	-24.038	-30.267
407191.0	7857702.0	-19.37271	134.11624	317.40	977123.50	-21.017	-23.678	-29.933
406513.0	7857742.0	-19.37232	134.10979	320.20	977123.87	-20.014	-22.699	-29.008
408421.0	7856021.0	-19.38796	134.12788	321.90	977120.62	-23.754	-26.453	-32.797
408976.0	7856002.0	-19.38815	134.13316	322.80	977119.94	-24.258	-26.965	-33.326
409475.0	7856000.0	-19.38820	134.13791	322.10	977119.31	-25.030	-27.731	-34.078
409987.0	7855856.0	-19.38952	134.14278	322.70	977118.25	-26.046	-28.752	-35.111
410461.0	7855888.0	-19.38925	134.14729	325.80	977118.00	-25.587	-28.319	-34.740
410896.0	7855955.0	-19.38867	134.15144	329.40	977115.69	-27.056	-29.818	-36.309
410687.0	7855121.0	-19.39619	134.14941	335.70	977113.56	-28.178	-30.993	-37.608
410209.0	7855093.0	-19.39643	134.14487	331.80	977113.81	-28.822	-31.604	-38.142
409664.0	7855187.0	-19.39555	134.13968	324.00	977117.25	-27.081	-29.798	-36.182
409093.0	7855143.0	-19.39592	134.13423	324.30	977117.69	-26.583	-29.303	-35.693
409665.0	7855093.0	-19.39640	134.13968	326.10	977118.12	-25.796	-28.530	-34.956
408128.0	7855155.0	-19.39577	134.12505	325.10	977119.25	-24.825	-27.551	-33.958
407846.0	7854755.0	-19.39937	134.12234	326.70	977118.44	-25.507	-28.246	-34.684
408652.0	7857046.0	-19.37871	134.13013	319.10	977121.69	-22.827	-25.503	-31.791
408652.0	7857046.0	-19.37871	134.13013	319.20	977121.50	-22.946	-25.623	-31.913
407633.0	7856726.0	-19.38155	134.12041	321.20	977121.69	-22.463	-25.156	-31.486
406018.0	7855378.0	-19.39366	134.10497	330.90	977119.87	-22.825	-25.599	-32.120
406268.0	7855796.0	-19.38989	134.10736	327.50	977121.19	-22.038	-24.784	-31.238
405751.0	7855807.0	-19.38977	134.10245	326.30	977122.31	-21.167	-23.903	-30.333
405254.0	7855780.0	-19.38999	134.09770	327.70	977123.06	-20.142	-22.890	-29.348
404696.0	7855720.0	-19.39050	134.09239	330.90	977123.69	-18.783	-21.558	-28.079
404823.0	7855461.0	-19.39285	134.09358	331.10	977123.37	-19.231	-22.008	-28.532
405360.0	7855295.0	-19.39438	134.09869	331.50	977122.12	-20.462	-23.242	-29.775
406437.0	7855168.0	-19.39557	134.10895	331.30	977118.44	-24.228	-27.006	-33.535
408190.0	7855093.0	-19.39633	134.12564	307.20	977127.75	-20.402	-22.978	-29.031
408652.0	7857046.0	-19.37871	134.13013	319.20	977121.62	-22.853	-25.529	-31.820

408652.0	7857046.0	-19.37871	134.13013	319.70	977121.69	-22.664	-25.345	-31.645
408652.0	7857046.0	-19.37871	134.13013	319.20	977121.75	-22.694	-25.371	-31.661
408652.0	7857046.0	-19.37871	134.13013	321.40	977121.62	-22.372	-25.067	-31.401
408652.0	7857046.0	-19.37871	134.13013	320.10	977121.75	-22.488	-25.172	-31.480
408652.0	7857046.0	-19.37871	134.13013	319.50	977121.44	-22.929	-25.608	-31.904
408652.0	7857046.0	-19.37871	134.13013	318.80	977121.75	-22.797	-25.470	-31.752
406090.0	7858335.0	-19.36694	134.10579	314.00	977125.31	-19.639	-22.272	-28.460
406679.0	7858272.0	-19.36754	134.11140	312.90	977125.06	-20.203	-22.826	-28.992
407214.0	7858319.0	-19.36714	134.11650	313.20	977124.44	-20.724	-23.350	-29.522
407728.0	7858321.0	-19.36714	134.12138	313.30	977124.00	-21.142	-23.769	-29.943
408274.0	7858391.0	-19.36654	134.12659	313.70	977123.87	-21.139	-23.769	-29.951
408715.0	7858349.0	-19.36694	134.13078	313.60	977123.31	-21.718	-24.347	-30.527
408652.0	7857046.0	-19.37871	134.13013	319.70	977121.62	-22.714	-25.395	-31.695
408159.4	7857589.5	-19.37377	134.12546	318.01	977122.50	-18.407	-21.074	-27.340
408159.4	7857614.5	-19.37355	134.12546	317.93	977122.50	-18.403	-21.069	-27.334
408159.4	7857639.5	-19.37332	134.12546	317.86	977122.56	-18.398	-21.063	-27.327
408159.4	7857664.5	-19.37309	134.12547	317.76	977122.75	-18.203	-20.867	-27.129
408159.4	7857689.5	-19.37287	134.12547	317.68	977122.75	-18.210	-20.874	-27.134
408159.4	7857714.5	-19.37264	134.12547	317.59	977122.75	-18.250	-20.913	-27.171
408159.4	7857739.5	-19.37242	134.12547	317.49	977122.75	-18.261	-20.924	-27.180
408159.4	7857764.5	-19.37219	134.12547	317.43	977122.75	-18.264	-20.926	-27.181
408159.4	7857789.5	-19.37197	134.12547	317.34	977122.75	-18.294	-20.955	-27.208
408159.4	7857814.5	-19.37174	134.12547	317.26	977122.87	-18.198	-20.858	-27.110
408159.4	7857839.5	-19.37151	134.12547	317.16	977122.94	-18.178	-20.838	-27.088
408159.4	7857864.5	-19.37129	134.12547	317.08	977122.94	-18.195	-20.854	-27.102
408239.4	7857864.5	-19.37129	134.12624	317.13	977123.00	-18.101	-20.760	-27.010
408239.4	7857839.5	-19.37152	134.12624	317.24	977123.00	-18.065	-20.725	-26.977
408239.4	7857814.5	-19.37174	134.12624	317.29	977122.94	-18.145	-20.806	-27.058
408239.4	7857789.5	-19.37197	134.12624	317.38	977122.62	-18.433	-21.095	-27.349
408239.4	7857764.5	-19.37220	134.12624	317.47	977122.81	-18.206	-20.868	-27.124
408239.4	7857739.5	-19.37242	134.12624	317.58	977122.81	-18.211	-20.874	-27.132
408239.4	7857714.5	-19.37265	134.12624	317.64	977122.75	-18.217	-20.880	-27.140
408239.4	7857689.5	-19.37287	134.12624	317.72	977122.56	-18.405	-21.069	-27.330
408239.4	7857664.5	-19.37310	134.12622	317.82	977122.62	-18.329	-20.994	-27.257
408239.4	7857639.5	-19.37333	134.12622	317.95	977122.62	-18.319	-20.985	-27.251
408239.4	7857614.5	-19.37355	134.12622	318.01	977122.62	-18.305	-20.971	-27.238
408239.4	7857589.5	-19.37378	134.12622	318.08	977122.56	-18.319	-20.986	-27.254
408239.4	7857564.5	-19.37400	134.12622	318.16	977122.50	-18.351	-21.019	-27.288
408239.4	7857539.5	-19.37423	134.12622	318.26	977122.56	-18.296	-20.965	-27.237
408239.4	7857514.5	-19.37445	134.12622	318.33	977122.50	-18.331	-21.000	-27.273
408239.4	7857489.5	-19.37468	134.12622	318.40	977122.44	-18.345	-21.015	-27.289
408239.4	7857464.5	-19.37491	134.12622	318.48	977122.44	-18.346	-21.016	-27.292
408239.4	7857439.5	-19.37513	134.12622	318.60	977122.44	-18.347	-21.019	-27.297
408239.4	7857414.5	-19.37536	134.12622	318.70	977122.44	-18.323	-20.995	-27.276
408239.4	7857389.5	-19.37558	134.12622	318.75	977122.37	-18.382	-21.055	-27.336
408239.4	7857364.5	-19.37581	134.12622	318.86	977122.37	-18.355	-21.029	-27.312
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.69	-18.791	-21.475	-27.780
408239.4	7857339.5	-19.37604	134.12621	318.96	977122.50	-18.194	-20.868	-27.154
408239.4	7857314.5	-19.37626	134.12621	319.03	977122.50	-18.189	-20.864	-27.151
408239.4	7857289.5	-19.37649	134.12621	319.11	977122.50	-18.171	-20.847	-27.135
408239.4	7857264.5	-19.37671	134.12621	319.24	977122.44	-18.194	-20.871	-27.162
408239.4	7857239.5	-19.37694	134.12621	319.31	977122.44	-18.170	-20.847	-27.139
408239.4	7857214.5	-19.37716	134.12621	319.41	977122.37	-18.210	-20.888	-27.182
408239.4	7857189.5	-19.37739	134.12621	319.50	977122.25	-18.293	-20.972	-27.268
408239.4	7857164.5	-19.37762	134.12621	319.60	977122.25	-18.322	-21.002	-27.300
408239.4	7857139.5	-19.37784	134.12621	319.70	977122.25	-18.271	-20.952	-27.252
408239.4	7857114.5	-19.37807	134.12621	319.78	977122.25	-18.254	-20.936	-27.237
408239.4	7857089.5	-19.37829	134.12621	319.88	977122.19	-18.305	-20.987	-27.290
408239.4	7857064.5	-19.37852	134.12621	319.95	977122.06	-18.403	-21.086	-27.391
408239.4	7857039.5	-19.37875	134.12621	320.05	977122.00	-18.433	-21.117	-27.424
408239.4	7857014.5	-19.37897	134.12619	320.14	977122.00	-18.393	-21.078	-27.386
408239.4	7856989.5	-19.37920	134.12619	320.21	977122.06	-18.347	-21.032	-27.342
408239.4	7856964.5	-19.37943	134.12619	320.31	977122.06	-18.326	-21.012	-27.324
408239.4	7856939.5	-19.37965	134.12619	320.37	977122.06	-18.314	-21.000	-27.313
408239.4	7856914.5	-19.37988	134.12619	320.48	977122.06	-18.290	-20.978	-27.293
408239.4	7856889.5	-19.38010	134.12619	320.52	977121.94	-18.385	-21.073	-27.389
408239.4	7856864.5	-19.38033	134.12619	320.61	977122.00	-18.336	-21.024	-27.342
408239.4	7856839.5	-19.38055	134.12619	320.71	977121.87	-18.396	-21.086	-27.405
408239.4	7856814.5	-19.38078	134.12619	320.78	977121.87	-18.382	-21.072	-27.393
408239.4	7856789.5	-19.38101	134.12619	320.87	977121.87	-18.394	-21.084	-27.407

408239.4	7856764.5	-19.38123	134.12619	320.94	977121.81	-18.452	-21.143	-27.467
408159.4	7856764.5	-19.38123	134.12543	320.90	977121.81	-18.411	-21.102	-27.425
408159.4	7856789.5	-19.38100	134.12543	320.81	977121.87	-18.381	-21.071	-27.393
408159.4	7856814.5	-19.38078	134.12543	320.73	977121.87	-18.400	-21.090	-27.410
408159.4	7856839.5	-19.38055	134.12543	320.67	977121.94	-18.343	-21.032	-27.351
408159.4	7856864.5	-19.38032	134.12543	320.60	977122.06	-18.278	-20.966	-27.284
408159.4	7856889.5	-19.38010	134.12543	320.51	977122.06	-18.278	-20.966	-27.282
408159.4	7856914.5	-19.37987	134.12543	320.44	977122.12	-18.213	-20.900	-27.215
408159.4	7856939.5	-19.37965	134.12543	320.36	977122.12	-18.243	-20.929	-27.242
408159.4	7856964.5	-19.37942	134.12543	320.26	977122.12	-18.257	-20.942	-27.253
408159.4	7856989.5	-19.37919	134.12543	320.18	977122.12	-18.276	-20.960	-27.270
408159.4	7857014.5	-19.37897	134.12544	320.12	977122.19	-18.249	-20.933	-27.242
408159.4	7857039.5	-19.37874	134.12544	320.04	977122.19	-18.259	-20.942	-27.249
408159.4	7857064.5	-19.37852	134.12544	319.95	977122.19	-18.280	-20.963	-27.268
408159.4	7857089.5	-19.37829	134.12544	319.86	977122.19	-18.281	-20.963	-27.266
408159.4	7857114.5	-19.37807	134.12544	319.76	977122.25	-18.274	-20.956	-27.257
408159.4	7857139.5	-19.37784	134.12544	319.66	977122.31	-18.247	-20.928	-27.227
408159.4	7857164.5	-19.37761	134.12544	319.56	977122.25	-18.271	-20.950	-27.248
408159.4	7857189.5	-19.37739	134.12544	319.46	977122.31	-18.243	-20.922	-27.217
408159.4	7857214.5	-19.37716	134.12544	319.38	977122.37	-18.222	-20.900	-27.193
408159.4	7857239.5	-19.37694	134.12544	319.28	977122.37	-18.235	-20.912	-27.204
408159.4	7857264.5	-19.37671	134.12544	319.20	977122.37	-18.234	-20.911	-27.201
408159.4	7857289.5	-19.37648	134.12544	319.11	977122.37	-18.308	-20.984	-27.273
408159.4	7857314.5	-19.37626	134.12544	319.01	977122.44	-18.250	-20.925	-27.211
408159.4	7857339.5	-19.37603	134.12546	318.90	977122.44	-18.276	-20.951	-27.235
408159.4	7857364.5	-19.37581	134.12546	318.83	977122.44	-18.274	-20.948	-27.231
408159.4	7857389.5	-19.37558	134.12546	318.74	977122.50	-18.265	-20.937	-27.218
408159.4	7857414.5	-19.37535	134.12546	318.64	977122.44	-18.310	-20.982	-27.261
408159.4	7857439.5	-19.37513	134.12546	318.56	977122.50	-18.247	-20.918	-27.196
408159.4	7857464.5	-19.37490	134.12546	318.45	977122.56	-18.222	-20.893	-27.168
408159.4	7857489.5	-19.37468	134.12546	318.34	977122.56	-18.260	-20.929	-27.203
408159.4	7857514.5	-19.37445	134.12546	318.32	977122.56	-18.266	-20.935	-27.208
408159.4	7857539.5	-19.37423	134.12546	318.20	977122.62	-18.233	-20.901	-27.172
408159.4	7857564.5	-19.37400	134.12546	317.91	977122.62	-18.290	-20.955	-27.220
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.69	-18.796	-21.479	-27.785
408319.4	7857264.5	-19.37672	134.12697	319.29	977122.19	-18.399	-21.076	-27.368
408319.4	7857239.5	-19.37694	134.12697	319.37	977122.19	-18.404	-21.082	-27.376
408319.4	7857214.5	-19.37717	134.12697	319.46	977122.25	-18.345	-21.024	-27.319
408319.4	7857189.5	-19.37740	134.12697	319.55	977122.06	-18.464	-21.144	-27.441
408319.4	7857164.5	-19.37762	134.12697	319.62	977122.12	-18.410	-21.090	-27.389
408319.4	7857139.5	-19.37785	134.12697	319.73	977122.12	-18.389	-21.070	-27.371
408319.4	7857114.5	-19.37807	134.12697	319.80	977121.94	-18.532	-21.214	-27.516
408319.4	7857089.5	-19.37830	134.12697	319.90	977121.94	-18.534	-21.217	-27.520
408319.4	7857064.5	-19.37852	134.12697	319.96	977121.94	-18.554	-21.237	-27.542
408319.4	7857039.5	-19.37875	134.12695	320.04	977121.87	-18.550	-21.234	-27.541
408319.4	7857014.5	-19.37898	134.12695	320.14	977121.87	-18.542	-21.227	-27.535
408319.4	7856989.5	-19.37920	134.12695	320.20	977121.81	-18.624	-21.309	-27.619
408319.4	7856964.5	-19.37943	134.12695	320.35	977121.81	-18.584	-21.270	-27.583
408319.4	7856939.5	-19.37965	134.12695	320.38	977121.81	-18.550	-21.236	-27.550
408319.4	7856914.5	-19.37988	134.12695	320.46	977121.81	-18.524	-21.211	-27.526
408319.4	7856889.5	-19.38011	134.12695	320.54	977121.81	-18.530	-21.218	-27.534
408319.4	7856864.5	-19.38033	134.12695	320.61	977121.75	-18.591	-21.279	-27.597
408319.4	7856839.5	-19.38056	134.12695	320.72	977121.75	-18.537	-21.227	-27.547
408319.4	7856814.5	-19.38078	134.12695	320.78	977121.75	-18.558	-21.247	-27.569
408319.4	7856789.5	-19.38101	134.12695	320.85	977121.69	-18.566	-21.256	-27.579
408319.4	7856764.5	-19.38124	134.12695	320.95	977121.69	-18.546	-21.237	-27.562
408399.4	7856764.5	-19.38124	134.12770	320.90	977121.62	-18.640	-21.331	-27.655
408399.4	7856789.5	-19.38101	134.12772	320.81	977121.62	-18.673	-21.363	-27.685
408399.4	7856814.5	-19.38079	134.12772	320.74	977121.69	-18.620	-21.310	-27.630
408399.4	7856839.5	-19.38056	134.12772	320.65	977121.62	-18.663	-21.352	-27.671
408399.4	7856864.5	-19.38033	134.12772	320.57	977121.69	-18.644	-21.332	-27.649
408399.4	7856889.5	-19.38011	134.12772	320.51	977121.69	-18.649	-21.337	-27.653
408399.4	7856914.5	-19.37988	134.12772	320.43	977121.69	-18.660	-21.347	-27.662
408399.4	7856939.5	-19.37966	134.12772	320.35	977121.75	-18.649	-21.336	-27.648
408399.4	7856964.5	-19.37943	134.12772	320.27	977121.75	-18.661	-21.346	-27.657
408399.4	7856989.5	-19.37921	134.12772	320.22	977121.75	-18.623	-21.308	-27.618
408399.4	7857014.5	-19.37898	134.12772	320.12	977121.87	-18.566	-21.250	-27.558
408399.4	7857039.5	-19.37875	134.12772	320.04	977121.94	-18.515	-21.199	-27.505
408399.4	7857064.5	-19.37853	134.12772	319.97	977121.81	-18.637	-21.320	-27.625
408399.4	7857089.5	-19.37830	134.12773	319.90	977121.87	-18.584	-21.266	-27.570

408399.4	7857114.5	-19.37808	134.12773	319.82	977121.94	-18.552	-21.234	-27.536
408399.4	7857139.5	-19.37785	134.12773	319.64	977122.06	-18.440	-21.121	-27.419
408399.4	7857164.5	-19.37762	134.12773	319.68	977122.12	-18.382	-21.062	-27.362
408399.4	7857189.5	-19.37740	134.12773	319.57	977122.12	-18.408	-21.088	-27.385
408399.4	7857214.5	-19.37717	134.12773	319.51	977122.19	-18.404	-21.083	-27.380
408399.4	7857239.5	-19.37695	134.12773	319.41	977122.12	-18.450	-21.128	-27.422
408399.4	7857264.5	-19.37672	134.12773	319.32	977122.19	-18.442	-21.119	-27.412
408399.4	7857289.5	-19.37650	134.12773	319.25	977122.19	-18.419	-21.096	-27.387
408399.4	7857314.5	-19.37627	134.12773	319.16	977122.19	-18.432	-21.108	-27.397
408399.4	7857339.5	-19.37604	134.12773	319.07	977122.25	-18.433	-21.109	-27.396
408399.4	7857364.5	-19.37582	134.12773	318.98	977122.31	-18.394	-21.069	-27.354
408399.4	7857389.5	-19.37559	134.12773	318.92	977122.31	-18.399	-21.073	-27.358
408399.4	7857414.5	-19.37537	134.12775	318.81	977122.31	-18.426	-21.099	-27.382
408399.4	7857439.5	-19.37514	134.12775	318.73	977122.31	-18.436	-21.109	-27.390
408399.4	7857464.5	-19.37491	134.12775	318.65	977122.37	-18.354	-21.026	-27.305
408399.4	7857489.5	-19.37469	134.12775	318.57	977122.44	-18.333	-21.004	-27.282
408399.4	7857514.5	-19.37446	134.12775	318.47	977122.44	-18.358	-21.029	-27.304
408399.4	7857539.5	-19.37424	134.12775	318.42	977122.44	-18.361	-21.031	-27.306
408399.4	7857564.5	-19.37401	134.12775	318.28	977122.44	-18.394	-21.063	-27.335
408399.4	7857589.5	-19.37378	134.12775	318.20	977122.56	-18.323	-20.992	-27.262
408399.4	7857614.5	-19.37356	134.12775	318.11	977122.50	-18.366	-21.033	-27.302
408399.4	7857639.5	-19.37333	134.12775	318.01	977122.56	-18.359	-21.025	-27.292
408399.4	7857664.5	-19.37311	134.12775	317.92	977122.62	-18.288	-20.954	-27.219
408399.4	7857689.5	-19.37288	134.12775	317.82	977122.69	-18.241	-20.906	-27.168
408399.4	7857714.5	-19.37265	134.12775	317.74	977122.81	-18.179	-20.843	-27.104
408399.4	7857739.5	-19.37243	134.12776	317.69	977122.81	-18.171	-20.835	-27.095
408399.4	7857764.5	-19.37220	134.12776	317.58	977122.87	-18.124	-20.788	-27.046
408399.4	7857789.5	-19.37198	134.12776	317.51	977122.81	-18.172	-20.835	-27.091
408399.4	7857814.5	-19.37175	134.12776	317.43	977122.87	-18.140	-20.802	-27.057
408399.4	7857839.5	-19.37152	134.12776	317.36	977122.87	-18.157	-20.818	-27.072
408399.4	7857864.5	-19.37130	134.12776	317.23	977122.87	-18.197	-20.858	-27.109
408319.4	7857864.5	-19.37130	134.12700	317.16	977122.94	-18.153	-20.812	-27.062
408319.4	7857839.5	-19.37152	134.12700	317.24	977122.94	-18.146	-20.806	-27.058
408319.4	7857814.5	-19.37175	134.12700	317.34	977122.81	-18.218	-20.879	-27.132
408319.4	7857789.5	-19.37197	134.12700	317.42	977122.81	-18.232	-20.893	-27.148
408319.4	7857764.5	-19.37220	134.12700	317.52	977122.75	-18.283	-20.945	-27.202
408319.4	7857739.5	-19.37243	134.12700	317.61	977122.75	-18.212	-20.875	-27.134
408319.4	7857714.5	-19.37265	134.12700	317.70	977122.75	-18.244	-20.908	-27.169
408319.4	7857689.5	-19.37288	134.12698	317.79	977122.69	-18.277	-20.942	-27.204
408319.4	7857664.5	-19.37310	134.12698	317.87	977122.69	-18.260	-20.925	-27.189
408319.4	7857639.5	-19.37333	134.12698	317.98	977122.62	-18.287	-20.954	-27.220
408319.4	7857614.5	-19.37355	134.12698	318.06	977122.62	-18.291	-20.958	-27.226
408319.4	7857589.5	-19.37378	134.12698	318.14	977122.56	-18.305	-20.973	-27.242
408319.4	7857564.5	-19.37401	134.12698	318.24	977122.50	-18.335	-21.003	-27.275
408319.4	7857539.5	-19.37423	134.12698	318.32	977122.50	-18.318	-20.987	-27.260
408319.4	7857514.5	-19.37446	134.12698	318.42	977122.56	-18.265	-20.935	-27.210
408319.4	7857489.5	-19.37468	134.12698	318.50	977122.50	-18.279	-20.950	-27.226
408319.4	7857464.5	-19.37491	134.12698	318.60	977122.44	-18.309	-20.980	-27.259
408319.4	7857439.5	-19.37514	134.12698	318.66	977122.44	-18.338	-21.010	-27.289
408319.4	7857414.5	-19.37536	134.12698	318.74	977122.44	-18.279	-20.952	-27.233
408319.4	7857389.5	-19.37559	134.12698	318.83	977122.44	-18.280	-20.954	-27.237
408319.4	7857364.5	-19.37581	134.12697	318.93	977122.37	-18.299	-20.974	-27.259
408319.4	7857339.5	-19.37604	134.12697	319.01	977122.37	-18.323	-20.998	-27.285
408319.4	7857314.5	-19.37626	134.12697	319.10	977122.37	-18.273	-20.949	-27.237
408319.4	7857289.5	-19.37649	134.12697	319.19	977122.31	-18.346	-21.023	-27.313
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.62	-18.797	-21.481	-27.787
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.62	-18.799	-21.482	-27.788
408479.4	7857164.5	-19.37763	134.12849	319.67	977121.94	-18.600	-21.280	-27.580
408479.4	7857189.5	-19.37740	134.12849	319.58	977121.94	-18.619	-21.298	-27.596
408479.4	7857214.5	-19.37718	134.12849	319.52	977121.94	-18.610	-21.289	-27.585
408479.4	7857239.5	-19.37695	134.12849	319.45	977122.00	-18.593	-21.272	-27.567
408479.4	7857264.5	-19.37672	134.12849	319.36	977122.00	-18.580	-21.258	-27.551
408479.4	7857289.5	-19.37650	134.12849	319.29	977122.06	-18.553	-21.230	-27.522
408479.4	7857314.5	-19.37627	134.12849	319.20	977122.06	-18.550	-21.227	-27.517
408479.4	7857339.5	-19.37605	134.12849	319.12	977122.12	-18.505	-21.181	-27.470
408479.4	7857364.5	-19.37582	134.12849	319.05	977122.19	-18.498	-21.173	-27.460
408479.4	7857389.5	-19.37560	134.12849	318.95	977122.25	-18.416	-21.090	-27.376
408479.4	7857414.5	-19.37537	134.12849	318.86	977122.31	-18.424	-21.098	-27.382
408479.4	7857439.5	-19.37514	134.12851	318.78	977122.31	-18.419	-21.093	-27.374
408479.4	7857464.5	-19.37492	134.12851	318.68	977122.37	-18.399	-21.071	-27.351

408479.4	7857489.5	-19.37469	134.12851	318.57	977122.37	-18.412	-21.083	-27.361
408479.4	7857514.5	-19.37447	134.12851	318.52	977122.37	-18.411	-21.082	-27.358
408479.4	7857539.5	-19.37424	134.12851	318.43	977122.44	-18.388	-21.058	-27.333
408479.4	7857564.5	-19.37401	134.12851	318.31	977122.44	-18.383	-21.052	-27.324
408479.4	7857589.5	-19.37379	134.12851	318.22	977122.50	-18.380	-21.048	-27.319
408479.4	7857614.5	-19.37356	134.12851	318.13	977122.56	-18.327	-20.994	-27.263
408479.4	7857639.5	-19.37333	134.12851	318.07	977122.56	-18.337	-21.005	-27.272
408479.4	7857664.5	-19.37311	134.12851	317.99	977122.62	-18.303	-20.969	-27.235
408479.4	7857689.5	-19.37288	134.12851	317.90	977122.62	-18.270	-20.935	-27.200
408479.4	7857714.5	-19.37266	134.12851	317.89	977122.62	-18.280	-20.946	-27.210
408479.4	7857739.5	-19.37243	134.12851	317.65	977122.69	-18.269	-20.933	-27.192
408479.4	7857764.5	-19.37221	134.12852	317.67	977122.69	-18.273	-20.937	-27.197
408479.4	7857789.5	-19.37198	134.12852	317.59	977122.69	-18.279	-20.943	-27.201
408479.4	7857814.5	-19.37175	134.12852	317.49	977122.75	-18.269	-20.931	-27.187
408479.4	7857839.5	-19.37153	134.12852	317.41	977122.81	-18.234	-20.895	-27.150
408479.4	7857864.5	-19.37130	134.12852	317.30	977122.87	-18.205	-20.865	-27.118
408559.4	7857864.5	-19.37131	134.12929	317.38	977122.81	-18.214	-20.876	-27.130
408559.4	7857839.5	-19.37153	134.12929	317.46	977122.81	-18.225	-20.887	-27.143
408559.4	7857814.5	-19.37176	134.12929	317.56	977122.75	-18.242	-20.905	-27.163
408559.4	7857789.5	-19.37198	134.12929	317.63	977122.69	-18.308	-20.971	-27.230
408559.4	7857764.5	-19.37221	134.12927	317.70	977122.69	-18.279	-20.943	-27.204
408559.4	7857739.5	-19.37244	134.12927	317.82	977122.62	-18.322	-20.987	-27.250
408559.4	7857714.5	-19.37266	134.12927	317.89	977122.62	-18.316	-20.981	-27.246
408559.4	7857689.5	-19.37289	134.12927	317.97	977122.62	-18.275	-20.941	-27.207
408559.4	7857664.5	-19.37311	134.12927	318.04	977122.62	-18.237	-20.904	-27.171
408559.4	7857639.5	-19.37334	134.12927	318.13	977122.56	-18.287	-20.954	-27.223
408559.4	7857614.5	-19.37357	134.12927	318.15	977122.56	-18.332	-21.000	-27.269
408559.4	7857589.5	-19.37379	134.12927	318.27	977122.50	-18.324	-20.993	-27.265
408559.4	7857564.5	-19.37402	134.12927	318.35	977122.50	-18.346	-21.016	-27.289
408559.4	7857539.5	-19.37424	134.12927	318.43	977122.44	-18.388	-21.058	-27.333
408559.4	7857514.5	-19.37447	134.12927	318.49	977122.37	-18.394	-21.065	-27.341
408559.4	7857489.5	-19.37469	134.12927	318.58	977122.37	-18.382	-21.053	-27.331
408559.4	7857464.5	-19.37492	134.12927	318.71	977122.31	-18.403	-21.075	-27.356
408559.4	7857439.5	-19.37515	134.12926	318.77	977122.31	-18.418	-21.091	-27.373
408559.4	7857414.5	-19.37537	134.12926	318.86	977122.25	-18.489	-21.163	-27.447
408559.4	7857389.5	-19.37560	134.12926	318.94	977122.19	-18.501	-21.175	-27.460
408559.4	7857364.5	-19.37582	134.12926	319.07	977122.06	-18.624	-21.299	-27.587
408559.4	7857339.5	-19.37605	134.12926	319.15	977122.06	-18.605	-21.281	-27.570
408559.4	7857314.5	-19.37628	134.12926	319.23	977121.81	-18.791	-21.468	-27.759
408559.4	7857289.5	-19.37650	134.12926	319.33	977121.87	-18.737	-21.414	-27.707
408559.4	7857264.5	-19.37673	134.12926	319.39	977121.81	-18.804	-21.482	-27.776
408559.4	7857239.5	-19.37695	134.12926	319.49	977121.81	-18.780	-21.459	-27.755
408559.4	7857214.5	-19.37718	134.12926	319.54	977121.75	-18.819	-21.498	-27.795
408559.4	7857189.5	-19.37741	134.12926	319.60	977121.69	-18.825	-21.505	-27.803
408559.4	7857164.5	-19.37763	134.12926	319.67	977121.62	-18.890	-21.571	-27.870
408559.4	7857139.5	-19.37786	134.12926	319.75	977121.62	-18.901	-21.583	-27.884
408559.4	7857114.5	-19.37808	134.12924	319.81	977121.69	-18.835	-21.517	-27.819
408559.4	7857089.5	-19.37831	134.12924	319.88	977121.62	-18.880	-21.562	-27.866
408559.4	7857064.5	-19.37854	134.12924	319.95	977121.56	-18.874	-21.557	-27.862
408559.4	7857039.5	-19.37876	134.12924	320.06	977121.56	-18.848	-21.531	-27.838
408559.4	7857014.5	-19.37899	134.12924	320.13	977121.62	-18.779	-21.463	-27.772
408559.4	7856989.5	-19.37921	134.12924	320.19	977121.56	-18.847	-21.532	-27.841
408559.4	7856964.5	-19.37944	134.12924	320.34	977121.56	-18.811	-21.498	-27.810
408559.4	7856939.5	-19.37967	134.12924	320.33	977121.56	-18.823	-21.509	-27.822
408559.4	7856914.5	-19.37989	134.12924	320.39	977121.56	-18.819	-21.506	-27.819
408559.4	7856889.5	-19.38012	134.12924	320.48	977121.56	-18.798	-21.485	-27.801
408559.4	7856864.5	-19.38034	134.12924	320.53	977121.56	-18.785	-21.473	-27.789
408559.4	7856839.5	-19.38057	134.12924	320.60	977121.62	-18.665	-21.354	-27.671
408559.4	7856814.5	-19.38079	134.12924	320.65	977121.62	-18.653	-21.342	-27.661
408559.4	7856789.5	-19.38102	134.12923	320.75	977121.62	-18.630	-21.320	-27.641
408559.4	7856764.5	-19.38125	134.12923	320.80	977121.56	-18.710	-21.400	-27.722
408479.4	7856744.5	-19.38124	134.12846	320.83	977121.50	-18.754	-21.444	-27.766
408479.4	7856789.5	-19.38102	134.12846	320.74	977121.56	-18.711	-21.400	-27.721
408479.4	7856814.5	-19.38079	134.12848	320.68	977121.56	-18.744	-21.433	-27.753
408479.4	7856839.5	-19.38057	134.12848	320.60	977121.62	-18.710	-21.398	-27.716
408479.4	7856864.5	-19.38034	134.12848	320.52	977121.56	-18.800	-21.487	-27.803
408479.4	7856889.5	-19.38011	134.12848	320.45	977121.62	-18.753	-21.440	-27.754
408479.4	7856914.5	-19.37989	134.12848	320.40	977121.62	-18.753	-21.439	-27.753
408479.4	7856939.5	-19.37966	134.12848	320.34	977121.69	-18.663	-21.349	-27.661
408479.4	7856964.5	-19.37943	134.12848	320.28	977121.69	-18.707	-21.392	-27.704

408479.4	7856989.5	-19.37921	134.12848	320.21	977121.75	-18.639	-21.324	-27.634
408479.4	7857014.5	-19.37898	134.12848	320.19	977121.81	-18.592	-21.277	-27.586
408479.4	7857039.5	-19.37876	134.12848	320.07	977121.87	-18.567	-21.251	-27.558
408479.4	7857064.5	-19.37853	134.12848	319.98	977121.94	-18.535	-21.218	-27.524
408479.4	7857089.5	-19.37831	134.12848	319.91	977121.94	-18.551	-21.233	-27.537
408479.4	7857114.5	-19.37808	134.12849	319.83	977121.94	-18.568	-21.250	-27.552
408479.4	7857139.5	-19.37785	134.12849	319.74	977122.00	-18.484	-21.165	-27.466
408639.4	7857164.5	-19.37764	134.13002	319.86	977121.62	-18.889	-21.572	-27.875
408639.4	7857139.5	-19.37786	134.13000	319.77	977121.62	-18.889	-21.570	-27.871
408639.4	7857114.5	-19.37809	134.13000	319.83	977121.62	-18.875	-21.557	-27.859
408639.4	7857089.5	-19.37831	134.13000	319.87	977121.69	-18.814	-21.497	-27.800
408639.4	7857064.5	-19.37854	134.13000	319.93	977121.69	-18.801	-21.483	-27.788
408639.4	7857039.5	-19.37877	134.13000	320.02	977121.62	-18.801	-21.485	-27.791
408639.4	7857014.5	-19.37899	134.13000	320.10	977121.62	-18.804	-21.488	-27.796
408639.4	7856989.5	-19.37922	134.13000	320.17	977121.69	-18.716	-21.400	-27.710
408639.4	7856964.5	-19.37944	134.13000	320.21	977121.62	-18.789	-21.474	-27.784
408639.4	7856939.5	-19.37967	134.13000	320.31	977121.69	-18.716	-21.402	-27.714
408639.4	7856914.5	-19.37989	134.13000	320.39	977121.69	-18.657	-21.343	-27.657
408639.4	7856889.5	-19.38012	134.13000	320.48	977121.69	-18.678	-21.365	-27.680
408639.4	7856864.5	-19.38035	134.13000	320.52	977121.62	-18.689	-21.377	-27.693
408639.4	7856839.5	-19.38057	134.13000	320.58	977121.56	-18.758	-21.447	-27.764
408639.4	7856814.5	-19.38080	134.12999	320.64	977121.56	-18.766	-21.455	-27.773
408639.4	7856789.5	-19.38102	134.12999	320.72	977121.19	-19.088	-21.778	-28.098
408639.4	7856764.5	-19.38125	134.12999	320.80	977121.44	-18.813	-21.503	-27.825
408719.4	7856764.5	-19.38125	134.13075	320.76	977121.37	-18.926	-21.616	-27.937
408719.4	7856789.5	-19.38103	134.13075	320.70	977121.44	-18.889	-21.578	-27.897
408719.4	7856814.5	-19.38080	134.13075	320.64	977121.37	-18.903	-21.591	-27.910
408719.4	7856839.5	-19.38058	134.13075	320.55	977121.44	-18.872	-21.560	-27.876
408719.4	7856864.5	-19.38035	134.13077	320.47	977121.56	-18.808	-21.495	-27.810
408719.4	7856889.5	-19.38012	134.13077	320.42	977121.50	-18.850	-21.537	-27.851
408719.4	7856914.5	-19.37990	134.13077	320.33	977121.56	-18.809	-21.495	-27.808
408719.4	7856939.5	-19.37967	134.13077	320.27	977121.56	-18.803	-21.489	-27.800
408719.4	7856964.5	-19.37945	134.13077	320.20	977121.69	-18.747	-21.432	-27.742
408719.4	7856989.5	-19.37922	134.13077	320.16	977121.69	-18.716	-21.400	-27.709
408719.4	7857014.5	-19.37899	134.13077	320.09	977121.75	-18.659	-21.344	-27.651
408719.4	7857039.5	-19.37877	134.13077	320.06	977121.69	-18.729	-21.413	-27.720
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.69	-18.795	-21.479	-27.784
408719.4	7857064.5	-19.37854	134.13077	320.01	977121.75	-18.691	-21.374	-27.680
408719.4	7857089.5	-19.37832	134.13077	319.96	977121.81	-18.672	-21.355	-27.660
408719.4	7857114.5	-19.37809	134.13077	319.90	977121.69	-18.759	-21.442	-27.746
408719.4	7857139.5	-19.37786	134.13077	319.87	977121.75	-18.746	-21.429	-27.732
408719.4	7857164.5	-19.37764	134.13077	319.78	977121.75	-18.727	-21.409	-27.710
408719.4	7857189.5	-19.37741	134.13078	319.71	977121.75	-18.786	-21.466	-27.767
408719.4	7857214.5	-19.37719	134.13078	319.64	977121.69	-18.833	-21.514	-27.812
408719.4	7857239.5	-19.37696	134.13078	319.56	977121.75	-18.822	-21.502	-27.799
408719.4	7857264.5	-19.37674	134.13078	319.49	977121.81	-18.766	-21.445	-27.741
408719.4	7857289.5	-19.37651	134.13078	319.44	977121.87	-18.699	-21.378	-27.672
408719.4	7857314.5	-19.37628	134.13078	319.31	977121.81	-18.782	-21.459	-27.751
408719.4	7857339.5	-19.37606	134.13078	319.22	977121.81	-18.803	-21.480	-27.771
408719.4	7857364.5	-19.37583	134.13078	319.11	977121.87	-18.778	-21.454	-27.742
408719.4	7857389.5	-19.37561	134.13078	319.01	977121.87	-18.782	-21.457	-27.743
408719.4	7857414.5	-19.37538	134.13078	318.93	977122.00	-18.718	-21.393	-27.677
408719.4	7857439.5	-19.37515	134.13078	318.82	977122.00	-18.724	-21.397	-27.680
408719.4	7857464.5	-19.37493	134.13078	318.74	977122.00	-18.764	-21.436	-27.717
408719.4	7857489.5	-19.37470	134.13078	318.66	977122.00	-18.732	-21.404	-27.684
408719.4	7857514.5	-19.37448	134.13080	318.57	977122.12	-18.651	-21.322	-27.600
408719.4	7857539.5	-19.37425	134.13080	318.32	977122.12	-18.678	-21.347	-27.620
408719.4	7857564.5	-19.37403	134.13080	318.46	977122.25	-18.576	-21.246	-27.522
408719.4	7857589.5	-19.37380	134.13080	318.37	977122.25	-18.598	-21.267	-27.541
408719.4	7857614.5	-19.37357	134.13080	318.33	977122.25	-18.588	-21.257	-27.530
408719.4	7857639.5	-19.37335	134.13080	318.24	977122.25	-18.579	-21.247	-27.518
408719.4	7857664.5	-19.37312	134.13080	318.20	977122.31	-18.569	-21.238	-27.508
408719.4	7857689.5	-19.37289	134.13080	318.09	977122.31	-18.564	-21.232	-27.500
408719.4	7857714.5	-19.37267	134.13080	317.99	977122.31	-18.589	-21.255	-27.521
408719.4	7857739.5	-19.37244	134.13080	317.93	977122.44	-18.500	-21.166	-27.431
408719.4	7857764.5	-19.37222	134.13080	317.87	977122.44	-18.464	-21.129	-27.393
408719.4	7857789.5	-19.37199	134.13080	317.78	977122.44	-18.538	-21.202	-27.464
408719.4	7857814.5	-19.37177	134.13080	317.70	977122.44	-18.506	-21.170	-27.430
408719.4	7857839.5	-19.37154	134.13081	317.60	977122.50	-18.479	-21.142	-27.400
408719.4	7857864.5	-19.37131	134.13081	317.51	977122.50	-18.500	-21.163	-27.420

408639.4	7857864.5	-19.37131	134.13005	317.44	977122.62	-18.416	-21.078	-27.333
408639.4	7857839.5	-19.37154	134.13005	317.52	977122.62	-18.400	-21.062	-27.319
408639.4	7857814.5	-19.37176	134.13005	317.61	977122.56	-18.432	-21.096	-27.354
408639.4	7857789.5	-19.37199	134.13004	317.71	977122.62	-18.360	-21.024	-27.285
408639.4	7857764.5	-19.37221	134.13004	317.78	977122.56	-18.398	-21.062	-27.324
408639.4	7857739.5	-19.37244	134.13004	317.87	977122.56	-18.390	-21.055	-27.319
408639.4	7857714.5	-19.37267	134.13004	317.94	977122.44	-18.468	-21.134	-27.399
408639.4	7857689.5	-19.37289	134.13004	318.02	977122.50	-18.401	-21.068	-27.335
408639.4	7857664.5	-19.37312	134.13004	318.10	977122.50	-18.383	-21.051	-27.319
408639.4	7857639.5	-19.37334	134.13004	318.20	977122.44	-18.435	-21.104	-27.374
408639.4	7857614.5	-19.37357	134.13004	318.27	977122.37	-18.453	-21.121	-27.393
408639.4	7857589.5	-19.37379	134.13004	318.34	977122.37	-18.479	-21.149	-27.422
408639.4	7857564.5	-19.37402	134.13004	318.44	977122.37	-18.417	-21.087	-27.362
408639.4	7857539.5	-19.37425	134.13004	318.47	977122.25	-18.567	-21.237	-27.513
408639.4	7857514.5	-19.37447	134.13004	318.52	977122.25	-18.506	-21.177	-27.454
408639.4	7857489.5	-19.37470	134.13004	318.61	977122.19	-18.590	-21.262	-27.541
408639.4	7857464.5	-19.37492	134.13002	318.69	977122.12	-18.626	-21.298	-27.578
408639.4	7857439.5	-19.37515	134.13002	318.78	977122.06	-18.659	-21.332	-27.614
408639.4	7857414.5	-19.37538	134.13002	318.88	977122.12	-18.586	-21.260	-27.544
408639.4	7857389.5	-19.37560	134.13002	318.96	977122.12	-18.580	-21.255	-27.540
408639.4	7857364.5	-19.37583	134.13002	319.08	977122.12	-18.554	-21.230	-27.518
408639.4	7857339.5	-19.37605	134.13002	319.16	977121.94	-18.683	-21.359	-27.648
408639.4	7857314.5	-19.37628	134.13002	319.26	977121.94	-18.712	-21.390	-27.681
408639.4	7857289.5	-19.37650	134.13002	319.37	977121.81	-18.793	-21.471	-27.764
408639.4	7857264.5	-19.37673	134.13002	319.47	977121.75	-18.833	-21.512	-27.807
408639.4	7857239.5	-19.37696	134.13002	319.53	977121.56	-19.017	-21.696	-27.993
408639.4	7857214.5	-19.37718	134.13002	319.60	977121.62	-18.909	-21.589	-27.887
408639.4	7857189.5	-19.37741	134.13002	319.69	977121.56	-18.932	-21.613	-27.912
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.69	-18.794	-21.477	-27.783
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.69	-18.796	-21.479	-27.785
408799.4	7857164.5	-19.37764	134.13153	319.83	977121.75	-18.731	-21.413	-27.716
408799.4	7857189.5	-19.37742	134.13153	319.72	977121.75	-18.787	-21.468	-27.768
408799.4	7857214.5	-19.37719	134.13155	319.62	977121.75	-18.788	-21.468	-27.766
408799.4	7857239.5	-19.37696	134.13155	319.56	977121.75	-18.781	-21.460	-27.758
408799.4	7857264.5	-19.37674	134.13155	319.53	977121.75	-18.829	-21.508	-27.804
408799.4	7857289.5	-19.37651	134.13155	319.44	977121.75	-18.849	-21.527	-27.822
408799.4	7857314.5	-19.37629	134.13155	319.36	977121.75	-18.825	-21.503	-27.796
408799.4	7857339.5	-19.37606	134.13155	319.27	977121.75	-18.887	-21.564	-27.855
408799.4	7857364.5	-19.37584	134.13155	319.17	977121.75	-18.867	-21.544	-27.833
408799.4	7857389.5	-19.37561	134.13155	319.06	977121.75	-18.933	-21.608	-27.896
408799.4	7857414.5	-19.37538	134.13155	318.95	977121.81	-18.906	-21.580	-27.865
408799.4	7857439.5	-19.37516	134.13155	318.87	977121.81	-18.893	-21.566	-27.850
408799.4	7857464.5	-19.37493	134.13155	318.78	977121.87	-18.840	-21.513	-27.795
408799.4	7857489.5	-19.37471	134.13155	318.73	977121.87	-18.851	-21.524	-27.805
408799.4	7857514.5	-19.37448	134.13155	318.64	977122.00	-18.768	-21.440	-27.719
408799.4	7857539.5	-19.37425	134.13156	318.58	977122.06	-18.688	-21.360	-27.638
408799.4	7857564.5	-19.37403	134.13156	318.51	977122.12	-18.693	-21.364	-27.640
408799.4	7857589.5	-19.37380	134.13156	318.45	977122.12	-18.706	-21.377	-27.652
408799.4	7857614.5	-19.37358	134.13156	318.35	977122.12	-18.677	-21.346	-27.620
408799.4	7857639.5	-19.37335	134.13156	318.29	977122.19	-18.680	-21.349	-27.621
408799.4	7857664.5	-19.37313	134.13156	318.19	977122.19	-18.681	-21.349	-27.619
408799.4	7857689.5	-19.37290	134.13156	318.12	977122.19	-18.676	-21.343	-27.612
408799.4	7857714.5	-19.37267	134.13156	318.03	977122.25	-18.665	-21.331	-27.598
408799.4	7857739.5	-19.37245	134.13156	317.96	977122.19	-18.710	-21.377	-27.642
408799.4	7857764.5	-19.37222	134.13156	317.90	977122.25	-18.672	-21.338	-27.602
408799.4	7857789.5	-19.37199	134.13156	317.81	977122.25	-18.723	-21.388	-27.651
408799.4	7857814.5	-19.37177	134.13156	317.71	977122.31	-18.652	-21.316	-27.577
408799.4	7857839.5	-19.37154	134.13156	317.63	977122.31	-18.680	-21.343	-27.603
408799.4	7857864.5	-19.37132	134.13158	317.56	977122.37	-18.654	-21.317	-27.574
408879.4	7857864.5	-19.37132	134.13232	317.57	977122.31	-18.713	-21.375	-27.633
408879.4	7857839.5	-19.37155	134.13232	317.67	977122.19	-18.772	-21.436	-27.696
408879.4	7857814.5	-19.37177	134.13232	317.77	977122.12	-18.801	-21.466	-27.728
408879.4	7857789.5	-19.37200	134.13232	317.84	977122.12	-18.816	-21.481	-27.744
408879.4	7857764.5	-19.37222	134.13232	317.92	977122.12	-18.787	-21.453	-27.718
408879.4	7857739.5	-19.37245	134.13232	318.00	977122.06	-18.810	-21.476	-27.743
408879.4	7857714.5	-19.37268	134.13232	318.05	977122.12	-18.788	-21.455	-27.722
408879.4	7857689.5	-19.37290	134.13232	318.15	977122.12	-18.765	-21.432	-27.702
408879.4	7857664.5	-19.37313	134.13232	318.22	977122.06	-18.800	-21.469	-27.739
408879.4	7857639.5	-19.37335	134.13232	318.32	977122.00	-18.808	-21.477	-27.750
408879.4	7857614.5	-19.37358	134.13232	318.41	977121.94	-18.849	-21.519	-27.794

408879.4	7857589.5	-19.37381	134.13232	318.47	977121.94	-18.856	-21.526	-27.802
408879.4	7857564.5	-19.37403	134.13232	318.54	977121.87	-18.891	-21.562	-27.839
408879.4	7857539.5	-19.37426	134.13231	318.62	977121.81	-18.934	-21.606	-27.885
408879.4	7857514.5	-19.37448	134.13231	318.69	977121.87	-18.856	-21.529	-27.809
408879.4	7857489.5	-19.37471	134.13231	318.74	977121.87	-18.886	-21.559	-27.840
408879.4	7857464.5	-19.37494	134.13231	318.79	977121.81	-18.925	-21.598	-27.880
408879.4	7857439.5	-19.37516	134.13231	318.85	977121.75	-18.963	-21.637	-27.920
408879.4	7857414.5	-19.37539	134.13231	318.94	977121.75	-18.943	-21.617	-27.902
408879.4	7857389.5	-19.37561	134.13231	319.02	977121.69	-18.976	-21.651	-27.937
408879.4	7857364.5	-19.37584	134.13231	319.10	977121.62	-19.008	-21.684	-27.972
408879.4	7857339.5	-19.37606	134.13231	319.19	977121.62	-19.009	-21.685	-27.975
408879.4	7857314.5	-19.37629	134.13231	319.29	977121.56	-19.068	-21.745	-28.037
408879.4	7857289.5	-19.37652	134.13231	319.37	977121.62	-18.998	-21.676	-27.970
408879.4	7857264.5	-19.37674	134.13231	319.47	977121.56	-19.027	-21.706	-28.001
408879.4	7857239.5	-19.37697	134.13231	319.58	977121.56	-18.961	-21.640	-27.938
408879.4	7857214.5	-19.37720	134.13229	319.67	977121.56	-18.960	-21.641	-27.940
408879.4	7857189.5	-19.37742	134.13229	319.74	977121.62	-18.862	-21.543	-27.843
408879.4	7857164.5	-19.37765	134.13229	319.86	977121.62	-18.834	-21.517	-27.820
408879.4	7857139.5	-19.37787	134.13229	319.90	977121.75	-18.753	-21.435	-27.739
408879.4	7857114.5	-19.37810	134.13229	319.95	977121.75	-18.710	-21.393	-27.698
408879.4	7857089.5	-19.37832	134.13229	319.98	977121.75	-18.724	-21.407	-27.712
408879.4	7857064.5	-19.37855	134.13229	320.02	977121.75	-18.673	-21.357	-27.663
408879.4	7857039.5	-19.37878	134.13229	320.02	977121.75	-18.694	-21.377	-27.683
408879.4	7857014.5	-19.37900	134.13229	320.03	977121.62	-18.794	-21.477	-27.784
408879.4	7856989.5	-19.37923	134.13229	320.07	977121.62	-18.785	-21.469	-27.776
408879.4	7856964.5	-19.37945	134.13229	320.11	977121.50	-18.899	-21.583	-27.891
408879.4	7856939.5	-19.37968	134.13229	320.18	977121.50	-18.914	-21.599	-27.908
408879.4	7856914.5	-19.37991	134.13229	320.23	977121.50	-18.923	-21.608	-27.919
408879.4	7856889.5	-19.38013	134.13228	320.29	977121.50	-18.910	-21.595	-27.907
408879.4	7856864.5	-19.38036	134.13228	320.35	977121.44	-18.948	-21.634	-27.947
408879.4	7856839.5	-19.38058	134.13228	320.46	977121.37	-19.005	-21.692	-28.007
408879.4	7856814.5	-19.38081	134.13228	320.60	977121.31	-18.994	-21.683	-28.000
408879.4	7856789.5	-19.38103	134.13228	320.69	977121.25	-19.025	-21.715	-28.034
408879.4	7856764.5	-19.38126	134.13228	320.78	977121.19	-19.088	-21.778	-28.099
408799.4	7856764.5	-19.38126	134.13152	320.77	977121.31	-18.987	-21.677	-27.998
408799.4	7856789.5	-19.38103	134.13152	320.67	977121.37	-18.958	-21.647	-27.966
408799.4	7856814.5	-19.38081	134.13152	320.58	977121.37	-18.947	-21.636	-27.953
408799.4	7856839.5	-19.38058	134.13152	320.50	977121.44	-18.924	-21.612	-27.927
408799.4	7856864.5	-19.38035	134.13152	320.43	977121.37	-18.950	-21.637	-27.952
408799.4	7856889.5	-19.38013	134.13153	320.35	977121.50	-18.896	-21.582	-27.895
408799.4	7856914.5	-19.37990	134.13153	320.27	977121.50	-18.894	-21.580	-27.891
408799.4	7856939.5	-19.37967	134.13153	320.25	977121.56	-18.816	-21.502	-27.813
408799.4	7856964.5	-19.37945	134.13153	320.18	977121.62	-18.791	-21.476	-27.785
408799.4	7856989.5	-19.37922	134.13153	320.15	977121.62	-18.767	-21.452	-27.760
408799.4	7857014.5	-19.37900	134.13153	320.09	977121.75	-18.678	-21.362	-27.669
408799.4	7857039.5	-19.37877	134.13153	320.06	977121.81	-18.654	-21.338	-27.645
408799.4	7857064.5	-19.37855	134.13153	320.01	977121.81	-18.645	-21.328	-27.634
408799.4	7857089.5	-19.37832	134.13153	319.98	977121.87	-18.601	-21.284	-27.589
408799.4	7857114.5	-19.37809	134.13153	319.93	977121.87	-18.612	-21.295	-27.599
408799.4	7857139.5	-19.37787	134.13153	319.89	977121.69	-18.776	-21.459	-27.762
409039.4	7857264.5	-19.37675	134.13382	319.39	977121.81	-18.789	-21.468	-27.761
409039.4	7857239.5	-19.37698	134.13382	319.50	977121.75	-18.797	-21.476	-27.772
409039.4	7857214.5	-19.37720	134.13382	319.59	977121.69	-18.850	-21.530	-27.828
409039.4	7857189.5	-19.37743	134.13382	319.68	977121.69	-18.811	-21.491	-27.791
409039.4	7857164.5	-19.37765	134.13382	319.74	977121.62	-18.881	-21.562	-27.863
409039.4	7857139.5	-19.37788	134.13382	319.80	977121.56	-18.961	-21.643	-27.945
409039.4	7857114.5	-19.37811	134.13382	319.86	977121.56	-18.948	-21.631	-27.934
409039.4	7857089.5	-19.37833	134.13382	319.92	977121.56	-18.926	-21.608	-27.913
409039.4	7857064.5	-19.37856	134.13382	319.96	977121.44	-19.031	-21.714	-28.019
409039.4	7857039.5	-19.37878	134.13382	320.02	977121.31	-19.122	-21.806	-28.112
409039.4	7857014.5	-19.37901	134.13382	320.03	977121.37	-19.080	-21.763	-28.070
409039.4	7856989.5	-19.37923	134.13382	320.06	977121.37	-19.064	-21.747	-28.054
409039.4	7856964.5	-19.37946	134.13382	320.12	977121.37	-19.052	-21.736	-28.044
409039.4	7856939.5	-19.37969	134.13380	320.22	977121.25	-19.133	-21.818	-28.129
409039.4	7856914.5	-19.37991	134.13380	320.28	977121.19	-19.172	-21.858	-28.169
409039.4	7856889.5	-19.38014	134.13380	320.36	977121.19	-19.165	-21.852	-28.165
409039.4	7856864.5	-19.38036	134.13380	320.46	977121.19	-19.165	-21.852	-28.167
409039.4	7856839.5	-19.38059	134.13380	320.56	977121.12	-19.216	-21.904	-28.221
409039.4	7856814.5	-19.38082	134.13380	320.61	977121.00	-19.309	-21.998	-28.316
409039.4	7856789.5	-19.38104	134.13380	320.67	977120.94	-19.369	-22.058	-28.377

409039.4	7856764.5	-19.38127	134.13380	320.75	977120.94	-19.353	-22.042	-28.363
408959.4	7856764.5	-19.38126	134.13304	320.72	977121.06	-19.241	-21.930	-28.250
408959.4	7856789.5	-19.38104	134.13304	320.64	977121.06	-19.229	-21.917	-28.236
408959.4	7856814.5	-19.38081	134.13304	320.59	977121.12	-19.179	-21.868	-28.185
408959.4	7856839.5	-19.38059	134.13304	320.55	977121.12	-19.180	-21.868	-28.184
408959.4	7856864.5	-19.38036	134.13304	320.49	977121.12	-19.195	-21.882	-28.198
408959.4	7856889.5	-19.38013	134.13304	320.38	977121.25	-19.139	-21.825	-28.138
408959.4	7856914.5	-19.37991	134.13304	320.27	977121.31	-19.063	-21.749	-28.060
408959.4	7856939.5	-19.37968	134.13306	320.21	977121.37	-19.036	-21.722	-28.031
408959.4	7856964.5	-19.37946	134.13306	320.15	977121.44	-19.000	-21.684	-27.993
408959.4	7856989.5	-19.37923	134.13306	320.07	977121.44	-18.989	-21.673	-27.980
408959.4	7857014.5	-19.37901	134.13306	320.03	977121.50	-18.948	-21.632	-27.938
408959.4	7857039.5	-19.37878	134.13306	320.02	977121.50	-18.932	-21.615	-27.921
408959.4	7857064.5	-19.37855	134.13306	320.00	977121.50	-18.958	-21.641	-27.947
408959.4	7857089.5	-19.37833	134.13306	319.96	977121.56	-18.929	-21.612	-27.917
408959.4	7857114.5	-19.37810	134.13306	319.94	977121.62	-18.844	-21.526	-27.831
408959.4	7857139.5	-19.37788	134.13306	319.87	977121.62	-18.861	-21.543	-27.846
408959.4	7857164.5	-19.37765	134.13306	319.81	977121.62	-18.856	-21.537	-27.839
408959.4	7857189.5	-19.37742	134.13306	319.72	977121.69	-18.846	-21.527	-27.828
408959.4	7857214.5	-19.37720	134.13306	319.66	977121.56	-18.945	-21.625	-27.924
408959.4	7857239.5	-19.37697	134.13306	319.56	977121.62	-18.918	-21.597	-27.895
408959.4	7857264.5	-19.37675	134.13307	319.47	977121.56	-18.992	-21.671	-27.966
408959.4	7857289.5	-19.37652	134.13307	319.35	977121.50	-19.073	-21.751	-28.044
408959.4	7857314.5	-19.37630	134.13307	319.26	977121.62	-18.993	-21.670	-27.961
408959.4	7857339.5	-19.37607	134.13307	319.15	977121.56	-19.071	-21.747	-28.036
408959.4	7857364.5	-19.37584	134.13307	319.10	977121.69	-18.982	-21.658	-27.946
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.69	-18.789	-21.473	-27.778
409039.4	7857289.5	-19.37652	134.13383	319.29	977121.69	-18.925	-21.602	-27.894
409039.4	7857314.5	-19.37630	134.13383	319.19	977121.69	-18.960	-21.636	-27.926
409039.4	7857339.5	-19.37607	134.13383	319.09	977121.75	-18.922	-21.597	-27.885
409039.4	7857364.5	-19.37585	134.13383	319.00	977121.69	-18.995	-21.670	-27.956
409039.4	7857389.5	-19.37562	134.13383	318.91	977121.75	-18.935	-21.609	-27.893
409039.4	7857414.5	-19.37539	134.13383	318.84	977121.69	-19.013	-21.686	-27.969
409039.4	7857439.5	-19.37517	134.13383	318.76	977121.75	-18.961	-21.633	-27.915
409039.4	7857464.5	-19.37494	134.13383	318.71	977121.87	-18.870	-21.542	-27.823
409039.4	7857489.5	-19.37472	134.13383	318.62	977121.87	-18.871	-21.543	-27.821
409039.4	7857514.5	-19.37449	134.13383	318.58	977121.87	-18.882	-21.553	-27.831
409039.4	7857539.5	-19.37427	134.13383	318.49	977121.87	-18.924	-21.595	-27.871
409039.4	7857564.5	-19.37404	134.13383	318.41	977121.87	-18.923	-21.593	-27.867
409039.4	7857589.5	-19.37381	134.13383	318.37	977121.94	-18.912	-21.582	-27.856
409039.4	7857614.5	-19.37359	134.13385	318.31	977121.87	-18.948	-21.618	-27.890
409039.4	7857639.5	-19.37336	134.13385	318.26	977121.94	-18.930	-21.599	-27.871
409039.4	7857664.5	-19.37313	134.13385	318.16	977122.00	-18.862	-21.530	-27.799
409039.4	7857689.5	-19.37291	134.13385	318.11	977121.94	-18.916	-21.583	-27.852
409039.4	7857714.5	-19.37268	134.13385	318.07	977122.00	-18.864	-21.531	-27.799
409039.4	7857739.5	-19.37246	134.13385	317.98	977122.00	-18.928	-21.594	-27.860
409039.4	7857764.5	-19.37223	134.13385	317.90	977122.00	-18.947	-21.612	-27.877
409039.4	7857789.5	-19.37201	134.13385	317.81	977122.00	-18.917	-21.582	-27.845
409039.4	7857814.5	-19.37178	134.13385	317.72	977122.06	-18.898	-21.562	-27.823
409039.4	7857839.5	-19.37155	134.13385	317.63	977122.12	-18.858	-21.521	-27.780
409039.4	7857864.5	-19.37133	134.13385	317.51	977122.12	-18.886	-21.549	-27.805
408959.4	7857864.5	-19.37132	134.13309	317.50	977122.12	-18.890	-21.553	-27.809
408959.4	7857839.5	-19.37155	134.13309	317.59	977122.00	-18.974	-21.638	-27.896
408959.4	7857814.5	-19.37178	134.13309	317.71	977121.94	-19.001	-21.665	-27.926
408959.4	7857789.5	-19.37200	134.13309	317.79	977122.00	-18.933	-21.598	-27.860
408959.4	7857764.5	-19.37223	134.13309	317.89	977121.94	-18.964	-21.629	-27.894
408959.4	7857739.5	-19.37245	134.13309	317.96	977121.87	-19.052	-21.718	-27.983
408959.4	7857714.5	-19.37268	134.13309	318.03	977121.87	-18.997	-21.664	-27.931
408959.4	7857689.5	-19.37291	134.13309	318.10	977121.87	-19.023	-21.690	-27.959
408959.4	7857664.5	-19.37313	134.13309	318.17	977121.87	-19.009	-21.677	-27.947
408959.4	7857639.5	-19.37336	134.13309	318.25	977121.69	-19.148	-21.816	-28.088
408959.4	7857614.5	-19.37358	134.13309	318.34	977121.75	-19.056	-21.726	-27.999
408959.4	7857589.5	-19.37381	134.13309	318.44	977121.69	-19.128	-21.798	-28.073
408959.4	7857564.5	-19.37403	134.13307	318.52	977121.69	-19.091	-21.762	-28.038
408959.4	7857539.5	-19.37426	134.13307	318.59	977121.69	-19.076	-21.748	-28.026
408959.4	7857514.5	-19.37449	134.13307	318.65	977121.69	-19.064	-21.736	-28.016
408959.4	7857489.5	-19.37471	134.13307	318.71	977121.75	-19.000	-21.673	-27.953
408959.4	7857464.5	-19.37494	134.13307	318.77	977121.75	-18.988	-21.661	-27.943
408959.4	7857439.5	-19.37516	134.13307	318.82	977121.69	-19.050	-21.723	-28.006
408959.4	7857414.5	-19.37539	134.13307	318.90	977121.75	-18.940	-21.614	-27.899

408959.4	7857389.5	-19.37562	134.13307	318.98	977121.69	-19.017	-21.691	-27.977
408657.4	7857036.5	-19.37879	134.13017	320.00	977121.69	-18.791	-21.475	-27.780
408159.0	7854742.0	-19.39950	134.12532	316.03	*****	-23.938	-26.588	-32.816
408151.0	7855508.0	-19.39258	134.12529	325.08	*****	-19.759	-22.485	-28.891
408171.0	7856509.0	-19.38354	134.12552	311.20	*****	-20.970	-23.580	-29.712
407911.0	7857963.0	-19.37039	134.12312	302.27	*****	-20.847	-23.381	-29.338
408893.0	7854743.0	-19.39953	134.13231	315.13	*****	-24.925	-27.567	-33.777
406666.0	7854788.0	-19.39902	134.11110	318.35	*****	-23.757	-26.427	-32.700
405797.0	7854990.0	-19.39715	134.10284	332.33	*****	-20.930	-23.716	-30.265

APPENDIX 4

DRILL LOG AND DOWN HOLE MAGNETICS:

P17P-1

DRILLING RECORD

Hole No. P17P-1PROJECT NT28TITLE BLACK ANGELLOCATION P17COLLAR CO-ORDS 4900N 5090E COLLAR R.L. _____BEARING AT COLLAR 266° grid W mag _____ true _____DIP AT COLLAR -75° TOTAL DEPTH 280mOBJECT OF HOLE To intersect a magnetic target at a vertical depth of 240mREMARKS No alteration or ironstone intersected, magnetic sediments intersected at B.O.H. Hole drilled subparallel to lithological strike

BOREHOLE SURVEYS

METHOD

depth (m)	bearing		dip (degrees)
	(mag)	(grid)	
24	IN Rod		74°
48	"		73.5°
72	"		72°
96	"		71°
120	"		70°
144	"		68.5°
168	"		66°
192	"		64°
216	"		63°
240	"		60.25°
264	"		59°

DRILLING RIG

RCD-150

OPERATOR

GOMEX (Gomer Dier)

DATE STARTED

29/6/90

DATE COMPLETED

2/7/90

CORE SIZES.

RC Hammer 0-280m

WEDGES PLACED

SUMMARY OF RESULTS

from	to	length	geological description
0	1	1	clays, soil, sand, gravel
1	36	35	pale brown, beige, or clays + very minor str. weath Pst+Pst
36	75	39	strongly oxidised (hematitic) Pst and Esp, tr Pxi/Psi
75	106	31	as above but less oxidised.
106	118	12	very slightly oxidised Pst and Esp
118	280	162	fresh grey, or brownish Pst and Esp, tr Pavp, Pat

mineralisation									

LOGGED BY S. Mather

DATE _____



Newmont Australia Limited

DRILL LOG

DATE 29/6/90

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HOLE No: P17P-1

4900 GN 5090 GE

PROJECT NT 2P

AZIMUTH 270°

DRILL RIG RCD-150

PROSPECT P17

DECLINATION -75°W

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE MASS WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	AAS Au g/t	SAMPLE N°	AAS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm	
0	1	RD BR	EW	CZ	sg				rd brn clys, sand, soil & gravel	75	H										
	2	BE	EW	P	st				lt brn/beige clys + minor str weath Pst?	25		0-4	0.01								
	3	BE	EW	P	st		s		ala, tr qv	10		0-4	0.01								
	4	BE	EW	P	st		h		lt brn/beige clys + minor lt brn/rdsh Pst?	20		0-4	0.01	0-4	X	<1	17	6	13	<10	
	5	BE	EW	P	st		h		ala, + silcrete (minor)	10		4-8	0.01								
	6	PK BR	EW	P	st		h		lt pk brn clys + Pst ala, rdsh, minor silc	10		4-8	0.01								
	7	PK BR	EW	P	st		h		ala, v pale or pk brn clys + Pst, silc	10		4-8	0.01								
	8	BR	EW	P	st		h		lt brn/beige clys + minor rdbrn Pst	10		4-8	0.01	4-8	X	<1	10	<4	11	<10	
	9	BE	EW	P	st		th, s		clys ala, v. minor lt brn, rdsh Pst, tr silcrete, tr qv	10		8-12	0.01								
	10	BE	EW	P	st		s		ala	20		8-12	0.01								
	11	BE	EW	P	st		s		ala, tr qv, tr Pst / silc	15		8-12	0.01								
	12	BE	EW	P	st		s		ala	20		8-12	0.01	8-12	X	<1	7	<4	19	<10	
	13	RE	EW	P	st		s		beige clys + tr be Pst, tr qv/perovsil alt	15		12-16	0.01								
	14	PK BR	EW	P	st		th		v lt pk brn clys + tr sl hem Pst?, v str weath	15		12-16	0.01								
	15	PK BR	EW	P	st		th		ala	15		12-16	0.01								
	16	LT BR	EW	P	st				v lt yell/pk brn clys + tr sl hem Pst?, v str weath	15		12-16	0.01	12-16	X	<1	7	<4	18	<10	
	17	BE	EW	P	st		s		ala but beige clys, tr qv	20		16-20	0.01								
	18	BE	EW	P	st		s		ala	25		16-20	0.01								
	19	BE	EW	P	st		s		ala but rare qv	20		16-20	0.01								
	20	PK BR	EW	P	st		th, s		ala but v lt pk brn clys, tr hem	20		16-20	0.01	16-20	X	<1	11	<4	23	<10	
	21	PK BR	EW	P	st		h		lt pk brn clys + v minor hem Pst	15		20-24	0.01								
	22	LT BR	EW	P	st	Pst?	s, ti		lt brn clys + v min lt brn Pst, v min - tr qv, tr Pst?	20		20-24	0.01								
	23	LT BR	EW	P	st		s		lt brn clys + v min lt brn, th Pst, tr qv	20		20-24	0.01								
23	24	LT BR	EW	P	st		s		ala	20		20-24	0.01	20-24	X	<1	8	<4	22	<10	

4.45

5.10

TIME STARTED 8.00

FINISHED 8.25

ASSAY LAB CLASSIC

P/O NM/637



Newmont Australia Limited

DRILL LOG

DATE 30/6/96

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PROJECT NT 28

AZIMUTH 270°

DRILL RIG RCB-150

HOLE N°: P17P-1

4900 E N

5090 G E

PROSPECT P17

DECLINATION -75°W

GEOLOGIST JM

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MANU. SAMPLE NO. (kg)	BIT TYPE	COMPOSITE SAMPLE N°	AAS Au g/t	SAMPLE N°	AAS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
24	25	B E	E W	P s t	P x i ?	s i ?		lt brn clys, min lt brn Pst, tr qv/Pxi?	25	H									
	26	B E	E W	P s t				be/lt brn clys, v minor lt brn Pst/Pst?	20										
	27	B E	E W	P s t				ala, Pst sl more abun	30										
	28	B E	E W	P s t	P x i ?	± i		ala + tr Pxi? v f veinlets	30				24-28	X	<1	19	<4	15	<10
	29	B K	E W	P s t	P x i ?	± h		ala but Pk brn clys	30										
	30	B K	E W	P s t	P x i	h		ala	20										
	31	B R	E W	P s t		h		lt or rd brn clys + minor hem Pst	25										
	32	B R	E W	P s t	P x i	h, i		ala + tr Pxi veinlets	25				28-32	X	<1	16	8	26	<10
	33	B R	E W	P s t	P x i	h, ± i		ala but only nil-rare Pxi	30										
	34	B R	E W	P s t		± h		lt rdsh brn clys + v minor or rd brn Pst	20										
	35	B T	E W	P s t	P s p	s i ?		ala + tr lt gry Esp, tr Pxi?/qv, lt brn clys	25										
	36	B R	E W	P s t	P x i	h, i		lt or rd brn clys + v min hem Pst, tr Pxi	25				32-36	X	<1	9	<4	15	<10
	37	B R	E W	P s t	P s p	h, i		ala, Pxi rare, minor lt gry Esp	35										
	38	B R	E W	P s t	P x i	h, i		lt or rd brn clys, + lt or rd brn Pst, tr Pxi	35										
	39	B R	H W	P s t	P s p	h		lt or rd brn clys + mass or rd brn Pst, + sbfiss lt brn Esp	35										
	40	B R	H W	P s t	P x i	h, i		ala + tr Pxi/Psi, v minor sbfiss Esp	25				36-40	X	<1	18	4	30	<10
	41	B R	H W	P s t	P s p	h, i		rd brn mass Pst, mod sbfiss gry brn Esp, tr Pxi	40										
	42	B R	H W	P s t	P x i	h, i		ala, less Esp, minor Psi/Pxi	40										
	43	B R	H W	P s t	P s p	h, i		rd brn mass Pst, min sbfiss Esp, tr Pxi	40										
	44	B R	H W	P s t	P x i	h, i		ala but less Esp, minor Pxi/Psi	30				40-44	X	3	119	94	185	18
	45	B R	H W	P s t	P x i	h, i		rd or brn mass Pst, tr Esp, tr-r Pxi/Psi	25										
	46	B R	H W	P s t	P s p	h, i		rd brn mass - sbfiss Pst/Psp, tr-r Psi/Pxi	25										
	47	B R	H W	P s t	P s p	h		ala, + lt gry sbfiss - fiss Esp, no Pxi	30										
47	48	B R	H W	P s t	P s p	h		ala	35				44-48	X	2	116	108	195	11

TIME STARTED 8.25

FINISHED 9.10

ASSAY LAB CLASSIC P/O N° NT 1637



Newmont Australia Limited

DRILL LOG

DATE 30/6/90

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PROJECT NT 2P

AZIMUTH 270°

DRILL RIG RCD-150

HOLE N°: P17P-1

4900 G N

5040 G E

PROSPECT P17

DECLINATION -75°W

GEOLOGIST JM

DEPTH		LITHOLOGICAL DESCRIPTION								SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAFIC SAMPLE WEIGHT %	BIT TYPE	COMPOSITE SAMPLE N°	ANAL. Au g/t	SAMPLE N°	ANAL. Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
48	49	DR BR	HW	Pst	Psp	h		rd brn sbfiss - mass Pst + lt gry Pu sbfiss-fiss Psp	35	H									
	50	DR BR	HW	Pst	Psp	h		ala, + tr v lt greenish Pat? fiss	35										
	51	DR BR	HW	Pst	Psp	h		rd brn Pst ala, + lt gry Psp ala	30										
	52	DR BR	HW	Pst	Psp	sh, i		rd brn mass Pst, tr Psp ala, tr qv, tr v f Pxi vnlts	35		48-52	X	<1	20	<4	29	10		
	53	DR BR	HW	Pst	Psp	h		rd brn sbfiss Pst/Psp + lt gry, mod fresh Pst/Psp	50										
	54	DR BR	HW	Pst	Psp	h, i		ala, less lt gry Pst/Psp, tr v f Pxi/Psi vnlts	40										
	55	DR BR	HW	Pst	Psp	h, i		pu brn sbfiss Psp/Pst, tr Pxi/Psi ala	40										
	56	DR BR	HW	Pst	Psp	h, i		ala + rd brn Pst, tr Pxi/Psi	40		52-56	X	<1	26	15	46	12		
	57	DR BR	HW	Pst	Psp	h		pu brn, grysh & rd brn sbfiss Psp/Pst	25										
	58	DR BR	HW	Pst	Psp	h, i		ala + tr Pxi/Psi	40										
	59	DR BR	HW	Pst	Psp	h, i		ala, tr Pxi/Psi	50										
	60	DR BR	HW	Pst	Psp	h, i		ala, mil-rare Pxi/Psi	45		56-60	X	<1	15	4	28	13		
	61	DR BR	HW	Pst	Psp	h		rd brn mass Pst + lt gry Psp, sbfiss	50										
	62	DR BR	HW	Pst	Psp	h		rd pu brn, min lt gry, sbfiss-mass Pst/Psp	50										
	63	DR BR	HW	Pst	Psp	h, i		ala, + tr lt gry fiss Psp, tr Pxi/Psi	35										
	64	DR BR	HW	Pst	Psp	h, i		ala	30		60-64	X	<1	25	25	51	11		
	65	DR BR	HW	Pst	Psp	h		lt pu gry sbfiss Pst/Psp + rd brn mass Pst	25										
	66	DR BR	HW	Pst	Psp	h, i		ala + tr Pxi/Psi, tr v lt greenish Pat?	35										
	67	DR BR	HW	Pst	Psp	h		rd brn mass Pst + pu Pst/Psp sbfiss	35										
	68	DR BR	HW	Pst	Psp	h, i		ala, tr Pxi/Psi	25		64-68	X	<1	6	<4	21	10		
	69	DR BR	HW	Pst	Psp	h		ala, no Pxi/Psi	45										
	70	DR BR	HW	Pst	Psp	h, i		ala, tr v f Pxi/Psi vnlts	45										
	71	DR BR	HW	Pst	Psp	h, i		ala	30										
71	72	DR BR	HW	Pst	Psp	h, s, i		ala, mod abun mass fg Pxi, tr qv	35		68-72	X	<1	6	6	26	<10		

TIME STARTED 9.10

FINISHED 10.10

ASSAY LAB CLASSIC

P/O N° NT 1637



Newmont Australia Limited

DRILL LOG

DATE 30/6/90

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HOLE N°: P17P-1

4900 G N 5090 G E

PROJECT NT 2P

PROSPECT P17

AZIMUTH 270°

DECLINATION -75°W

DRILL RIG RCD-150

GEOLOGIST JM

DEPTH		LITHOLOGICAL DESCRIPTION								SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG. WEIGHT SAMPLE FUSL	BIT TYPE	COMPOSITE SAMPLE N°	AAS Au g/t	SAMPLE N°	AAS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
72	73	BR	HW	Pst	Psp	h		rd brn mass Pst, tr purgry Psp, sbfiss, tr lat?	30	H	72-76								
	74	BR	HW	Pst	Psp	h		ala, no lat	35										
	75	BR	HW	Pst	Psp	h, si		ala, tr qx, tr Pxi/Psi	30										
	76	BR	MW	Pst	Psp	h		pu rd brn & lt-med gry (fresher) Psp/Pst, sbfiss	20			72-76	X	<1	4	<4	30	<10	
	77	BR	MW	Pst	Psp	±h		ala but less purd, gryer, sbfiss	25		76-80								
	78	BR	MW	Pst	Psp	h, i		pu gry brn sbfiss Psp/Pst, tr Pxi/Psi	25										
	79	BR	MW	Pst	Pxi	h, i		ala, sl more (miner) Pxi/Psi	20										
	80	BR	MW	Pst	Pxi	h, i		rd brn mass & gry sbfiss Pst/Psp, 2/1 Pxi/Psi	35			76-80	X	<1	4	<4	24	<10	
	81	BR	MW	Pst	Pxi	h, i		ala but tr Pxi/Psi	25		80-84								
	82	BR	MW	Pst	Psp	h		pu rd brn Pst/Psp, mingry, no Pxi/Psi	25										
	83	BR	MW	Pst	Psp	h		ala	35										
	84	BR	MW	Pst	Psp	h		pu gry, & rd brn Pst/Psp, sbfiss	35			80-84	X	<1	3	<4	21	10	
	85	BR	MW	Pst	Psp	h, s, ±i		ala, tr qx, tr Pxi?	55		84-88								
	86	BR	MW	Pst	Psp	h, s		ala	45										
	87	BR	MW	Pst	Psp	h		ala but sl less oxid, no qx	35										
	88	BR	MW	Pst	Psp	h		pu rd brn, min pu gry mass-sbfiss Psp/Pst	35			84-88	X	<1	17	10	37	<10	
	89	BR	MW	Pst	Pxi	h, i		pu gry & pu rd brn sbfiss Psp/Pst, tr Pxi/Psi	40		88-92								
	90	BR	MW	Pst	Pxi	h		ala	50										
	91	BR	MW	Pst	Psp	h, ±i		ala, nil-r Pxi/Psi	50										
	92	BR	MW	Pst	Psp	h		lt gry & pu rd brn sbfiss Pst/Psp	45			88-92	X	<1	5	<4	23	11	
	93	BR	MW	Pst	Psp	h		ala, + minor fiss sl yellsh gry Psp/Pst	45		92-96								
	94	BR	MW	Pst	Psp	h		ala	40										
	95	BR	MW	Pst	Pxi	h, ±i		ala, tr Pxi/Pxi	45										
95	96	BR	MW	Pst	Psp	h		pu gry, min rd brn fiss-sbfiss Pst/Psp	40			92-96	X	<1	6	<4	42	<10	

TIME STARTED 10.10

FINISHED 10.55

ASSAY LAB CLASSIC

P/O N° NT 1637



Newmont Australia Limited

DRILL LOG

DATE 30/6/90

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PROJECT NT 28

AZIMUTH 270°

DRILL RIG RCD-150

HOLE No: P17P-1

4900 G N 5090 G E

PROSPECT P17

DECLINATION - 75°W

GEOLOGIST JM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAG. SAMPLE WEIGHT (g)	BIT TYPE	COMPOSITE SAMPLE No	ANAL. Au g/t	SAMPLE No	ANAL. Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
96	97	BR	HW	Pst	/	Psp		h		rd pubrn & pugry mass - sbfiss Pst/Psp	45	H									
	97	BR	HW	Pst	/	Psp		h		ala + lt greenish gry fss Psp/Pst	35										
	99	BR	MW	Pst	/	Psp		h		rd pubrn & lt pugry, min greenish sbfiss Pst/Psp	35										
	100	BR	MW	Pst	/p	Px/si		h, i		ala, tr vf Pxi/Psi vnlts / frac fill	40		96-100		96-100	X	<1	21	44	44	11
	101	BR	MW	Pst	/	Psp		h		rd brn & pugry Pst/Psp, sbfiss, tr lt gnsh Psp	55										
	102	BR	MW	Pst	/	Psp		th, s		pugry & lt gry Psp/Pst, sbfiss, tr gnsh ala/gry	55										
	103	BR	MW	Pst	/	Psp		th, s		ala, tr med gry/gn Pst?	55										
	104	BR	MW	Pst	/	Psp		th, i		ala, tr Pxi/Psi, no Pst, no qv	45		100-104		100-104	X	<1	15	44	32	10
	105	BR	MW	Pst	/p	Px/si		th, si		med pu gry & gry Psp/Pst, mass, tr qv, tr Pxi/Psi	50										
	106	BR	MW	Pst	/	Psp		th		pu gry & rd pu gry & gnsh gry sbfiss Psp/Pst	45										
	107	BR	SW	Pst	/	Psp				ala but much less oxid/hem, pred lt greenish gry	65										
	108	BR	SW	Pst		Psp				min pu gry, Pst ala, + predom med gry & gnsh gry mass Pst	60		104-108		104-108	X	<1	19	44	33	12
	109	BR	SW	Pst	/	Psp				lt-med grey, sl greenish mass - sbfiss Pst/Psp	95										
	110	BR	SW	Pst	/	Psp				ala	85										
	111	BR	SW	Pst	/	Psp				ala	70										
	112	BR	SW	Pst	/	Psp				ala but w/ min rd pugry Pst/Psp	60		108-112		108-112	X	<1	32	23	70	13
	113	BR	SW	Pst	/	Psp				ala	85										
	114	BR	SW	Pst	/	Psp				lt-med gry, mass, sl oxid i/p Pst/Psp	200										
	115	BR	SW	Pst	/	Psp				ala + tr fss Psp	70										
	116	BR	SW	Pst						ala + fresher, v sl fss Pst, no Psp	180		112-116		112-116	X	<1	8	44	37	11
	117	BR	SW	Pst		Psp				ala but more oxid, + tr fss Psp	95										
	118	BR	SW	Pst						pugry Pst, mass	35										
	119	BR	SW	Pst						lt-med gry, v sl oxid i/p Pst, mass	80										
119	120	BR	SW	Pst						ala	80		116-120		116-120	X	<1	11	44	38	13

TIME STARTED 10.55

FINISHED 12.20

ASSAY LAB CLASSIC

P/O No NT 1637



Newmont Australia Limited

DRILL LOG

DATE 30/6/90

PAGE No 6/12

HOLE No: P17P-1

4900 G N 5090 G E

PROJECT NT 28

AZIMUTH 270°

DRILL RIG RCD-150

PROSPECT P17

DECLINATION -75° W

GEOLOGIST JM

DEPTH		LITHOLOGICAL DESCRIPTION								SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG. GRAIN SIZE (mm)	BIT TYPE	COMPOSITE SAMPLE NO	MAG. AU g/t	SAMPLE NO	MAG. AU g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
120	121	LT GR	SW	Pst	Psp			lt-med gry, tr oxid, mass Pst, tr lt gry fiss Psp	75	H									
	122	GR	F	Pst				med gry, fresh, mass (sb fiss) Pst	95										
	123	GR	SW	Pst				ala, tr qv, tr oxid i/p	90										
	124	GR	SW	Pst	Psp			ala, t minor vsl brush fiss Psp	90				120-124	X	<1	11	<4	33	13
	125	GR	F	Pst		m		minor ala, t abundant dk gry, mass Pst, mag	600										
	126	GR	F	Pst		j, m		med gry mass Pst, minor lt brush gry Pst, tr vjasp	750										
	127	GR	SW	Pst				ala, tr oxid, sb fiss, no jasp vults	90										
	128	GR	F	Pst				med brush gry sb fiss-mass Pst	90				124-128	X	<1	11	<4	31	12
	129	GR	SW	Pst				ala, sl oxid, predom sb fiss	85										
	130	GR	SW	Pst	Psp	s		ala, sl oxid, 2-27% qv, sb fiss-fiss, tr jasp?	75										
	131	GR	SW	Pst				med grysh brn sb fiss-mass Pst	65										
	132	GR	SW	Pst				med (brnsh) gry sb fiss Pst	75				128-132	X	<1	5	<4	27	<10
	133	GR	SW	Pst				ala, sl oxid	75										
	134	GR	SW	Pst		s		ala t 1-2% qv	95										
	135	GR	SW	Pst				med gry, sl brn; sl greenish i/p, mass-sb fiss Pst	75										
	136	GR	F	Pst	Psp			med-dk gry sb fiss Pst + lt sl greenish fiss Psp	90				132-136	X	<1	6	<4	28	<10
	137	GR	SW	Pst				sl oxid, brn gry sb fiss Pst	70										
	138	GR	F	Pst	Psp			med-dk gry mass-sb fiss Pst + lt brn gry fiss Psp	75										
	139	GR	F	Pst	Psp			ala, Pst more fiss, Psp less fiss-sb fiss-fiss	70										
	140	GR	F	Pst	Psp			mass-sb fiss med gry Pst + Psp, tr oxid	75				136-140	X	<1	7	<4	31	11
	141	GR	SW	Pst	Psp	s		sl oxid ala, tr qv	75										
	142	GR	F	Pst	Psp			lt-med brush gry, sb fiss-mass, Psp/Pst	40										
	143	GR	F	Pst	Psp	s, j		ala, tr qv, tr jasp (assoc w/ qv), wet	80										
143	144	GR	F	Pst	Psp	j		lt-med gry sb fiss Psp/Pst, tr jasp vults	80				140-144	X	<1	6	<4	30	<10

TIME STARTED 12.20

FINISHED 3.15

ASSAY LAB CLASSIC

P/O No NT 1637



Newmont Australia Limited

DRILL LOG

DATE 30/6/190

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HOLE N°: P17P-1

4900 G N 5090 G E

PROJECT NT 28

PROSPECT P17

AZIMUTH 270°

DECLINATION -75° W

DRILL RIG RCB-150

GEOLOGIST J.M.

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAG. GRAIN SIZE	BIT TYPE	COMPOSITE SAMPLE N°	AMS Au g/t	SAMPLE N°	AMS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
144	145	GR	F	Pst	Pst	Pst	Pst			lt-med brnsh gry sbfiss Pst/Pst, ± jasp, wet	90	H									
	146	GR	F	Pst	Pst	Pst	Pst	m		med gry sbfiss Pst/Pst, sl oxid frags i/p	570										
	147	GR	F	Pst	Pst	Pst	Pst	m, tch		ala, v sl greenish, poss wk dissem chl, wet	500										
	148	GR	F	Pst	Pst	Pst	Pst	m, tch		med greenish gry sbfiss Pst/Pst, mag, wet	490				144-148	X	<1	11	<4	28	13
	149	GR	F	Pst	Pst	Pst	Pst	m		ala, sl more fiss, tr oxid frags, wet, mag	750										
	150	GR	F	Pst	Pst	Pst	Pst	m		ala, but sbfiss, wet, mag	400										
	151	GR	F	Pst	Pst	Pst	Pst	±m		med, sl greenish gry Pst/Pst, sbfiss, wet	300										
	152	GR	F	Pst	Pst	Pst	Pst	±m		ala, wet	300				148-152	X	<1	6	<4	28	11
	153	GR	F	Pst	Pst	Pst	Pst	m		med gry, sbfiss Pst/Pst, mag, wet	900										
	154	GR	F	Pst	Pst	Pst	Pst	m		ala, but v sl brnsh, tr oxid frags, wet, mag	550										
	155	GR	F	Pst	Pst	Pst	Pst	m		dry, ala, mag, not split	600										
	156	GR	F	Pst	Pst	Pst	Pst	m		dry, med gry sbfiss Pst, mag, not split	500				152-156	X	<1	5	<4	29	11
	157	GR	F	Pst	Pst	Pst	Pst	m		dry, ala, sl mass i/p, minor Pst, mag, n.s.	650										
	158	GR	F	Pst	Pst	Pst	Pst	m		ala, dry, mag, not split	850										
	159	GR	F	Pst	Pst	Pst	Pst	m		med gry, mass - sbfiss Pst, not split	800										
	160	GR	F	Pst	Pst	Pst	Pst			med gry & brnsh gry sbfiss - fiss Pst/Pst, dry	190				156-160	X	<1	<2	<4	23	11
	161	GR	F	Pst	Pst	Pst	Pst			ala but fissile, wet	55										
	162	GR	F	Pst	Pst	Pst	Pst			ala, sl greenish i/p, wet, sl less brown, wet	60										
	163	GR	F	Pst	Pst	Pst	Pst			med gry mass Pst + lt-med brn gry fiss Pst/Pst, wet	70										
	164	GR	F	Pst	Pst	Pst	Pst	s		ala + 2 1% gv, wet	75				160-164	X	<1	<2	<4	23	11
	165	GR	F	Pst	Pst	Pst	Pst			med-lt gry, minor brn sbfiss Pst/Pst, wet	60										
	166	GR	F	Pst	Pst	Pst	Pst			ala, v sl greenish, wet	55										
	167	GR	F	Pst	Pst	Pst	Pst			brn gry, sbfiss - fiss Pst/Pst, wet	50										
167	168	GR	F	Pst	Pst	Pst	Pst			lt-med, sl brnsh, gry sbfiss Pst/Pst, wet	50				164-168	X	<1	<2	<4	19	11

TIME STARTED 3.15

FINISHED 5.10

ASSAY LAB CLASSIC

P/O N° NT 1637



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PROJECT NT 28

AZIMUTH 270°

DRILL RIG RCD - 150

HOLE N° : P17P-1

4900

N

5090

E

PROSPECT P 17

DECLINATION -75° W

GEOLOGIST SM

TIME STARTED 9.15 FINISHED 11.10

ASSAY LAB CLASSIC

P/O N° NT 1637



Newmont Australia Limited

DRILL LOG

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HOLE N°: P17P-1

4900 N 5090 E

PROJECT NT28

AZIMUTH

DRILL RIG RCD - 150

PROSPECT P17

DECLINATION -75°W

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG. OL. / X / 2 / 4 / 8 / 16 / 32 / 64 / 128 / 256 / 512 / 1024 / 2048 / 4096 / 8192 / 16384 / 32768 / 65536 / 131072 / 262144 / 524288 / 1048576 / 2097152 / 4194304 / 8388608 / 16777216 / 33554432 / 67108864 / 134217728 / 268435456 / 536870912 / 1073741824 / 2147483648 / 4294967296 / 8589934592 / 17179869184 / 34359738368 / 68719476736 / 137438953472 / 274877906944 / 549755813888 / 1099511627776 / 2199023255552 / 4398046511104 / 8796093022208 / 17592186044416 / 35184372088832 / 70368744177664 / 140737488355328 / 281474976710656 / 562949953421312 / 1125899906842624 / 2251799813685248 / 4503599627370496 / 9007199254740992 / 18014398509481984 / 36028797018963968 / 72057594037927936 / 144115188075855872 / 288230376151711744 / 576460752303423488 / 1152921504606846976 / 2305843009213693952 / 4611686018427387904 / 9223372036854775808 / 18446744073709551616 / 36893488147419103232 / 73786976294838206464 / 147573952589676412928 / 295147905179352825856 / 590295810358705651712 / 1180591620717411303424 / 2361183241434822606848 / 4722366482869645213696 / 9444732965739290427392 / 18889465931478580854784 / 37778931862957161709568 / 75557863725914323419136 / 151115727451828646838272 / 302231454903657293676544 / 604462909807314587353088 / 1208925819614629174706176 / 2417851639229258349412352 / 4835703278458516698824704 / 9671406556917033397649408 / 19342813113834066795298816 / 38685626227668133590597632 / 77371252455336267181195264 / 154742504910672534362390528 / 309485009821345068724781056 / 618970019642690137449562112 / 1237940039285380274899124224 / 2475880078570760549798248448 / 4951760157141521099596496896 / 9903520314283042199192993792 / 19807040628566084398385987584 / 39614081257132168796771975168 / 79228162514264337593543950336 / 158456325028528675187087900672 / 316912650057057350374175801344 / 633825300114114700748351602688 / 1267650600228229401496703205376 / 2535301200456458802993406410752 / 5070602400912917605986812821504 / 10141204801825835211973625643008 / 20282409603651670423947251286016 / 40564819207303340847894502572032 / 81129638414606681695789005144064 / 162259276829213363391578010288128 / 324518553658426726783156020576256 / 649037107316853453566312041152512 / 1298074214633706907132624082305024 / 2596148429267413814265248164610048 / 5192296858534827628530496329220096 / 10384593717069655257060992658440192 / 20769187434139310514121985316880384 / 41538374868278621028243970633760768 / 83076749736557242056487941267521536 / 166153499473114484112975882535043072 / 332306998946228968225951765070086144 / 664613997892457936451903530140172288 / 1329227995784915872903807060280344576 / 2658455991569831745807614120560689152 / 5316911983139663491615228241121378304 / 10633823966279326983230456482242756608 / 21267647932558653966460912964485513216 / 42535295865117307932921825928971026432 / 85070591730234615865843651857942052864 / 170141183460469231731687303715884105728 / 340282366920938463463374607431768211456 / 680564733841876926926749214863536422912 / 1361129467683753853853498429727072845824 / 2722258935367507707706996859454145691648 / 5444517870735015415413993718908291383296 / 10889035741470030830827987437816582766592 / 21778071482940061661655974875633165533184 / 43556142965880123323311949751266331066368 / 87112285931760246646623899502532662132736 / 174224571863520493293247799005065324265472 / 348449143727040986586495598010130648530944 / 696898287454081973172991196020261297061888 / 1393796574908163946345982392040522594123776 / 2787593149816327892691964784081045188247552 / 5575186299632655785383929568162090376495104 / 11150372599265311570767859136324180752990208 / 22300745198530623141535718272648361505980416 / 44601490397061246283071436545296723011960832 / 89202980794122492566142873090593446023921664 / 178405961588244985132285746181186892047843328 / 356811923176489970264571492362373784095686656 / 713623846352979940529142984724747568191373312 / 1427247692705959881058285969449495136382746624 / 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1496577676626844588240573268701473812127674924007424 / 2993155353253689176481146537402947624255349848014848 / 5986310706507378352962293074805895248510699696029696 / 11972621413014756705924586149611790497021399392059392 / 23945242826029513411849172299223580994042798784118784 / 47890485652059026823698344598447161988085597568237568 / 95780971304118053647396689196894323976171195136475136 / 191561942608236107294793378393788647952342390272950272 / 383123885216472214589586756787577295904684780545900544 / 766247716923335095479473513575154591809369561091801088 / 1532495540865888858358347027150309183618739122183602176 / 3064991081731777716716694054300618367237478244367204352 / 6129982163463555433433388108601236734474956488734408704 / 122599643269271108668667762172024734689499129774688173888 / 245199286538542217337335524344049469378998259549376347776 / 490398573077084434674671048688098938757996519098752695552 / 980797146154168869349342097376197877515993038197505391104 / 1961594292308337738698684194752395755031986076395010782208 / 3923188584616675477397368389504791510063972152790021564416 / 784637716923335095479473513575154591809369561091801088 / 15692754338466701909589473558019166040255888611160086257664 / 31385508676933403819178947116038332080511777222320172515328 / 6277101735386680763835789423207666416102355444367204352 / 125542034707733615276715788464153328322047108889280690061312 / 251084069415467230553431576928306656644094217778561380122624 / 502168138830934461106863153856613313288188435557122760245248 / 1004336277661868922213726307713226626576376871114245520490496 / 2008672555323737844427452615426453253152753742228491040980992 / 4017345110647475688854905230852906506305507484456982081961984 / 8034690221294951377709810461705813012611014968913964163923968 / 16069380442589902755419620923411626025222029937827928327847936 / 32138760885179805510839241846823252050444059875655856655695872 / 64277521770359611021678483693646504100888119751311713311391744 / 128555043540719222043356967387293008201776239502623426622783488 / 257110087081438444086713934774586016403552479005246853245566976 / 514220174162876888173427869549172032807104958010493706491133952 / 1028440348325753776346855739098344065614209916020982221787684667392 / 2056880696651507552693711478196688131228419832041974825964535808 / 4113761393303015105387422956393376262456839664083949651929071616 / 822752278660603021077484591278675252491367932041974825964535808 / 16455045573212060421549691825573505049827358656335798607716286464 / 32910091146424120843099383651147010099654717312671597215432572928 / 65820182292848241686198767302294020199309434625343194430865145856 / 131640364585696483372397534604588040398618869250686388861730291712 / 263280729171392966744795069209176080797237738501372777723460583424 / 526561458342785933489590138418352161594475477002745555446921166848 / 1053122916685571866979180276836704323188950954005491110893842333696 / 2106245833371143733958360553673408646377901908010982221787684667392 / 4212491666742287467916721107346817292755803816021964443575369334784 / 8424983333484574935833442214693634585511607632043928887150738669568 / 16849966666969149871666884429387269171023215264087857774301477339136 / 33699933333938299743333768858774538342046430528175715548602954678272 / 67399866667876599486667537717549076684092861056351431097205909356544 / 134799733335753198973335075435098153368185722112702862194411818713088 / 269599466671506397946670150870196306736371444225405724388823637426176 / 539198933343012795893340301740392613472742888450811448777647274852352 / 1078397866686025591786680603480785226945485776901622897555294549704704 / 2156795733372051183573361206961570453890971553803245795111589099409408 / 4313591466744102367146722413923140907781943107606491590223178198818816 / 8627182933488204734293444827846281815563886215212983180446356397637632 / 17254365866976409468586889655692563631127772430425966360892712795275264 / 34508731733952818937173779311385127262255544860851932721785425590550528 / 69017463467905637874347558622770254524511089721703865443570851181101056 / 138034926935811275748695117245540509049022179443407730887141702362202112 / 276069853871622551497390234491081018098044358886815461774283404724404224 / 552139707743245102994780468982162036196088717773630923548566809448808448 / 1104279415486490205989560937964324072392177435547261847097133618897616896 / 2208558830972980411979121875928648144784354871094523694194267237795233792 / 4417117661945960823958243751857296289568709742189047388388534475590467584 / 8834235323891921647916487503714592579137419484378094776777068951180935168 / 17668470647783843295832975007429185158274838968756189553554137902361870336 / 35336941295567686591665950014858370316549677937512379107108275804723740672 / 70673882591135373183331900029716740633099355875024758214216551609447481344 / 141347765182270746366663800059433481266198711750049516428433103218894862688 / 282695530364541492733327600118866962532397423500099032856866206437789725376 / 565391060729082985466655200237733925064794847000198065713732412875579450752 / 1130782121458165970933310400475467850129589694000396131427464825751158901504 / 2261564242916331941866620800950935700259179388000792262854929												



Newmont Australia Limited

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PROJECT NT28

AZIMUTH

DRILL RIG RCD-150

HOLE No: P17P-1

4900 N 5090 E

PROSPECT P17

DECLINATION -75°W

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG. SUSC.	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm	
216	217	GR	F	Pst		Psp			med gry & brn gry, sbfiss - fiss Pst, mod oxid frags	75	H	216-220	<0.01								
	218	GR	F	Pst					ala	75											
	219	GR	F	Pst					med gry, tr brnsh, sbfiss Pst, mod oxid frags	65											
	220	GR	F	Pst					ala, mod abun. oxid frags	45		216-220	<0.01	X	<1	<2	<4	25	11		
	221	GR	F	Pst					lt-med, sl brnsh gry, sbfiss, blk y Pst, ^{dry, n.s.} oxid frags	95											
	222	GR	F	Pst		Psp			med gry, sbfiss - fiss Pst, tr oxid frags, wet	65		220-224	<0.01								
	223	GR	F	Pst					gry & brn Pst, sbfiss, tr oxid frags, wet	55											
	224	GR	F	Pst			s		ala + tr qv, tr perv sil alt, wet	45		220-224	<0.01	X	<1	2	<4	26	11		
	225	GR	F	Pst		Psp	s		brn, minor gry, fiss Pst, tr qv, tr oxid frags, wet	55											
	226	GR	F	Pst		Psp			lt-med gry, tr brnsh, sbfiss Pst, tr oxid frags	50		224-228	<0.01								
	227	GR	F	Pst					med gry, sbfiss Pst, tr brnsh, tr oxid frags	50											
	228	GR	F	Pst					med gry, sbfiss - fiss Pst, minor oxid frags	50		224-228	<0.01	X	<1	<2	<4	27	<10		
	229	GR	F	Pst					ala, sl less fiss i/p	65											
	230	GR	F	Pst		Psp	s		lt-med gry, v sl gsh i/p, fiss Pst/Psp, no qv, tr oxid frags	95		228-232	<0.01								
	231	GR	F	Pst			s		med gry fiss Pst, 2% qv, tr oxid frags, tr perv sil alt	75											
	232	GN	F	Pst		Pst	s		lt gry (grysh) Pst/Pst, fiss, tr qv, wet	75		228-232	<0.01	X	<1	<2	<4	19	11		
	233	GR	F	Pst		Psp			med be gry Pst/Psp fiss-sbfiss, mod oxid frags	80											
	234	GR	F	Pst		Psp			lt med grysh brn Pst/Psp, sbfiss - fiss, tr blk bands	55		232-236	<0.01								
	235	GR	F	Pst					med gry, blk y, sbfiss Pst, tr oxid frags, wet	60											
	236	GR	F	Pst					ala but no oxid frags	90		232-236	<0.01	X	<1	<2	<4	20	12		
	237	GR	F	Pst					med (-dk) gry mass-sbfiss Pst	260											
	238	GR	F	Pst			m		ala, + med brnsh grey sbfiss - fiss Pst, ^{± mag}	400		236-240	<0.01								
	239	GR	F	Pst			s, m		med gry, sbfiss, Pst, tr hem coat qv, wet	460											
239	240	GR	F	Pst			m		med gry, mass-sbfiss Pst, wet, mag	600		236-240	<0.01	X	<1	2	<4	23	10		

TIME STARTED 1:05

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ASSAY LAB CLASSIC

P/O No NT 1637



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PROJECT NT28

AZIMUTH

DRILL RIG RCD-150

HOLE N°: P17P-1

4900

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5090

E

PROSPECT P17

DECLINATION -75°W

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES										
FROM TO		COLOUR		DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	MAG g/t	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
240	241	G	R	F	P	S	T				m	med gry, sbfiss, blk y Pst, wet, tr oxid frags, mag	450	H	240-244	240-244	X	<1	<2	<4	24	11
	242	G	R	F	P	S	T				m	ala, no oxid frags, mag	750									
	243	G	R	F	P	S	T				m	ala, tr oxid frags, mag	400									
	244	G	R	F	P	S	T					med gry & brn gry, sbfiss, blk y Pst, wet	65									
	245	G	R	F	P	S	T					ala	55		244-248	244-248	X	<1	<2	<4	27	11
	246	G	R	F	P	S	T					med, sl brnsh gry, sbfiss Pst, tr greenish?	210									
	247	G	R	F	P	S	T				m	med gry, sbfiss Pst, wet, mag, wet	530									
	248	G	R	F	P	S	T					med, sl brnsh gry, blk y, mass-sbfiss Pst	50									
	249	G	R	F	P	S	T				s	ala, tr gv	70		248-252	248-252	X	<1	3	8	48	12
	250	G	R	F	P	S	T				m	med gry, vsl greenish, blk y, sbfiss Pst, wet	650									
	251	G	R	F	P	S	T				m	med gry, blk y, mass-sbfiss Pst, mag, wet	2000									
	252	G	R	F	P	S	T				m	ala but lt-med gry, vsl greenish, mag, wet	1600									
	253	G	R	F	P	S	T				m	ala, tr brnsh Pst, tr oxid frags, mag, wet	750		252-256	252-256	X	<1	6	6	40	13
	254	G	R	F	P	S	T				m	med gry mass(-sbfiss) blk y Pst	450									
	255	G	R	F	P	S	T				m	med, vsl greenish gry, sbfiss Pst, mag, wet	620									
	256	G	R	F	P	S	T				m	ala, sl brnsh i/p, mag, wet	2100									
	257	G	R	F	P	S	T				m	med gry, sbfiss Pst, wet, mag	2000		256-260	256-260	X	<1	2	<4	36	12
	258	G	R	F	P	S	T				m	ala, sbfiss (-fiss) Pst, sl greenish, mag, wet	2000									
	259	G	R	F	P	S	T				m	med gry, sbfiss - fiss Pst, sl greenish, mag, wet	2400									
	260	G	R	F	P	S	T				m	ala	2400									
	261	G	R	F	P	S	T				m	lt-med, vsl greenish gry, sbfiss Pst, mag, wet	2300		260-264	260-264	X	<1	5	<4	31	12
	262	G	R	F	P	S	T				m	med gry (tr greenish), mass-sbfiss, blk y Pst	2400									
	263	G	R	F	P	S	T				m	med, sl greenish, gry Pst, sbfiss (-fiss), mag	2200									
263	264	G	R	F	P	S	T				m	ala, wet	1900									

TIME STARTED 3-10

FINISHED 6.00

ASSAY LAB CLASSIC

P/O N° NT 1637



Newmont Australia Limited

DRILL LOG

DATE 2/7/90

PAGE N° 12 / 12

PROJECT NT 28

AZIMUTH

DRILL RIG RCD - 150

HOLE N°: P17P-1 4900 N 5090 E

PROSPECT P17

DECLINATION - 75°W

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG. W. / T. / S. / W. / S. / W.	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm		
FROM	TO																				
264	265	(G R) (N)	F	Pst		m		med, tr greenish, gry Pst, sbfiss, mag, wet	2100	H	264-268	< 0.01									
	266	(G R) (N)	F	Pst		m		ala	2100												
	267	(G R) (N)	F	Pst		m		ala	2100												
	268	(G R) (N)	F	Pst		m		ala, sl blocky	2000												
	269	(G R) (N)	F	Pst		m		ala	2300		268-272	< 0.01									
	270	(G R) (N)	F	Pst		m		med, sl greenish gry Pst, sbfiss, mag, wet	2300												
	271	(G R) (N)	F	Pst		m		ala	1700												
	272	(G R) (N)	F	Pst		m		ala, sl more massive i/p	2100												
	273	(G R) (N)	F	Pst		m		med, v sl greenish gry Pst, sbfiss, mag, wet	2400		272-276	< 0.01									
	274	(G R) (N)	F	Pst		m		ala	1600												
	275	G R	F	Pst		m		med gry, mass - sbfiss, blk, Pst, mag, wet	2300												
	276	G R	F	Pst		m		ala	2000												
	277	G R	F	Pst		m		ala	2100		276-280	< 0.01									
	278	G R	F	Pst		m		ala	2400												
	279	G R	F	Pst		m		ala but sbfiss	2300												
	280	G R	F	Pst		m		med (-dk) gry, mass - sbfiss Pst, mag, wet	2100												
								EOH 280m													

 TIME STARTED 6.00 - 6.40
 FINISHED 9.00 9.40

ASSAY LAB CLASSIC P/O N° NT 1637

SPREAD VALUES REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - 1.31

Company: AUSTRALIAN DEVELOPMENT
Probe #: 2061
Location:
Field: TENNANT CREEK NT
Well no: P17P1
Operator: GRAHAM EDWARDS
Time: Wed Jul 11 13:40:27 1990
Filename: P17P1
Comments: SURVEY RUN INSIDE 50mm PVC CASING.

Htotal Max -> 51340 gammas Shot number - 306

Htotal Min -> 50645 gammas Shot number - 2

Htotal Spread -> 695 gammas

Gtotal Max -> 999.7 mg Shot number - 354

Gtotal Min -> 998.3 mg Shot number - 498

Gtotal Spread -> 1.3 mg

Dip Angle Max -> -50.18 degrees Shot number - 560

Dip Angle Min -> -50.93 degrees Shot number - 4

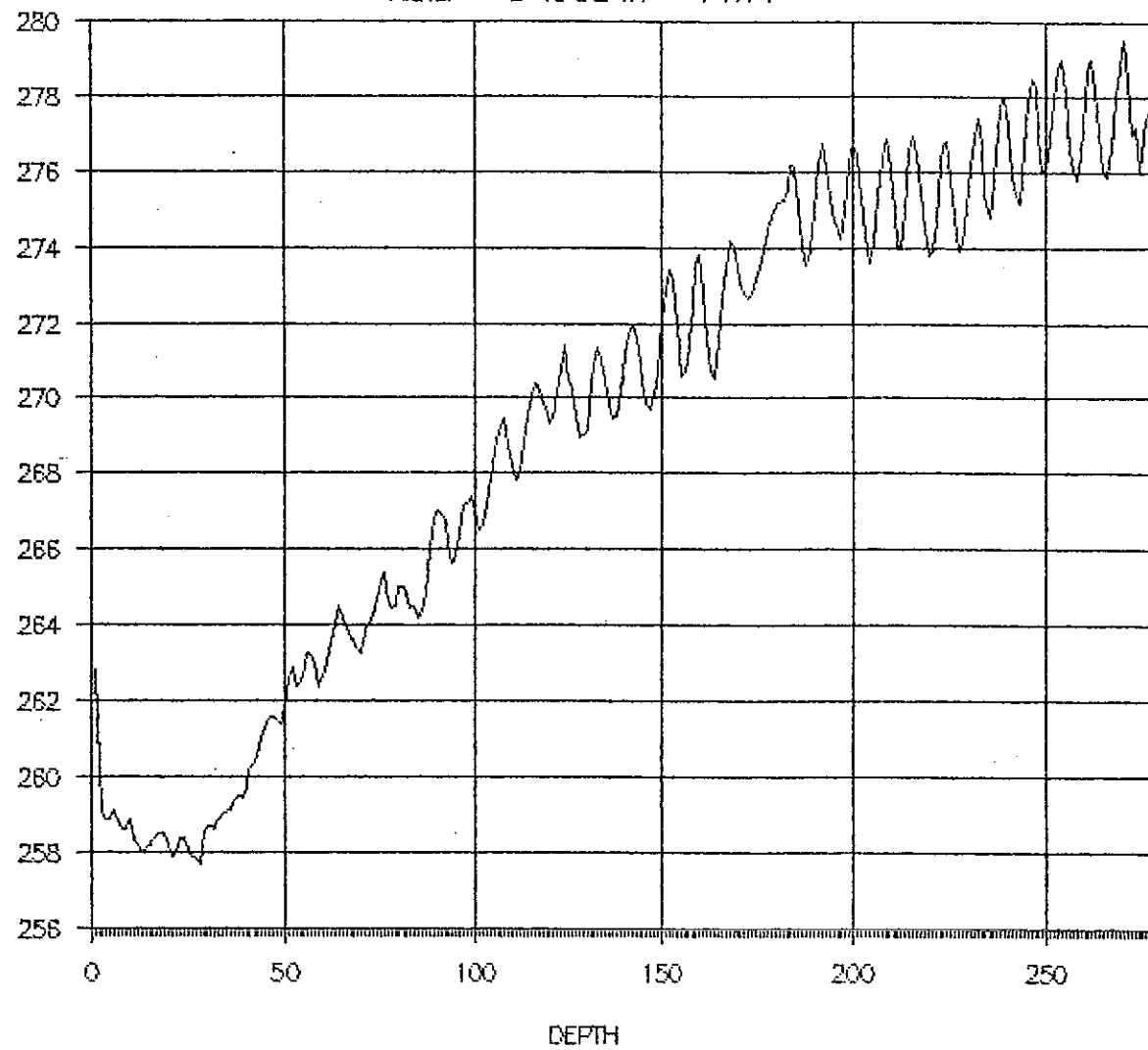
Dip Angle Spread -> 0.74 degrees

Arming Information from Probe:

Mode : Multishot Mode
Shot Interval : 10 Seconds
Holdoff Time : 5 Minutes
Averaging factor : 8

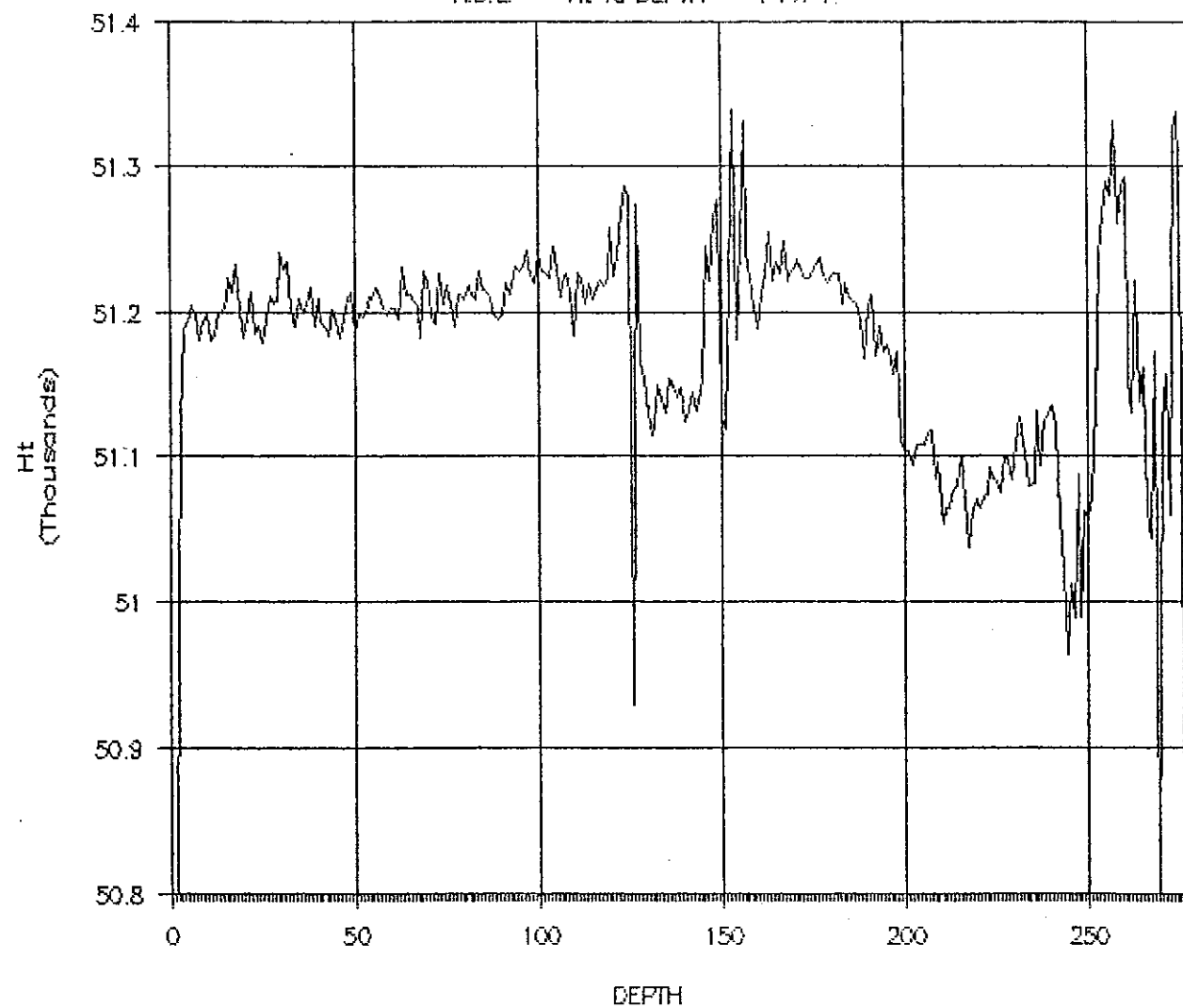
SURTRON TECHNOLOGIES PTY LTD

AD.L B' vs DEPTH P17P1



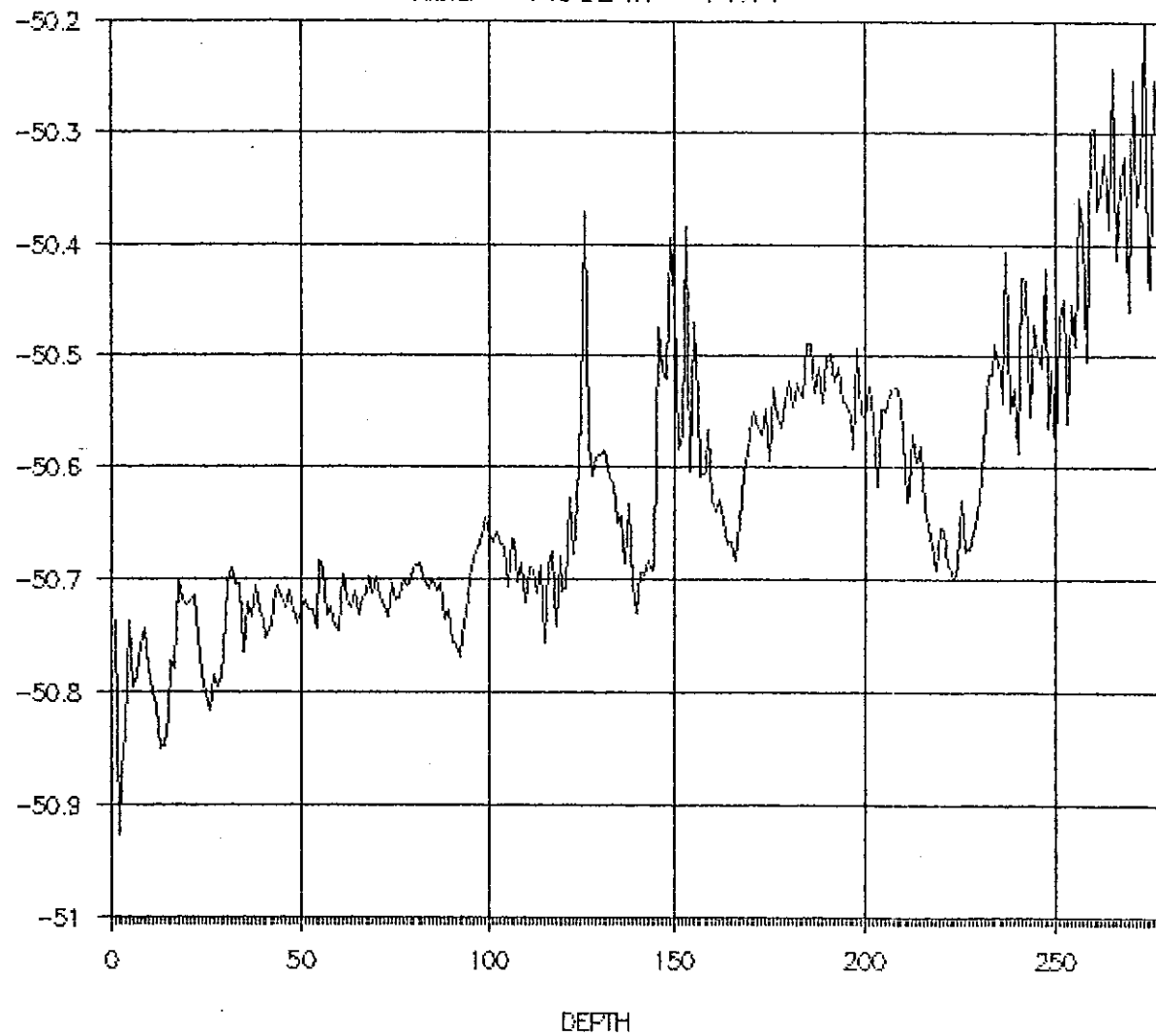
SURTRON TECHNOLOGIES PTY LTD

A.D.L. Ht vs DEPTH P17P1.



SURTRON TECHNOLOGIES PTY LTD

A.D.L. I vs DEPTH P17P1



DATA VERIFICATION REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - 1.31

Probe number - 2061

File Name - P17P1

Shot	Depth	Inc	Az	HS	MTF	GTotal	HTotal	Dip	Temp (C)	Bat
2	1.0	15.51	262.83	175.12	77.96	998.8	50645	-50.74	22	16
4	2.0	15.18	260.29	148.30	48.59	999.0	50989	-50.93	22	16
6	3.0	15.19	259.09	128.27	27.36	998.9	51124	-50.87	22	16
8	4.0	15.17	258.88	85.86	344.74	998.7	51188	-50.84	22	16
10	5.0	15.22	258.89	31.27	290.16	999.1	51193	-50.74	22	16
12	6.0	15.27	259.13	343.00	242.13	999.0	51204	-50.80	22	16
14	7.0	15.19	258.86	322.17	221.03	998.8	51197	-50.79	22	16
16	8.0	15.24	258.60	328.41	227.01	999.0	51181	-50.76	22	16
18	9.0	15.32	258.59	337.37	235.96	998.9	51193	-50.74	23	16
20	10.0	15.26	258.85	315.36	214.21	998.6	51197	-50.78	23	16
22	11.0	15.17	258.26	249.81	148.07	998.5	51181	-50.80	23	16
24	12.0	15.27	258.20	231.26	129.46	998.4	51184	-50.81	23	16
26	13.0	15.31	257.95	193.79	91.74	998.8	51199	-50.85	23	16
28	14.0	15.34	258.09	179.86	77.95	998.6	51199	-50.85	23	16
30	15.0	15.41	258.16	169.25	67.41	998.8	51210	-50.82	23	16
32	16.0	15.41	258.30	141.79	40.09	998.8	51223	-50.77	23	16
34	17.0	15.30	258.43	113.83	12.26	998.8	51213	-50.78	23	16
36	18.0	15.38	258.50	62.94	321.44	999.1	51233	-50.70	23	16
38	19.0	15.48	258.49	358.53	257.03	999.0	51200	-50.72	23	16
40	20.0	15.48	258.20	345.56	243.75	999.0	51182	-50.72	23	16
42	21.0	15.57	257.88	335.69	233.56	999.1	51195	-50.72	23	16
44	22.0	15.58	257.96	335.88	233.84	998.7	51214	-50.72	23	16
46	23.0	15.43	258.35	315.25	213.59	998.5	51185	-50.75	23	16
48	24.0	15.46	258.38	306.90	205.28	998.9	51191	-50.78	23	16
50	25.0	15.54	258.03	278.50	176.53	998.7	51179	-50.80	23	16
52	26.0	15.54	257.88	205.01	102.88	998.8	51194	-50.82	23	16
54	27.0	15.56	257.79	192.05	89.84	998.7	51210	-50.78	24	16
56	28.0	15.61	257.67	182.80	80.47	998.9	51206	-50.79	24	16
58	29.0	15.49	258.56	129.09	27.65	998.9	51207	-50.79	24	16
60	30.0	15.58	258.62	114.78	13.41	998.5	51240	-50.76	24	16
62	31.0	15.67	258.68	86.84	345.52	998.9	51229	-50.70	24	16
64	32.0	15.70	258.59	55.04	313.63	998.7	51233	-50.69	24	16
66	33.0	15.83	258.89	1.46	260.35	998.9	51201	-50.71	24	16
68	34.0	15.87	258.96	339.68	238.64	999.0	51190	-50.70	24	16
70	35.0	15.78	259.08	315.89	214.96	998.6	51209	-50.76	24	16
72	36.0	15.86	259.11	317.13	216.23	998.6	51200	-50.72	24	16
74	37.0	15.95	259.40	335.26	234.65	999.3	51204	-50.74	24	16
76	38.0	15.99	259.46	333.67	233.14	998.5	51217	-50.71	24	16
78	39.0	16.07	259.40	332.00	231.40	999.1	51190	-50.73	24	16
80	40.0	16.15	259.67	335.82	235.49	998.4	51209	-50.74	24	16

DATA VERIFICATION REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - 1.31

Probe number - 2061

File Name - P17P1

Shot	Depth	Inc	Az	HS	MTF	GTotal	HTotal	Dip	Temp (C)	Bat
82	41.0	16.11	260.15	327.97	228.11	998.9	51194	-50.75	25	16
84	42.0	16.18	260.39	321.63	222.02	999.1	51189	-50.74	25	16
86	43.0	16.27	260.57	330.45	231.02	998.9	51183	-50.72	25	16
88	44.0	16.35	261.01	328.07	229.08	999.1	51200	-50.70	25	16
90	45.0	16.47	261.30	328.59	229.88	998.9	51194	-50.72	25	16
92	46.0	16.52	261.48	327.72	229.20	999.2	51182	-50.73	25	16
94	47.0	16.42	261.54	317.58	219.13	999.1	51195	-50.71	25	16
96	48.0	16.53	261.48	320.34	221.81	999.0	51210	-50.73	25	16
98	49.0	16.68	261.36	322.59	223.95	998.6	51213	-50.74	25	16
100	50.0	16.73	261.82	333.49	235.31	998.8	51185	-50.73	25	16
102	51.0	16.78	262.54	337.18	239.72	999.0	51199	-50.72	25	16
104	52.0	16.80	262.86	331.53	234.39	998.5	51197	-50.73	25	16
106	53.0	16.76	262.35	312.81	215.16	998.8	51200	-50.73	25	16
108	54.0	16.85	262.46	322.82	225.27	998.6	51211	-50.74	25	16
110	55.0	16.90	262.63	334.38	237.02	999.0	51209	-50.68	25	16
112	56.0	16.95	263.23	330.84	234.07	998.7	51216	-50.69	25	16
114	57.0	17.00	263.17	322.53	225.70	999.0	51211	-50.73	26	16
116	58.0	17.05	263.02	329.39	232.41	999.3	51203	-50.72	26	16
118	59.0	17.00	262.38	317.61	219.99	999.1	51198	-50.74	26	16
120	60.0	17.12	262.63	326.92	229.55	998.6	51203	-50.75	26	16
122	61.0	17.18	262.99	330.73	233.73	999.1	51203	-50.70	26	16
124	62.0	17.20	263.52	331.21	234.72	999.0	51194	-50.72	26	16
126	63.0	17.22	264.00	338.08	242.07	999.2	51231	-50.73	26	16
128	64.0	17.29	264.52	331.48	236.00	998.9	51213	-50.71	26	16
130	65.0	17.22	264.18	322.07	226.25	999.2	51212	-50.73	26	16
132	66.0	17.30	263.97	314.60	218.57	998.6	51207	-50.72	26	16
134	67.0	17.41	263.64	322.37	226.01	998.9	51204	-50.71	26	16
136	68.0	17.43	263.62	322.62	226.24	998.7	51182	-50.69	26	16
138	69.0	17.56	263.38	321.97	225.35	998.5	51229	-50.71	26	16
140	70.0	17.62	263.26	322.09	225.35	998.7	51222	-50.70	26	16
142	71.0	17.54	263.82	310.34	214.16	998.5	51198	-50.72	26	16
144	72.0	17.59	264.04	308.23	212.27	998.8	51192	-50.72	26	16
146	73.0	17.67	264.27	313.77	218.04	999.0	51225	-50.73	27	16
148	74.0	17.71	264.68	328.82	233.50	998.5	51206	-50.70	27	16
150	75.0	17.83	265.10	327.50	232.60	999.0	51219	-50.72	27	16
152	76.0	17.87	265.40	327.15	232.55	999.0	51206	-50.72	27	16
154	77.0	17.80	264.67	313.39	218.05	998.9	51190	-50.70	27	16
156	78.0	17.91	264.46	317.86	222.33	998.7	51212	-50.71	27	16
158	79.0	18.04	264.50	330.57	235.07	999.1	51211	-50.70	27	16
160	80.0	18.03	265.02	337.42	242.44	998.8	51209	-50.69	27	16

DATA VERIFICATION REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - '1.31

Probe number - 2061

File Name - P17P1

Shot	Depth	Inc	Az	HS	MTF	GTotal	HTotal	Dip	Temp (C)	Bat
162	81.0	18.09	264.98	325.92	230.90	998.8	51219	-50.69	27	16
164	82.0	18.21	264.78	322.61	227.40	998.9	51212	-50.69	27	16
166	83.0	18.19	264.44	326.62	231.05	999.2	51208	-50.70	27	16
168	84.0	18.24	264.50	323.18	227.68	999.2	51227	-50.70	27	16
170	85.0	18.38	264.18	317.99	222.17	999.1	51216	-50.70	27	16
172	86.0	18.44	264.36	319.09	223.45	998.8	51213	-50.71	27	16
174	87.0	18.43	264.81	316.45	221.26	999.0	51210	-50.70	27	16
176	88.0	18.42	266.04	291.35	197.38	998.9	51196	-50.74	28	16
178	89.0	18.30	266.80	276.00	182.80	998.5	51195	-50.73	28	16
180	90.0	18.32	267.05	240.47	147.52	998.4	51198	-50.76	28	16
182	91.0	18.43	266.86	198.00	104.86	998.4	51219	-50.76	28	16
184	92.0	18.46	266.78	189.82	96.61	998.7	51213	-50.77	28	16
186	93.0	18.49	266.17	164.67	70.84	998.6	51218	-50.75	28	16
188	94.0	18.53	265.62	140.73	46.34	999.0	51232	-50.72	28	16
190	95.0	18.54	265.80	125.56	31.37	998.6	51228	-50.70	28	16
192	96.0	18.58	266.39	95.47	1.86	999.2	51231	-50.68	28	16
194	97.0	18.72	267.13	52.53	319.66	998.9	51241	-50.67	28	16
196	98.0	18.79	267.23	9.18	276.41	999.4	51225	-50.66	28	16
198	99.0	18.87	267.39	3.35	270.74	998.7	51220	-50.65	29	16
200	100.0	18.99	267.03	4.62	271.64	998.8	51241	-50.66	29	16
202	101.0	19.11	266.50	3.27	269.77	999.3	51228	-50.67	29	16
204	102.0	19.21	266.68	5.67	272.34	999.0	51226	-50.66	29	16
206	103.0	19.24	267.16	0.54	267.70	998.9	51223	-50.67	29	16
208	104.0	19.31	267.85	341.14	249.00	999.1	51244	-50.67	29	16
210	105.0	19.31	268.60	337.02	245.62	999.2	51229	-50.71	29	16
212	106.0	19.35	269.11	335.65	244.77	999.0	51211	-50.66	29	16
214	107.0	19.39	269.30	336.56	245.86	999.0	51220	-50.66	29	16
216	108.0	19.40	269.46	328.82	238.28	999.2	51227	-50.70	29	16
218	109.0	19.57	268.76	316.22	224.98	998.7	51215	-50.69	29	16
220	110.0	19.64	268.19	307.84	216.03	999.3	51183	-50.72	29	16
222	111.0	19.77	267.84	316.39	224.24	998.9	51227	-50.69	29	16
224	112.0	19.87	268.01	323.28	231.30	998.6	51223	-50.69	30	16
226	113.0	19.79	268.79	326.83	235.62	999.1	51205	-50.71	30	16
228	114.0	19.79	269.54	329.44	238.98	998.9	51220	-50.69	30	16
230	115.0	19.89	270.10	333.62	243.72	999.2	51209	-50.75	30	16
232	116.0	19.95	270.41	329.86	240.28	999.0	51216	-50.69	30	16
234	117.0	20.06	270.20	322.91	233.11	999.4	51221	-50.68	30	16
236	118.0	20.13	269.83	321.80	231.64	998.8	51218	-50.74	30	16
238	119.0	20.14	269.64	329.27	238.91	999.2	51224	-50.68	30	16
240	120.0	20.11	269.33	318.66	227.99	999.1	51258	-50.71	30	16

DATA VERIFICATION REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - 1.31

Probe number - 2061

File Name - P17P1

Shot	Depth	Inc	Az	HS	MTF	GTotal	HTotal	Dip	Temp (C)	Bat
242	121.0	20.30	269.47	321.86	231.33	998.8	51224	-50.71	30	16
244	122.0	20.33	270.16	347.50	257.66	998.8	51238	-50.63	30	16
246	123.0	20.46	270.77	349.19	259.96	999.0	51268	-50.68	30	16
248	124.0	20.54	271.41	338.85	250.26	999.2	51286	-50.63	30	16
250	125.0	20.48	270.47	337.32	247.79	999.0	51278	-50.55	30	16
252	126.0	20.43	270.28	319.50	229.79	999.3	50929	-50.37	30	16
254	127.0	20.48	269.51	317.44	226.95	998.8	51274	-50.58	30	16
256	128.0	20.59	268.98	321.58	230.55	999.0	51166	-50.61	30	16
258	129.0	20.71	269.04	325.52	234.56	999.4	51154	-50.59	30	16
260	130.0	20.83	269.19	325.59	234.77	999.4	51130	-50.59	30	16
262	131.0	20.69	270.41	335.37	245.78	999.2	51114	-50.58	30	16
264	132.0	20.77	270.93	329.43	240.36	998.9	51122	-50.59	30	16
266	133.0	20.93	271.33	325.38	236.72	999.2	51149	-50.61	30	16
268	134.0	21.10	271.00	321.03	232.03	999.1	51140	-50.61	31	16
270	135.0	21.13	270.50	312.57	223.07	999.2	51131	-50.65	31	16
272	136.0	21.26	269.83	300.25	210.08	998.6	51154	-50.64	31	16
274	137.0	21.18	269.45	291.95	201.41	998.9	51149	-50.68	31	16
276	138.0	21.23	269.56	259.53	169.09	999.0	51142	-50.63	31	16
278	139.0	21.30	270.20	234.33	144.53	998.8	51147	-50.70	31	16
280	140.0	21.30	271.15	211.11	122.26	998.9	51125	-50.73	31	16
282	141.0	21.39	271.66	203.53	115.19	999.0	51131	-50.70	31	16
284	142.0	21.56	271.99	192.34	104.33	998.5	51145	-50.69	31	16
286	143.0	21.56	271.61	159.67	71.28	999.1	51132	-50.68	31	16
288	144.0	21.42	270.94	141.36	52.30	999.2	51145	-50.69	31	16
290	145.0	21.48	270.50	143.43	53.93	999.0	51152	-50.69	31	16
292	146.0	21.61	269.85	141.54	51.39	999.0	51245	-50.47	31	16
294	147.0	21.81	269.70	148.54	58.24	998.6	51222	-50.51	31	16
296	148.0	22.02	270.06	147.19	57.25	998.8	51264	-50.52	31	16
298	149.0	22.08	270.73	144.90	55.63	998.6	51276	-50.39	31	16
300	150.0	21.99	272.09	144.93	57.02	998.8	51128	-50.45	31	16
302	151.0	22.14	272.86	151.35	64.21	999.2	51119	-50.58	31	16
304	152.0	22.28	273.42	144.00	57.42	998.8	51222	-50.57	31	16
306	153.0	22.40	273.13	143.89	57.02	998.9	51340	-50.38	31	16
308	154.0	22.49	272.00	135.69	47.69	999.1	51181	-50.60	31	16
310	155.0	22.43	270.60	125.43	36.02	999.0	51247	-50.47	31	16
312	156.0	22.54	270.74	140.99	51.73	999.0	51331	-50.54	31	16
314	157.0	22.72	271.02	152.46	63.48	998.9	51240	-50.60	31	16
316	158.0	22.61	272.43	150.93	63.35	999.0	51216	-50.60	31	16
318	159.0	22.68	273.63	146.06	59.69	999.0	51203	-50.57	31	16
320	160.0	22.81	273.79	140.07	53.87	999.1	51188	-50.63	31	16

DATA VERIFICATION REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - 1.31

Probe number - 2061

File Name - P17P1

Shot	Depth	Inc	Az	HS	MTF	GTotal	HTotal	Dip	Temp (C)	Bat
322	161.0	22.77	272.84	125.88	38.71	999.1	51212	-50.64	31	16
324	162.0	22.76	271.62	125.17	36.79	999.0	51226	-50.63	31	16
326	163.0	22.95	270.71	142.54	53.25	999.1	51255	-50.64	31	16
328	164.0	23.21	270.55	150.56	61.10	998.9	51221	-50.67	31	16
330	165.0	23.30	271.57	152.74	64.30	998.8	51233	-50.67	31	16
332	166.0	23.45	272.64	149.34	61.98	998.4	51226	-50.68	31	16
334	167.0	23.40	273.40	125.35	36.76	998.9	51249	-50.65	31	16
336	168.0	23.23	274.14	108.40	22.54	999.0	51221	-50.60	31	16
338	169.0	23.47	274.07	72.44	346.51	999.2	51227	-50.58	31	16
340	170.0	23.61	273.56	34.45	308.01	999.2	51231	-50.55	31	16
342	171.0	23.69	273.08	22.95	296.03	999.2	51235	-50.55	31	16
344	172.0	23.85	272.75	12.17	284.92	999.5	51229	-50.56	31	16
346	173.0	24.01	272.70	6.05	278.75	999.6	51223	-50.57	31	16
348	174.0	24.21	272.79	13.07	285.87	999.1	51223	-50.55	31	16
350	175.0	24.43	273.19	13.35	286.54	999.3	51228	-50.59	31	16
352	176.0	24.67	273.42	18.44	291.86	999.2	51233	-50.53	31	16
354	177.0	24.81	273.93	19.84	293.76	999.7	51237	-50.55	32	16
356	178.0	24.89	274.49	11.52	286.01	999.6	51224	-50.56	32	16
358	179.0	24.89	274.78	22.43	297.22	999.2	51220	-50.54	32	16
360	180.0	24.89	275.10	14.02	289.12	999.6	51224	-50.52	32	16
362	181.0	24.98	275.20	8.68	283.88	999.5	51226	-50.55	32	16
364	182.0	25.03	275.23	8.39	283.62	999.3	51226	-50.52	32	16
366	183.0	25.18	275.57	15.88	291.45	999.1	51206	-50.53	32	16
368	184.0	25.43	276.16	20.43	296.59	999.3	51220	-50.54	32	16
370	185.0	25.51	276.12	7.71	283.83	999.4	51210	-50.49	32	16
372	186.0	25.42	275.13	2.24	277.37	999.4	51208	-50.49	32	16
374	187.0	25.47	274.07	355.12	269.18	999.2	51206	-50.53	32	16
376	188.0	25.68	273.54	348.73	262.27	999.2	51194	-50.51	32	16
378	189.0	25.84	273.88	331.36	245.24	999.4	51168	-50.54	32	16
380	190.0	25.85	275.02	350.48	265.49	999.0	51204	-50.50	32	16
382	191.0	25.88	276.16	354.02	270.18	999.3	51212	-50.49	32	16
384	192.0	25.98	276.72	342.03	258.76	999.2	51170	-50.52	32	16
386	193.0	26.02	276.15	343.36	259.51	999.6	51189	-50.51	32	16
388	194.0	26.00	275.27	337.21	252.48	999.0	51173	-50.54	32	16
390	195.0	26.04	274.71	326.70	241.41	999.2	51177	-50.55	32	16
392	196.0	26.25	274.51	325.56	240.08	999.1	51168	-50.55	32	16
394	197.0	26.27	274.26	325.01	239.28	998.7	51158	-50.58	32	16
396	198.0	26.24	274.93	336.16	251.09	999.1	51173	-50.49	32	16
398	199.0	26.27	276.26	349.20	265.45	999.2	51112	-50.55	32	16
400	200.0	26.43	276.74	332.85	249.60	999.1	51102	-50.55	32	16

DATA VERIFICATION REPORT
POSEIDON GOLD
Version - 1.31

Probe number - 2061

File Name - VIVD8

Shot	Depth	Inc	Az	HS	MTF	GTotat	HTotal	Dip	Temp (C)	Bat
724	362.0	19.28	160.32	83.23	243.55	999.3	52344	-55.92	35	16
725	363.0	19.52	159.98	80.17	240.13	999.3	52330	-55.90	35	16
726	364.0	19.57	159.44	83.00	243.43	999.5	52299	-55.78	35	16
730	365.0	19.02	158.30	90.39	248.69	998.9	52236	-55.58	35	16
732	366.0	19.13	157.95	86.22	244.16	999.5	52181	-55.36	35	16
734	367.0	19.19	158.11	87.37	245.48	999.3	52101	-55.16	35	16
736	368.0	19.28	158.01	79.84	237.85	999.3	52021	-54.98	35	16
738	369.0	19.47	157.40	76.88	234.06	999.2	51903	-54.78	35	16
740	370.0	19.47	158.61	94.30	250.91	999.3	51830	-54.53	35	16
742	371.0	18.98	158.19	102.05	258.23	999.2	51738	-54.34	35	16
744	372.0	19.28	158.23	114.93	271.16	999.0	51650	-54.14	35	16
746	373.0	19.55	158.42	122.84	279.27	999.0	51587	-53.92	35	16
748	374.0	19.17	158.74	130.00	282.81	999.1	51489	-53.77	35	16
750	375.0	19.08	158.98	124.00	280.19	999.1	51424	-53.62	35	16
752	376.0	19.03	158.47	117.39	272.86	999.3	51369	-53.50	35	16
754	377.0	19.11	158.84	127.26	283.10	999.2	51289	-53.37	35	16
758	379.0	19.46	158.85	125.37	281.22	999.4	51192	-53.11	35	16
760	380.0	19.58	158.71	128.20	281.91	999.2	51134	-53.00	35	16
762	381.0	19.64	158.44	127.79	283.23	999.1	51088	-52.92	35	16
764	382.0	19.92	158.55	137.00	292.58	999.0	51081	-52.83	35	16
766	383.0	20.04	158.80	137.37	292.87	999.0	51037	-52.74	35	16
768	384.0	19.75	158.03	135.27	290.30	999.0	50983	-52.68	35	16
770	385.0	19.94	154.81	132.84	287.66	999.4	50937	-52.60	35	16
772	386.0	20.22	154.56	139.10	291.89	998.9	50942	-52.50	35	16
774	387.0	19.95	154.77	141.07	295.84	999.0	50914	-52.44	35	16
776	388.0	20.03	155.13	138.14	293.27	999.1	50929	-52.37	35	16
778	389.0	20.24	155.31	139.77	295.08	999.0	50908	-52.29	35	16
780	390.0	20.21	154.92	138.28	288.20	999.4	50874	-52.27	35	16
782	391.0	20.30	154.52	136.71	285.23	999.1	50906	-52.13	35	16
784	392.0	20.42	154.14	138.82	290.75	999.1	50881	-52.15	35	16
786	393.0	20.54	154.05	145.83	299.88	999.1	50862	-52.03	35	16
788	394.0	20.52	154.17	147.13	301.30	999.0	50891	-52.06	36	16
790	395.0	20.57	154.38	145.06	299.44	999.3	50899	-52.01	35	16
792	396.0	20.74	154.17	164.84	319.01	999.2	50887	-51.94	36	16
794	397.0	20.95	154.23	191.02	343.25	998.8	50893	-51.91	36	16

VIV-9A DRILL LOGS

DRILLING RECORD

PROJECT NT28

TITLE PHILLIP CREEK

LOCATION VIVID

COLLAR CO-ORDS

10100N'

9.940 E

COLLAR R.L.

BEARING AT COLLAR

176.5

grid Σ

WJG

true

DIP AT COLLAR

" - 70°

TOTAL DEPTH

195m

OBJECT OF HOLE

REMARKS

BOREHOLE SURVEYS

METHOD PEEWEE CAMERA

DRILLING RIG

RCD - 150

OPERATOR

GOMEX (Gomer Dier)

DATE STARTED

4/11/90

DATE COMPLETED

6/11/90

CORE SIZES:

RC HAMMER 0-195m

depth (m)	bearing		dip (degrees)
	(mag)	(grid)	
6	180°		70.50
24			70
48	178		69
72			68.50
96	179.5		67.75
120	179.0		66.50
144	178.0		64.50
168	178.0		63.50
192	176		61.50
192	IN ROD		62.25

WEDGES PLACED

S U M M A R Y O F R E S U L T S

[illegible]

LOGGED BY S. Mather

DATE _____

4-6/11/90



Newmont Australia Limited

DRILL LOG

DATE 4/11/90

PAGE No 1 / 1

HOLE No: VIV-9(PRECOURT) 10100 N 9940 E

PROJECT NT 28

AZIMUTH 176.5

DRILL RIG RCD-150

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST SM

DEPTH		LITHOLOGICAL						DESCRIPTION		SAMPLES									
FROM	TO	CLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS		Wt %	BIT TYPE	COMPOSITE SAMPLE No	Au g/t	SAMPLE No	Au g/t				
0	1	BR	EW	C2 sg				Soil, sand, gravel		80	It								
	2	BR	EW	C2 sg				ala		180									
	3	BR	EW	C2 sg				ala		25									
	4	BR	EW	C2 sg				ala + clays		300									
	5	BR	EW	C2 sg				or brn clays + mod fine gravel		90									
	6	BR	EW	C2 sg				ala + tr qv gravel		90									
	7	BR	EW	C2 sg				ala		85									
	8	BR	EW	C2 sg				lt brn clys + EW Pst gravel, tr qv gravel		65									
	9	BR	EW	C2 sg				lt brn clys + qv Pst gravel		180									
	10	BR	EW	C2 sg				ala		550									
	11	BR	EW	C2 sg	Pst			lt pu brn clys + qv, Pst gravel ala, tr silc		95									
	12	BR	EW	C1 ay	Pst			lt pu brn clys + soft clayey Pst/Rsp		25									
	13	BR	EW	C1 ay	Pst			ala		25									
	14	BR	EW	C1 ay	Pst			pu brn clys + tr pu brush EW Pst		20									
	15	BR	EW	C1 ay	Pst			ala		20									
	16	BR	EW	C1 ay				lt brn clys, tr qv - & limonitic		95									
	17	BR	EW	C1 ay		S		ala		50									
	18	BR	EW	C1 ay		S		ala		30									
	19	BR	EW	C1 ay		S		ala		30									
	20	BR	EW	C1 ay		S		ala, qv strongly striated, strong lim		25									
	21	BR	EW	C1 ay		S		lt brn clys, tr lim qv ala		25									
	22	BR	EW	C1 ay	Pst	S		ala + tr Pst, EW, qv lim & striated		80									
	23	BR	EW	C1 ay	Pst	S		ala		80									
23	24	BR	EW	C1 ay	Pst	S		ala, qv sl less lim & striated, tr Pst?		60									

TIME STARTED 9.15 FINISHED 12.40

ASSAY LAB

P/O No



Newmont Australia Limited

DRILL LOG

DATE 4/11/90

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PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG RCD - 150

HOLE N°: VIV - 9 10100 N 9940 E

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES											
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	FEET	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t						
24	25	BT	FW	Clay	Pst	s, i?	ala		40	H										
	26	BT	FW	Clay	Pst	s, i?	ala, tr Pxi?	tr wh kcal/ser str sheared frag	40											
	27	BT	FW	Clay	Pst	s, i?	lt brn clys, mod abun strial limqv, tr Pxi? tr Ew Pst		35											
	28	BT	FW	Clay	Pst	s, i?	ala		80											
	29	BT	FW	Clay	Pst	s, i?	ala but gv not so striated		80											
	30	BU	HW	Pat			bu clys + abun lter & brn fg (w) sed? buff?		60											
	31	BU	HW	Pat			ala		55											
	32	BU	HW	Pat		i	ala, tr Pxi, (w) tuffaceous sed?		70											
	33	BU	HW	Pat			ala		40											
	34	OR	MW-HW	Pst	/ Pat	i	or fg Pat? / Pst, HW-MW, tr Pxi		70											
	35	OR	MW-HW	Pst	/ Pat		ala, Pat/Pst mod well foliated.		40											
	36	OR	MW-HW	Pst	/ Pat		ala		20											
	37	OR	MW-HW	Pst	/ Pat	s, i	ala, 5% wh gv, tr Pxi		30											
	38	OR	MW-HW	Pst	h	i	or Psth, tr Pxi, tr v lt gn seric? / blkhd? Pst		25											
	39	LT	MW-HW	Pst	(h)	s, i	or Psth, tr gv, tr Pxi		30											
	40	LT	MW-HW	Pst	(h)	i	ala but no gv		350											
	41	OR	HW	Pst	h	s, i	ala, + tr gv		50											
	42	OR	HW	Pst	h	i, s	ala		30											
	43	OR	HW	Pst	h	Pst	or Psth, + tr yell, wh HW Pst, tr Pxi		30											
	44	OR	HW	Pst	h	i, s	or Psth, tr-r gv, tr Pxi valts		30											
	45	LT	HW	Pst	h	Pst	ala, + v lt gry & brn gry (w) Pst (seric?)		20											
	46	DK	HW	Pst	h	s	or Pst, sl cherty i/p, tr wh gv		250											
	47	DK	HW	Pst	h	s	ala		70											
47	48	OR	HW	Pst	h	Pst	ala + mod abun v lt gn (w) Pst, tr Pxi		40											

TIME STARTED 12.40 FINISHED 2.50

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 4/11/90

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HOLE N°: VIV-9 10100 N 9940 E

PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG RCD-150

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST SM

DEPTH		LITHOLOGICAL						DESCRIPTION		SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS		Wt % Fe Mg	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t				
48	49	DR	HW	Pst(h)		s,i		lt pu & or hw Pst, tr qv, tr Pxi vults		75	lt								
	50	DR	HW	Pst		s,i		ala, mod thin Pxi vults, tr qv		75									
	51	DR	HW	Pst		s,i		lt brn HW Pst, tr qv (wh), tr Pxi		40									
	52	PU	HW	Pst(h)				lt pu, str weath Pst(h)		200									
	53	BR	HW	Pst(h)		i		lt brn - lt pu str weath Pst(h), tr Pxi		80									
	54	BR	HW	Pst(h)		i,s		ala + tr qv		75									
	55	OR	HW	Pst h	Pst?	i		minor ala + abun or fg Pst?/Pst, tr Pxi		60									
	56	OR	MW	Pst h				or Pst h, v finely foliated, blocky		40									
	57	OR	MW	Pst h		s,i		ala + tr qv, r Pxi vults		40									
	58	OR	MW	Pst h		s,i		ala		350									
	59	OR	MW	Pst h	Psc	i		or Pst h ala, tr Pxi, tr grey brn cherty rx		70									
	60	OR	MW	Pst h		s		or Pst h, minor (<1%) wh qv		55									
	61	OR	MW	Pst h		s		or + brn-wh mod-str weath Pst h, tr qv		30									
	62	OR	MW	Pst h		s		or Pst h, 1-2% wh qv, tr Pxi		45									
	63	OR	MW	Pst h	Psc	s,i		ala + tr Pxi + min brn grey cherty rx		30									
	64	OR	MW	Pst h	Psc	s		ala but only tr Psc, no Pxi		300									
	65	OR	MW	Pst h		s		or Pst h, blocky, tr wh kaol (w) Pst? tr qv		70									
	66	BU	HW	Pst		i		lt or & lt gn/bu (w) Pst h, tr Pxi		40									
	67	OR	MW	Pst(h)		i		or & yell, tr wh (w) Pst(h), tr Pxi		75									
	68	OR	MW	Pst h	Psc	i,s		or Pst h + 5% brn gn cherty rx, tr Pxi		60									
	69	OR	MW	Pst h	Psc	s		ala, no Pxi		40									
	70	OR	MW	Pst h	Psc	s		or Pst h, s) silic?/p, tr chert ala, tr qv		300									
	71	OR	MW	Pst h		s		ala but no chert <1% wh qv		95									
71	72	BU	MW	Pm 22	Pst h	s		or Pst h ala + bu seric shrd? sedst tr qv		55									

TIME STARTED 2.50

FINISHED 5.15

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 4/11/90

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5/11/90

PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG(RD) - 150

HOLE N°: VIV-9 10100 N 9940 E

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION								SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	77/92 77/92 NAG	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t					
72	73	BU	MW	Pm2s	Psth	s		lt brn-bu shrd, silic schist?, or Psth, 1% whqv	80	H									
	74	OR	MW	Psth		s		or Psth, blocky, sl silic?, tr whqv	50										
	75	OR	MW	Psth	Psc	s		ala, tr grn brn cherty rx, tr-r qv/ala	35										
	76	OR	MW	Psth		s		or MW Psth + pu sw Psth, tr chert, trqv	200										
	77	OR	MW	Psth		s		ala but wet, poor returns	45										
	78	OR	MW	Psth		s?		or Psth + dk brn silic? Psth, moist, poor returns	30										
	79	PU	SW	Psth		s?		brn pu Psth, sl-mod clvd, tr or Psth, tr sil?, dry	45										
	80	PU	SW	Psth		s		ala, tr qv, dry	50										
	81	PU	SW	Psth				pu brn/brn pu Psth, sl-mod clvd, dry	50										
	82	PU	SW	Psth				5% or 50% pu brn Psth, wet	90										
	83	PU	SW	Psth		s		brn pu Psth, mod clvd, tr qv, dry	80										
	84	PU	SW	Psth				ala but no qv	70										
	85	PU	SW	Psth				ala	60										
	86	PU	SW	Psth				brn pu, mod clvd Psth, dry	60										
	87	PU	SW	Psth				ala	65										
	88	PU	SW	Psth		s		ala but 1-2% wh qv	270										
	89	PU	SW	Psth		s		ala but <1% wh qv, tr or Psth	95										
	90	PU	SW	Psth		s		brn pu Psth ala, perv sil alt i/p, 5% wh qv	220										
	91	PU	SW	Psth/Psw	Psw	s		brn pu Psth/Psw, sl less clvd, 5% or Psth, tr qv	95										
	92	PU	SW	Psth/Psw	Psw	s		ala but only tr or Psth, tr wh qv	250										
	93	PU	SW	Psth/Psw	Psw	s		ala, <1% wh qv	220										
	94	PU	SW	Psth/Psw	Psw	s		ala	270										
	95	PU	F	Psth/Psw	Psw	s		fresh Psth/Psw, tr qv, tr or Psth	230										
95	96	PU	F	Psth/Psw	Psth	s		ala, sl-mod clvd/foliated	200										

TIME STARTED 5:15 7:30 FINISHED 5:20 8:30

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 5/11/90

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PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG RCD-150

HOLE No: VIV-9

10100

N

9940

E

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	W/ % E/ % MAG	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t							
96	97	BR	F	Psw h	Pst h	S		brn pu gry Psw h, tr or Psth, < 1% wh qv	250	H											
	98	BR	F	Psw h	Pst h	S		ala, mod foliated	270												
	99	BR	F	Psw h	Pst h	S		ala	300												
	100	BR	F	Psw(h)	Pst h	S		dk push gry Psw(h), tr qv, tr or Psth	200												
	101	GR	F	Psw(h)	Pst h	S		ala	160												
	102	GR	F	Psw		S		ala but 1-2% wh qv	190												
	103	GR	F	Psw		S, ±chl		Psw ala, 5% wh qv, tr chl alt??	210												
	104	GR	F	Psw(h)	Pst(h)	S		pu gry Psw(h), < 1% wh qv, grdy Pst	200												
	105	GR	F	Psw(h)	Pst(h)	S		pu gry Psw(h) + Psth, tr qv	150												
	106	GR	F	Psw(h)	Pst(h)	S, ±chl		ala + 1-2% wh qv, tr siliceous slickensides	300												
	107	GR	F	Psw h	Pst h	S		pu brn gry Psw h Psth, tr qv	160												
	108	GR	F	Psw h	Pst h	S, ±chl		ala, < 1% wh qv, tr chl w/ qv	200												
	109	GR	F	Psw h	Pst h	S, ±chl		ala, tr chl alt?	200												
	110	BR	F	Pst h	Psw h	S		pu brn Psth / Psw h, tr qv	200												
	111	BR	F	Pst h	Psw h	S, j		ala + tr jasp	200												
	112	GR	F	Pst(h)	Psw(h)	S		pu gry brn Pst(h) / Psw(h), tr qv	220												
	113	BR	F	Pst h	Psw h	S, ±chl		ala but mostly Psth, tr qv, ±chl	190												
	114	BR	F	Pst h		S, chl		pu brn Psth, 10% wh qv w/ min chl, min chl	300												
	115	BR	F	Pst h		S, chl		ala, Psth mod clud	280												
	116	BR	F	Pst h		S, ±chl		pu brn, mod clud Psth, tr qv, ±chl	160												
	117	BR	F	Psw h	Pst h	S		pu brn Psw h, tr Psth, < 1% wh qv	300												
	118	BR	F	Psw h		S		brn Psw h, tr qv	240												
	119	BR	F	Psw h	Pst h	S, chl		brn Psw h ala, tr Psth, 1-2% qv w/ chl	200												
119	120	BR	F	Psw h	Pst h	S		brn Psw h / Pst h, tr qv	230												

TIME STARTED 8.30

FINISHED 2.06

ASSAY LAB

P/O No



Newmont Australia Limited

DRILL LOG

DATE 5/11/90

PAGE No 5/9

HOLE No: VIV-9

10100 N 9940 E

PROJECT NT 28

AZIMUTH 176.5

DRILL RIG RLD-150

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION						SAMPLES										
FROM	TO	COLOR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	Wt % Fe Mg	BIT TYPE	COMPOSITE SAMPLE No	Au g/t	SAMPLE No	Au g/t				
120	121	PU	F	Pst h	Pst wh	chl, s		pubrn Pst h / Pst wh tr chl alt, tr qv	85	H								
	122	PU	F	Pst h		chl, s		mod clvd Pst h ala, min qv, chl alt	170									
	123	PU	F	Pst h	Pst wh	s, chl		ala + mod Pst wh, less chl	210									
	124	PU	F	Pst h		s, chl		pubrn Pst h, min Pst wh, v 5% wh qv tr chl	75									
	125	PU	F	Pst h		s, chl		ala, moist	50									
	126	PU	F	Pst h		s, chl		pubrn Pst h, wk chl alt i/p, tr qv, dry	85									
	127	PU	F	Pst h		s, chl		pubrn Pst h, min chl alt, 1-2% qv w/ chl	80									
	128	PU	F	Pst h		s, chl		ala but only tr qv, tr chl	60									
	129	PU	F	Pst h		s, chl		pubrn Pst h ala + v 2% wh qv, 4% lt gn bl chl rx	65									
	130	PU	F	Pst h		s, chl		Pst h ala, tr qv, tr chl frac/shear surfaces	80									
	131	PU	F	Pst h		s		ala, qv only tr	65									
	132	PU	F	Pst h		s, chl		Pst h ala, + mod qv (1-2%) w/ slicken, tr chl	85									
	133	PU	F	Pst h		s		Pst h ala, tr qv	65									
	134	PU	F	Pst h		s, chl		Pst h ala + v 5% qv / chl vng	75									
	135	PU	F	Pst h		s, chl		pubrn Pst h, tr wh qv, tr chl shear surf	75									
	136	PU	F	Pst h		s, chl		ala but sl more qv / chl	95									
	137	PU	F	Pm 2 z?	Pst h	chl, s		ala + v 60% lt gn shrd? ser? bl chl rx, tr Pstc	55									
	138	LT	F	Psc	Pst			lt-med gry vfg-fg cherty rx / Pst	90									
	139	GR	F	Psc	Pst c			ala, + minor Pstc	65									
	140	GR	F	Psc	Pst			ala - cherty rx tr Pstc	75									
	141	GR	F	Psc	Pst c			lt-med gry Psc, grdg to Pstc	85									
	142	GR	F	Psc	Pst			lt-med brn gry Psc, tr Pstc	90									
	143	GR	F	Psc	Pst			ala	80									
	144	GR	F	Psc	Pst			ala but grey	65									

TIME STARTED 2.06

FINISHED 4.30

ASSAY LAB

P/O No



Newmont Australia Limited

DRILL LOG

DATE 6/11/90

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HOLE N°: VIV-9 10100 N 9940 E

PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG RCD-150

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	DEPTH (m)	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t							
144	145	GR	F	Pst	Psc			fg, med gry, blocky Pst / Esp, slcherty	90	H											
	146	GR	F	Pst	Pstc	chl		ala, min chl frac/shear surf, tr Pstc	75												
	147	GR	F	Pst	Pstc	chl		ala	70												
	148	GR	F	Pst	Pstc	±chl		brn & gry cherty Pst, tr Pstc, wet	80	WET											
	149	GR	F	Pst	Pstc	chl		orsh med gry cherty Pst ala, minor Pstc, wet	220	↓											
	150	GR	F	Pst	Psc	±chl, s		ala, tr qv, only tr Pstc, wet	180												
	151	GR	F	Pst	Psc	s		gry, lt brn & rd brn cherty Pst, tr qv, wet	85												
	152	GR	F	Pst	Psw			brn gry Pst / Psw, wet	65												
	153	GR	F	Pst	Psw	s, ±chl		ala, tr Pstc, tr qv, wet	60												
	154	GR	F	Pst	Psc	s		lt-med brn cherty Pst, 1-2% wh qv	60												
	155	GR	F	Pst	Psc			ala, t mod med gry cherty Pst, no qv	45												
	156	GR	F	Pst				med gry & rd brn (minor) Pst, blk, slcherty	45												
	157	GR	F	Pst		s, ±chl		ala, tr Pstc?, tr qv, wet	40												
	158	GR	F	Pst	Psc	s, ±chl		ala, sl more cherty, blocky, sl browner	50	↑											
	159	GR	F	Psc	Pst			med gry & rd brn (less) cherty Pst?	35	WET											
	160	GR	F	Pstc		chl		tr ala, t abund green grey Pstc, dry	310	DRY											
	161	GR	F	Pst	Psc			tr ala, med gry - rd brn cherty Pst, dry	250	DRY											
	162	GR	F	Psc	Pst	s, ±chl		ala, sl dker gry, tr Pstc?, tr qv	240	WET											
	163	GR	F	Psc	Pst	s, ±chl		med brn gry & rd brn cherty Pst, tr qv, chl	180	↓											
	164	GR	F	Psc	Pst	s, chl		ala, minor Pstc, only tr qv, wet	75												
	165	GR	F	Pst	Pstc	chl		med gry, blocky, cherty Pst, tr Pstc, tr qv	60												
	166	GR	F	Pst	Pstc	±chl, s		lt brn & gry Pst, tr Pstc, 1-2% qv	210												
	167	GR	F	Pst	Pstc	chl, s		lt rd brn & brn Pst, tr gry, tr Pstc, dry	50	↑											
	168	GR	F	Pst	Pstc	±chl, s		lt gry brn & rd brn Pst, tr Pstc, tr qv, wet	45	WET											

4.30

4.35

TIME STARTED 10.00

FINISHED 11.40

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 6/11/90

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HOLE N°: V1V9

10100 N 9940 E

PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG RCD-150

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	WET	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t							
168	169	PBR	F	Pst+h		ts, tchl		minor ala, predom rd pu brn Psth, tr gv, chl	65	H											
	170	PBR	F	Pst	Pst+h	s		40% Pstala, 60% lt brn gry cherty Pstala, tr gv	45	✓											
	171	PBR	F	Pst+h		s, tchl		mod well clvd Psth, 57% wh gv, tr chl, wet	50												
	172	PBR	F	Pst+h		s, chl		ala but 1-2% wh gv w/- chl assoc, wet	200												
	173	PBR	F	Pst+h				pu rd brn Psth	45												
	174	PBR	F	Pst+h		chl		ala + tr wk chl on frac surfaces	40												
	175	PBR	F	Pst+h				rd brn Psth, sl-mod clvd, wet	30												
	176	PBR	F	Pst+h		s, j?, chl?		ala + tr gv w/- tr jasp?, tr chl frac surfs	45												
	177	PBR	F	Pst+h		s, tchl		Psth ala + tr gv, tr gry sl chl cherty Pst	50												
	178	PBR	F	Pst+h		j?, chl		Psth ala, tr chl on cleav surf, tr j?	95												
	179	PBR	F	Pst+h	Pst+c	chl		ala Psth, + @ 10% sl-mod chl cherty Pstc	80												
	180	PBR	F	Pst+h	Pst+c	tchl		ala but only tr Pstc	45												
	181	PBR	F	Pst+h				blocky, sl-mod clvd Psth	55												
	182	PBR	F	Pst+h	Pst+c	tchl		ala, tr Pstc	45												
	183	PBR	F	Pst+h				rd brn, blocky, sl-mod fol/clvd Psth	55												
	184	PBR	F	Pst+h	Pst	tchl		ala, tr Pstc, tr lt brn Pst	200												
	185	PBR	F	Pst+h				mass-sl fol, blocky Psth	50												
	186	PBR	F	Pst+h		tchl		ala + tr or bichd? Psth, tr-r Pstc	50												
	187	PBR	F	Pst / Psc				ala-tr, abun lt gn brn cherty Pst?	85												
	188	PBR	F	Pst+h / Psc		tchl		miner ala, abun rd brn sl cherty Psth, tr chl	40												
	189	PBR	F	Pst				lt pk brn, tr greenish cherty Pst	50												
	190	PBR	F	Pst+h	Pst+c	s, chl		Psth, rd brn + 5% Pstc 2% wh gv	200	↑											
	191	PBR	F	Pst+h	Pst+c	chl(?)		sl-mod fol Psth, tr Pstc	65												
191	192	PBR	F	Pst+h				Psth ala + minor or bichd? Psth	45	WET											

TIME STARTED 11-40

FINISHED 1-45

ASSAY LAB

P/O N°



DATE 6/11/90

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PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG RCD-150

HOLE N°: VIVA 10100 N 9940 E

PROSPECT VIVID

DECLINATION -70°

GEOLOGIST *SM*

TIME STARTED

FINISHED

ASSAY LAB

P/O N°

VIV-9B DRILL LOGS

DRILLING RECORD

Hole No. VIV-9B

TITLE PHILLIP CREEK

10106N

9941 E

COLLAR R.L.

176.5°

grid 5

and

true

-75°

TOTAL DEPTH

150m

BOREHOLE SURVEYS

METHOD EASTMAN CAMERA

DRILLING RIG

LONG YEAR

OPERATOR

STADCCOTE (G. McFarlane)

DATE STARTED

8/11/90

DATE COMPLETED

9/11/90

CORE SIZES:

HAMMER (open hole)

10 - 150m

WEDGES PLACED

depth (m)	bearing		dip (degrees)
	(mag)	(grid)	
24			77°
54	181		78.75°
78			79°
102	174		80°
126			80.5°
150	162.5		82°

S U M M A R Y O F R E S U L T S

[illegible]

LOGGED BY

S. Mather

DATE _____

8-9/11/90



Newmont Australia Limited

DRILL LOG

DATE 8/11/90

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HOLE N°: VIV-9B 10106 N 9941 E

PROJECT NT 28

AZIMUTH 176.5

DRILL RIG STADCOE

PROSPECT VIVID

DECLINATION - 75°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION										SAMPLES										
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY		SECONDARY LITHOLOGY		ALTERATION	MINERALISATION	COMMENTS	Wt % Au mg	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t						
0	1	BR	EW	C2	Sg					sand, soil, gravel (Pst, qv)	40	H										
	2	BR	EW	C2	Sg					ala	45											
	3	BR	EW	C2	Sg					ala, less gravel, more clays	50											
	4	BR	EW	C2	Sg					ala	50											
	5	BR	EW	C2	Sg					ala	35											
	6	BR	EW	C2	Sg					ala	35											
	7	BR	EW	C2	S					brown gritty clays + sand	40											
	8	BR	EW	C2	S					ala	40											
	9	BR	EW	C2	SS					ala + silcrete	50											
	10	BR	EW	C2	SS					ala + silcrete	65											
	11	BR	EW	C2	Sg	Clay				lt brn clys + Pst, qv, Pxi & lat piso gravel	210											
	12	BR	EW	Clay						lt brn clys	20											
	13	BR	EW	"						ala	20											
	14	BR	EW	"						ala	20											
	15	BR	EW	"						ala	15											
	16	BR	EW	"						ala	15											
	17	BR	EW	"						ala	15											
	18	BR	EW	"						ala	15											
	19	BR	EW	"						lt pn brn clys	15											
	20	BR	EW	"						ala	15											
	21	BR	EW	"						ala	20											
	22	BR	EW	"						ala	20											
	23	BR	EW	"						ala	15											
23	24	BR	EW	"						ala, sl dker pn brn clys	15											

TIME STARTED 8:00

FINISHED 8:35

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 8/11/90

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PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG STADCODE

HOLE N°: VIV 98

10106 N 9941 E

PROSPECT VIVID

DECLINATION -75°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION								SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE GRAVITY g/t	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t					
24	25	BR	FW	Clay				med pu brn clys	20	H									
	26	BR	FW	Clay	Psth			ala, t tr pu brn str weath Psth	15										
	27	BR	FW	Clay				lt brn, tr wh clays	30										
	28	BR	FW	Clay	Pst	s		ala, tr Pst?, tr qv?	30										
	29	BR	FW	Clay		s		lt brn clys, tr sl lim qv	30										
	30	BR	FW	Clay				lt-med brn, sl gritty clays	25										
	31	BR	FW	Clay		s		lt brn clys, tr sl lim qv	35										
	32	BR	FW	Clay		s		ala, qv striated (slicken) ip/thru	40										
	33	BR	FW	"		s		ala	20										
	34	BR	FW	"		s		lt-med brn clys, tr qv	20										
	35	BR	FW	"	Psth			lt-med brn clys, tr Fw Pst(h)	20										
	36	BR	FW	"	Psth	s, i		med pu brn clys, tr qv, tr Pxi, tr Psth	25										
	37	BR	FW	"	Psth	s, i		ala but only r Pxi, r qv, minor Psth	25										
	38	BR	FW	"	Psth			med pu brn clys, tr Fw Psth	30										
	39	BR	FW	"	Psth			ala	20										
	40	BR	FW	"	Psth	i		ala, tr r Pxi	25										
	41	BR	FW	"	Psth	i, s		pu brn clys, min Psth(hw) + tr qv, tr Pxi	25										
	42	BR	FW	"	Psth	s, i		ala but more qv	25										
	43	BR	FW	"	Psth	s, i		clays ala t mod well fol Psth(minor), tr qv, Pxi	25										
	44	BR	FW	"	Psth	s, i		ala	25										
	45	BR	FW	"	Psth	s, i		ala, tr more qv	25										
	46	BR	FW	"	Psth	s, i		ala	20										
	47	BR	FW	"	Psth	s, i		ala, r Pxi	20										
47	48	BR	FW	"	Psth	s, i		ala	20										

TIME STARTED 9.30

FINISHED 10.25

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 8/11/90

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HOLE No: VIV - 98 10106 N 9941 E

PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG STADCO TE

PROSPECT VIVID

DECLINATION -7S°

GEOLOGIST SM

DEPTH		LITHOLOGICAL						DESCRIPTION		SAMPLES									
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS		DRILL LOG MAG	BIT TYPE	COMPOSITE SAMPLE No	Au g/t	SAMPLE No	Au g/t				
48	49	BR	HW	Pst h		s, i		pu brn Pst h, mod well fol, tr Pxi, qv, tr clys		30	H								
	50	BR	HW	Pst h		s		ala, abun qv, sl more weath		30									
	51	BR	HW	Pst h		s		Pst h ala, tr or brn blk y Pst h, minor qv		30									
	52	BR	HW	Pst h		s, i		ala, tr Pxi?		40									
	53	BR	HW	Pst h	Pm z	s		ala, t minor lt or -pk shrd frags		25									
	54	BR	HW	Pm z				lt or -bn shrd, kaol? ser? Pm z		25									
	55	BR	HW	Pm z		i		ala, tr Pxi		35									
	56	OR	HW	Pst h	Pm z	i, s		tr ala, or rd sl fol Pst h, tr qv, tr Pxi		45									
	57	DR	MW	Pst h		i, s		or Pst h ala, tr qv, r Pxi		35									
	58	DR	MW	Pst h		i, s		ala		35									
	59	DR	MW	Pst h		i, s		ala but @ 1-2% qv		45									
	60	BR	MW	Pst (h)		s		lt or brn Pst h) ala, tr qv		25									
	61	BR	HW	Pst (h)		s		ala, poss sl sil alt		35									
	62	BR	HW	Pst (h)	Pst h	s, i		ala t minor purd brn Pst h, tr qv, min Pxi		40									
	63	BR	HW	Pst h		s, i		med rdsh brn silic Pst h, 5% qv, tr Pxi		95									
	64	BR	MW	Pst h		s, i		blk y, cherty (silicified) Pst h, 1-2% whq, tr Pxi		65									
	65	BR	MW	Pst (h)		s, i		lt-med brn cherty (silic) blk y Pst (h), tr qv, r Pxi		55									
	66	BR	MW	Pst h		s		ala, sl dker rd pu brn silic Pst h, tr qv, no Pxi		55									
	67	BR	MW	Pst h				ala t tr lt gny cherty Pst, tr lt gny gnyh Pm z		40									
	68	BR	MW	Pst h		s		rdsh brn, blk y cherty (silic) Pst h, tr qv		45									
	69	BR	MW	Pst h		s, i		ala, t tr Pxi?		35									
	70	BR	MW	Pst h		s, i (t)		ala, sl fol i/p		40									
	71	BR	MW	Pst h		s		ala but no Pxi		50									
71	72	BR	MW	Pst h	Pm z	s		ala, but mod abun gn brn cherty shrd Rx		55									

10.25

10.45

TIME STARTED 11.40

FINISHED 12.35

ASSAY LAB

P/O No



Newmont Australia Limited

DRILL LOG

DATE 8/11/90

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PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG STADLOTE

HOLE N°: VIV-9B 10106 N 9941 E

PROSPECT VIVID

DECLINATION -75°

GEOLOGIST SM

DEPTH		LITHOLOGICAL						DESCRIPTION		SAMPLES									
FROM	TO	COLOR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS		DIAGRAM	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t				
72	73	OR	MW	Pst+h				s	or brn - pu brn Pst+h, tr qv, not sil alt	45	H								
	74	OR	MW	Pst+h				s	ala	30									
	75	OR	HW	Pst+h				±i	ala, tr Pxi, no qv, HW	40									
	76	BR	MW	Pst(h)				s	lt brn, sl perv sil alt? Pst(h), tr qv	35									
	77	BR	MW	Pst(h)	Pm2			s	ala + abn vlt + green Pm2, tr qv	35									
	78	BR	MW	Pst(h)				s	lt pu brn - lt brn Pst(h), minor qv	50									
	79	BR	MW	Pst(h)				s, ±i	ala, ± Pxi, moist	35									
	80	BR	MW	Pst(h)				s	ala, minor qv, no Pxi	70									
	81	BR	MW	Pst(h)				s	mod orsh brn silic (blk, cherty) Pst, mod qv	160									
	82	BR	MW	Pst+h				s	ala but rd brn, sl less perv sil alt, mod qv	85									
	83	BR	HW	Pst+h	Psw h			s	HW, pu brn Pst+h/Psw h, sl fol, tr qv	190									
	84	BR	MW	Pst+h				s	dk pu brn, mod well fol/clvd Pst+h	65									
	85	BR	MW	Pst+h				±s	ala, tr qv, sl moist	45									
	86	BR	MW	Pst+h				±s	ala, dry	85									
	87	BR	MW	Pst+h	Psw h			±s	pu brn SW Pst+h/Psw h, mass → well fol, tr qv	55									
	88	BR	MW	Pst+h	Psw h			s	ala, sl more weath tr qv	90									
	89	BR	MW	Pst+h				s	SW - Fresh Pst+h, mod well clvd, tr qv	65									
	90	BR	MW	Pst+h				s	ala	75									
	91	BR	MW	Pst+h	Pssh			s	ala, t Psw h/Pssh, tr qv, tr perv sil alt?	60									
	92	BR	MW	Pssh	Pst+h			s	pu brn Psw h/Pssh, tr Pst+h, tr qv	85									
	93	BR	F	Pssh	Pst+h			s	ala, sl more Pst+h than above	190									
	94	BR	F	Pst+h	Psw h			s, ±chl	fresh Pst+h/Psw h, 3/4 qv, tr chl on frags	85									
	95	BR	F	Pst+h	Psw h			s, ±chl	ala	90									
95	96	BR	F	Pst+h	Psw h			s, ±chl	ala, no - r chl	80									

12.35

12.55

TIME STARTED 1.20

FINISHED 2.30

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 8/11/90

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9/11/90

PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG STADCOE

HOLE N°: VIV-98

10106 N 9941 E

PROSPECT VIVID

DECLINATION -75°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES											
FROM TO		COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	TEST MAG	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t						
96	97	BR	F	Pst h	Psw h	s		pu brn fresh Psth/Psw h, tr qv	55	H										
	98	BR	F	Pst h	Psw h	chl(±)		ala Psth, no qv, tr chl on frac surfs	80											
	99	BR	F	Pst h	Psw h	s		Psth ala, tr qv	70											
	100	BR	F	Pst h		s, ±chl		Psth, fresh, tr qv, r chl on fracs	85											
	101	BR	F	Pst h		s, ±chl		ala but 2-3% wh qv, r chl	190											
	102	BR	F	Psw h	Pssh	s, ±chl		Psw h/Pssh, tr Psth, 1-2% qv w/ chl, tr chl	210											
	103	BR	F	Psw h	Pssh	s, ±chl		ala, less qv, wet, sl contam	65											
	104	BR	F	Pst h	Psw h	ts, ±chl		Psth ± Psw h, tr qv, tr chl on fracs, moist	75											
	105	BR	F	Pst h	Psw h	s		pu gry Psth + Psw h, tr qv	70											
	106	BR	F	Pst h		s, ±chl		ala, more Psth, tr chl	80											
	107	BR	F	Pst h	Psw h	s		Psth/Psw h, tr qv	200											
	108	BR	F	Pst h	Psw h	s		ala	200											
	109	BR	F	Pst h	Psw h	s, chl		ala, sl more qv, tr chl, pu brn.	55											
	110	BR	F	Pst h	Psw h	s		ala but no chl	100											
	111	BR	F	Pst h	Psw h	s		ala	200											
	112	BR	F	Pst h	Psw h	s		ala	180											
	113	BR	F	Pst h	Psw h	s		ala but ~2% qv	90											
	114	BR	F	Pst h	Psw h	s		ala but tr qv	80											
	115	BR	F	Psw h	Pssh	s		pu brn Pssh, 1-2% qv, tr contam, wet	55	↑										
	116	BR	F	Psw h	Pssh	s		ala	70	↑										
	117	BR	F	Psw h	Pst h	s, ±chl		ala + tr Psth, tr chl?	65	↑										
	118	BR	F	Psw h	Pst h	s, ±chl		Psw h, minor Psth, tr-min qv	60	↑										
	119	BR	F	Psw h	Pst h	s		ala	90	↑										
119	120	BR	F	Psw h	Pst h	s		ala	190	↑										

2.30

2.55

TIME STARTED 4.10

FINISHED 5.00

7.50

8.25

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 9/11/90

PAGE N° 6 / 7

PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG STADCO TE

HOLE N°: VIV-98

10106 N 994 E

PROSPECT VIVID

DECLINATION -75°

GEOLOGIST SM

DEPTH		LITHOLOGICAL						DESCRIPTION		SAMPLES									
FROM	TO	COLOR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS		GRAVIMETRIC ANALYSIS	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t				
120	121	BR	F	Psw	h	Pst	h	s	pubrn Psw, tr Psth, tr qv	80	41								
	122	BR	F	Psw	h	Pst	h	s	ala	85									
	123	BR	F	Psw	h	Pst	h	s	ala, sl more qv	65									
	124	BR	F	Psw	h			s	Psw, tr qv	55									
	125	BR	F	Psw	h			s, chl	ala, tr chl?	250									
	126	BR	F	Psw	h	Pst	h	s	ala, no chl, tr well clvd Psth	250									
	127	BR	F	Psw	h	Pst	h	s	pubrn Psw -> Pssh, tr qv	50									
	128	BR	F	Psw	h	Pst	h	s, chl	ala, tr chl assoc w/- qv, tr Psth?	80									
	129	BR	F	Psw	h	Pst	h	s	Psw, tr Psth, tr qv	170									
	130	BR	F	Psw	h			s, chl	ala, tr chl	200									
	131	BR	F	Psw	h				Psw, pubrn, tr Psth?	210									
	132	BR	F	Psw	h	Pst	h	s	ala, tr qv	200									
	133	BR	F	Psw	h	Pst	h	s, chl	ala, r qv, r chl	65									
	134	BR	F	Pst	h	Pst	h	s, chl	pubrn Psth, tr Psw, tr Pstc, tr qv	70									
	135	BR	F	Psw	h			s, chl	pubrn Psw, 1% qv, tr chl?	250									
	136	BR	F	Psw	h	Pst	h	s	ala + tr Psth, no chl	250									
	137	BR	F	Psw	h	Pst	h	s	Psw, tr Psth, tr qv	250									
	138	BR	F	Psw	h	Pst	h	s, chl	ala, tr chl assoc w/- qv	210									
	139	BR	F	Psw	h	Pst	h	s, chl	ala	75									
	140	BR	F	Psw	h	Pst	h	s, chl	ala, + tr Pstc?	190									
	141	BR	F	Pst	h			s	Psth, tr qv	180									
	142	BR	F	Pst	h	Pst	h	s, chl	Psth tr Psw, tr-min Pstc, tr qv	190									
	143	BR	F	Pst	h	Pst	h	s, chl	ala	150									
	144	BR	F	Pst	h	Pst	h	s, chl	ala, tr Pstc	180									

8.25

9.08

TIME STARTED 10.00

FINISHED 12.00

ASSAY LAB

P/O N°



Newmont Australia Limited

DRILL LOG

DATE 9/11/90

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HOLE N°: VIV 98

10106 N 9941 E

PROJECT NT 28

AZIMUTH 176.5°

DRILL RIG STABLOTE

PROSPECT VIVID

DECLINATION -75°

GEOLOGIST SM

DEPTH		LITHOLOGICAL DESCRIPTION						SAMPLES						
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	EL. (m)	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t
144	145	BR	F	Pst+h	Pst+c	s, tchl		pubrn Pst+h + med (g) gny Pst(c), mod qv, n	60	It				
	146	BR		Psw h		s		pu brn gny Psw h, tr qv	75					
	147	BR		Psw h	Pst+h	s		ala, tr Pst+h, mod qv	200					
	148	BR		Psw h	Pst+h	s		Psw h, tr Pst+h, tr qv	250					
	149	BR		Pst+h	Pst+c	s, chl		Pst+h, minor Pstc, tr qv	90					
	150	BR		Pst+h	Pst+c	s, tchl		ala, only tr Pstc	180					
151														
152														
153														
154														
155														
156														
157														
158														
159														
160														
161														
162														
163														
164														
165														
166														
167														
168														

HOLE ABANDONED 150m
due to excessive steeping
and azimuth deviation

TIME STARTED

FINISHED

ASSAY LAB

P/O N°

DATA VERIFICATION REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - 1.31

Probe number - 2061

File Name - P17P1

Shot	Depth	Inc	Az	HS	MTF	GTotal	HTotal	Dip	Temp (C)	Bat
402	201.0	26.48	276.45	319.07	235.53	999.0	51105	-50.52	32	16
404	202.0	26.53	275.28	314.89	230.17	998.9	51094	-50.56	32	15
406	203.0	26.54	274.34	309.09	223.43	999.2	51107	-50.62	32	15
408	204.0	26.75	273.58	316.36	229.94	999.2	51108	-50.55	32	15
410	205.0	26.81	274.14	336.72	250.86	999.3	51107	-50.55	32	15
412	206.0	26.72	275.29	348.78	264.06	999.0	51117	-50.54	32	15
414	207.0	26.75	276.35	346.74	263.09	999.5	51117	-50.53	32	15
416	208.0	26.98	276.89	330.04	246.93	999.0	51086	-50.53	32	15
418	209.0	26.97	276.58	321.84	238.42	998.7	51096	-50.54	32	15
420	210.0	26.89	275.00	300.87	215.87	999.3	51054	-50.63	32	15
422	211.0	27.05	274.07	298.54	212.62	999.0	51064	-50.62	32	15
424	212.0	27.29	274.01	328.72	242.73	998.9	51064	-50.57	32	15
426	213.0	27.32	274.95	351.08	266.03	999.3	51077	-50.60	32	15
428	214.0	27.18	276.53	356.28	272.81	999.4	51080	-50.58	32	15
430	215.0	27.28	276.95	334.90	251.84	999.3	51101	-50.64	32	15
432	216.0	27.38	276.51	311.26	227.77	999.2	51070	-50.65	32	15
434	217.0	27.36	275.43	287.85	203.28	998.7	51038	-50.67	32	15
436	218.0	27.40	274.45	242.48	156.93	998.6	51062	-50.69	32	15
438	219.0	27.69	273.77	233.71	147.48	998.8	51071	-50.65	32	15
440	220.0	27.95	273.96	243.40	157.36	998.7	51065	-50.66	32	15
442	221.0	27.97	274.71	228.18	142.89	998.9	51073	-50.68	32	15
444	222.0	27.63	276.16	208.84	125.00	998.7	51074	-50.69	33	15
446	223.0	27.87	276.68	193.78	110.45	999.0	51093	-50.70	33	15
448	224.0	28.07	276.81	182.22	99.03	998.9	51084	-50.68	33	15
450	225.0	28.11	275.89	145.94	61.83	998.8	51083	-50.63	33	15
452	226.0	28.17	274.78	128.23	43.01	998.8	51076	-50.67	33	15
454	227.0	28.43	273.95	135.63	49.58	998.8	51101	-50.67	33	15
456	228.0	28.72	274.14	146.53	60.67	998.8	51098	-50.66	33	15
458	229.0	28.72	275.02	141.75	56.77	998.8	51085	-50.64	33	15
460	230.0	28.67	276.14	101.19	17.33	999.4	51108	-50.61	33	15
462	231.0	28.76	276.95	65.26	342.21	999.3	51128	-50.56	33	15
464	232.0	29.07	277.44	26.21	303.64	999.4	51110	-50.52	33	15
466	233.0	29.11	276.71	8.56	285.27	999.5	51092	-50.51	33	15
468	234.0	28.99	275.38	356.74	272.12	999.3	51080	-50.49	33	15
470	235.0	29.32	274.81	6.27	281.07	999.3	51081	-50.51	33	15
472	236.0	29.47	275.26	31.15	306.41	999.1	51132	-50.54	33	15
474	237.0	29.39	276.46	16.26	292.73	999.4	51095	-50.41	33	15
476	238.0	29.37	277.77	346.68	264.44	999.4	51126	-50.55	33	15
478	239.0	29.46	278.01	326.38	244.39	999.2	51129	-50.53	33	15
480	240.0	29.49	277.26	312.43	229.69	999.2	51136	-50.59	33	15

DATA VERIFICATION REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - 1.31

Probe number - 2061

File Name - P17P1

Shot	Depth	Inc	Az	HS	MTF	GTotat	HTotal	Dip	Temp (C)	Bat
482	241.0	29.44	275.95	295.73	211.69	998.8	51122	-50.43	33	15
484	242.0	29.76	275.37	299.47	214.85	999.1	51059	-50.43	33	15
486	243.0	29.92	275.19	327.72	242.91	999.3	51023	-50.55	33	15
488	244.0	29.77	276.61	356.45	273.06	998.9	50964	-50.47	33	15
490	245.0	29.69	277.65	358.98	276.83	999.5	51012	-50.50	33	15
492	246.0	29.85	278.52	335.53	254.05	999.4	50990	-50.51	33	15
494	247.0	29.94	278.33	318.31	236.64	999.2	51089	-50.42	33	15
496	248.0	29.69	277.02	309.07	226.09	999.2	50989	-50.57	33	15
498	249.0	29.98	276.00	296.45	212.45	998.3	51063	-50.51	33	15
500	250.0	30.23	276.05	320.32	236.36	998.7	51058	-50.59	33	15
502	251.0	30.33	276.85	331.40	248.25	998.9	51072	-50.47	33	15
504	252.0	30.00	277.94	352.25	270.19	999.0	51136	-50.45	33	15
506	253.0	30.05	278.84	339.92	258.75	999.1	51239	-50.56	33	15
508	254.0	30.25	278.98	319.17	238.15	999.1	51267	-50.45	33	15
510	255.0	30.24	278.13	304.13	222.26	999.2	51288	-50.49	33	15
512	256.0	30.18	276.57	288.07	204.64	998.4	51280	-50.36	33	15
514	257.0	30.29	276.11	282.48	198.59	998.8	51332	-50.39	33	15
516	258.0	30.53	275.83	252.79	168.61	998.4	51261	-50.50	33	15
518	259.0	30.56	276.41	254.30	170.71	998.7	51286	-50.30	33	15
520	260.0	30.38	277.95	228.29	146.23	998.8	51292	-50.29	33	15
522	261.0	30.45	278.76	204.05	122.81	998.9	51152	-50.37	33	15
524	262.0	30.66	279.02	187.76	106.78	998.8	51131	-50.36	33	15
526	263.0	30.72	278.21	156.57	74.78	999.0	51221	-50.32	33	15
528	264.0	30.37	277.04	129.60	46.64	998.9	51138	-50.39	33	15
530	265.0	30.62	275.97	134.01	49.98	998.6	51161	-50.24	33	15
532	266.0	30.93	275.88	146.41	62.29	999.0	51061	-50.41	33	15
534	267.0	30.93	276.63	150.35	66.98	998.8	51045	-50.34	33	15
536	268.0	30.72	277.98	116.32	34.30	999.0	51172	-50.32	33	15
538	269.0	30.70	278.80	99.70	18.49	999.1	50782	-50.46	33	15
540	270.0	30.94	279.57	64.60	344.17	999.4	51122	-50.25	34	15
542	271.0	30.99	278.46	48.80	327.26	999.5	51157	-50.36	34	15
544	272.0	30.96	277.02	33.48	310.50	999.3	51060	-50.34	34	15
546	273.0	31.06	277.20	17.80	295.00	999.1	51324	-50.19	34	15
548	274.0	31.27	276.08	16.56	292.64	999.5	51338	-50.43	34	15
550	275.0	31.31	276.41	9.76	286.16	999.2	51298	-50.44	34	15
552	276.0	31.29	277.40	0.71	278.11	999.7	50894	-50.25	34	15
554	277.0	31.29	277.66	350.74	268.40	999.2	51007	-50.28	34	15
556	278.0	31.26	277.96	353.28	271.24	999.0	51054	-50.35	34	15
558	279.0	31.31	278.63	343.16	261.78	998.9	50961	-50.27	34	15
560	280.0	31.48	278.90	331.04	249.94	999.3	50931	-50.18	34	15

DATA VERIFICATION REPORT
AUSTRALIAN DEVELOPMENT LTD
Version - 1.31

Probe number - 2061

File Name - P17P1

Shot	Depth	Inc	Az	HS	MTF	GTotat	HTotal	Dip	Temp (C)	Bat
482	241.0	29.44	275.95	295.73	211.69	998.8	51122	-50.43	33	15
484	242.0	29.76	275.37	299.47	214.85	999.1	51059	-50.43	33	15
486	243.0	29.92	275.19	327.72	242.91	999.3	51023	-50.55	33	15
488	244.0	29.77	276.61	356.45	273.06	998.9	50964	-50.47	33	15
490	245.0	29.69	277.85	358.98	276.83	999.5	51012	-50.50	33	15
492	246.0	29.85	278.52	335.53	254.05	999.4	50990	-50.51	33	15
494	247.0	29.94	278.33	318.31	236.64	999.2	51089	-50.42	33	15
496	248.0	29.89	277.02	309.07	226.09	999.2	50989	-50.57	33	15
498	249.0	29.98	276.00	296.45	212.45	998.3	51063	-50.51	33	15
500	250.0	30.23	276.05	320.32	236.36	998.7	51058	-50.59	33	15
502	251.0	30.33	276.85	331.40	248.25	998.9	51072	-50.47	33	15
504	252.0	30.00	277.94	352.25	270.19	999.0	51136	-50.45	33	15
506	253.0	30.05	278.84	339.92	258.75	999.1	51239	-50.56	33	15
508	254.0	30.25	278.98	319.17	238.15	999.1	51267	-50.45	33	15
510	255.0	30.24	278.13	304.13	222.26	999.2	51288	-50.49	33	15
512	256.0	30.18	276.57	288.07	204.64	998.4	51280	-50.36	33	15
514	257.0	30.29	276.11	282.48	198.59	998.8	51332	-50.39	33	15
516	258.0	30.53	275.83	252.79	168.61	998.4	51261	-50.50	33	15
518	259.0	30.56	276.41	254.30	170.71	998.7	51286	-50.30	33	15
520	260.0	30.38	277.95	228.29	146.23	998.8	51292	-50.29	33	15
522	261.0	30.45	278.76	204.05	122.81	998.9	51152	-50.37	33	15
524	262.0	30.66	279.02	187.76	106.78	998.8	51131	-50.36	33	15
526	263.0	30.72	278.21	156.57	74.78	999.0	51221	-50.32	33	15
528	264.0	30.37	277.04	129.60	46.64	998.9	51138	-50.39	33	15
530	265.0	30.62	275.97	134.01	49.98	998.6	51161	-50.24	33	15
532	266.0	30.93	275.88	146.41	62.29	999.0	51061	-50.41	33	15
534	267.0	30.93	276.63	150.35	66.98	998.8	51045	-50.34	33	15
536	268.0	30.72	277.98	116.32	34.30	999.0	51172	-50.32	33	15
538	269.0	30.70	278.80	99.70	18.49	999.1	50782	-50.46	33	15
540	270.0	30.94	279.57	64.60	344.17	999.4	51122	-50.25	34	15
542	271.0	30.99	278.46	48.80	327.26	999.5	51157	-50.36	34	15
544	272.0	30.96	277.02	33.48	310.50	999.3	51060	-50.34	34	15
546	273.0	31.06	277.20	17.80	295.00	999.1	51324	-50.19	34	15
548	274.0	31.27	276.08	16.56	292.64	999.5	51338	-50.43	34	15
550	275.0	31.31	276.41	9.76	286.16	999.2	51298	-50.44	34	15
552	276.0	31.29	277.40	0.71	278.11	999.7	50894	-50.25	34	15
554	277.0	31.29	277.66	350.74	268.40	999.2	51007	-50.28	34	15
556	278.0	31.26	277.96	353.28	271.24	999.0	51054	-50.35	34	15
558	279.0	31.31	278.63	343.16	261.78	998.9	50961	-50.27	34	15
560	280.0	31.48	278.90	331.04	249.94	999.3	50931	-50.18	34	15

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: AUSTRALIAN DEVELOPMENT LTD
HOLE NO: P17P1
LEASE:
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 11-7-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: P17P1A.ADL

EASTING???		NORTHING ???			RL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
2	1	-3904	-32250	-38854	-266.1	-22.7	962.4	22.27
4	2	12277	-29652	-39622	-222.6	-137.5	964.2	22.27
6	3	22087	-23153	-39872	-162.1	-205.5	964.1	22.39
8	4	31953	-2067	-39937	18.9	-260.7	963.9	22.39
10	5	20247	24897	-39886	224.2	-136.2	964.1	22.27
12	6	-4930	31729	-39885	251.6	76.9	963.8	22.27
14	7	-16035	27758	-39919	206.7	160.5	963.9	22.45
16	8	-13011	29258	-39927	223.6	137.5	963.9	22.45
18	9	-8259	30960	-39924	243.5	101.5	963.4	22.52
20	10	-19188	25692	-39912	187.0	184.7	963.4	22.52
22	11	-31115	-7153	-40002	-90.2	245.2	963.7	22.52
24	12	-27241	-16634	-40013	-164.6	205.2	963.1	22.70
26	13	-11393	-29756	-40076	-256.1	62.8	963.4	22.64
28	14	-3996	-31639	-40055	-264.2	-0.6	963.0	22.52
30	15	1829	-31880	-40034	-260.7	-49.5	962.9	22.76
32	16	16308	-27531	-39999	-208.6	-164.2	962.9	22.82
34	17	27321	-16668	-39982	-106.5	-241.2	963.4	22.94
36	18	30261	10656	-39944	120.5	-236.0	963.4	22.94
38	19	3530	31865	-39920	266.5	6.8	962.8	23.00
40	20	-3858	31758	-39952	258.2	66.5	962.7	23.13
42	21	-9331	30557	-40001	244.4	110.4	962.4	23.00
44	22	-9193	30631	-40001	244.8	109.6	962.0	23.13
46	23	-19318	25510	-39950	188.7	187.1	962.5	23.25
48	24	-22776	22467	-39962	159.9	213.0	962.8	23.37
50	25	-30682	8794	-40007	39.5	264.7	962.2	23.43
52	26	-17071	-26932	-40051	-242.5	113.1	962.3	23.49
54	27	-10562	-30103	-40059	-262.0	55.9	962.1	23.55
56	28	-5559	-31386	-40076	-268.5	13.1	962.0	23.67
58	29	21847	-23429	-39949	-168.2	-207.0	962.6	23.67
60	30	26960	-17408	-39945	-112.4	-243.5	961.8	23.74
62	31	32018	-2816	-39892	14.9	-269.4	961.8	23.80
64	32	28680	14507	-39898	154.9	-221.5	961.4	23.92
66	33	5610	31685	-39826	272.4	-7.0	961.0	23.92
68	34	-6494	31528	-39803	256.2	94.9	961.0	24.10
70	35	-18634	26232	-39837	195.0	189.1	960.9	24.04
72	36	-18033	26689	-39799	200.1	185.7	960.5	24.10
74	37	-8648	31088	-39757	249.4	114.9	960.8	24.22
76	38	-9462	30896	-39738	246.6	122.0	959.8	24.29
78	39	-10322	30585	-39729	244.3	129.9	960.1	24.29

DOWNHOLE MAGNETOMETER SURVEY

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: AUSTRALIAN DEVELOPMENT LTD
HOLE NO: P17P1
LEASE:
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 11-7-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: P17P1A.ADL

EASTING???			NORTHING ???			RL ???		
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
80	40	-8093	31317	-39700	253.4	113.8	959.0	24.41
82	41	-12116	30063	-39626	234.9	147.0	959.7	24.53
84	42	-15241	28673	-39571	218.2	172.8	959.5	24.59
86	43	-10544	30767	-39521	243.4	138.0	958.9	24.53
88	44	-11598	30511	-39447	238.7	148.8	958.7	24.71
90	45	-11127	30749	-39390	241.7	147.6	957.9	24.83
92	46	-11478	30648	-39352	240.2	151.7	957.9	24.77
94	47	-16739	28142	-39355	208.5	190.5	958.4	24.71
96	48	-15325	28938	-39373	218.8	181.4	957.8	25.02
98	49	-14132	29532	-39382	227.7	174.2	956.6	24.96
100	50	-8057	31820	-39275	257.3	128.3	956.5	25.14
102	51	-5635	32498	-39160	265.8	111.8	956.5	25.20
104	52	-8649	31892	-39105	253.7	137.6	955.9	25.32
106	53	-18608	27182	-39196	195.7	211.3	956.4	25.38
108	54	-13504	30081	-39183	230.6	175.0	955.8	25.38
110	55	-7114	32277	-39114	261.9	125.6	955.9	25.45
112	56	-8806	31984	-39020	254.3	141.9	955.3	25.45
114	57	-13300	30355	-39042	231.9	177.7	955.4	25.57
116	58	-9620	31691	-39049	252.2	149.2	955.3	25.51
118	59	-16121	28764	-39166	215.8	197.0	955.4	25.69
120	60	-11091	31124	-39116	246.2	160.4	954.4	25.75
122	61	-8825	31957	-39021	257.5	144.3	954.5	25.87
124	62	-8307	32185	-38935	258.9	142.3	954.3	25.69
126	63	-4156	33093	-38886	274.4	110.4	954.5	25.99
128	64	-7660	32578	-38765	260.8	141.7	953.7	25.93
130	65	-13042	30720	-38844	233.3	181.8	954.4	26.12
132	66	-16963	28718	-38855	208.6	211.5	953.4	26.12
134	67	-12996	30666	-38891	236.7	182.4	953.2	26.30
136	68	-12866	30721	-38863	237.7	181.7	952.8	26.18
138	69	-13236	30556	-38929	237.3	185.6	952.0	26.36
140	70	-13190	30565	-38929	238.6	185.8	951.8	26.36
142	71	-18988	27429	-38838	194.8	229.4	952.1	26.42
144	72	-19894	26834	-38791	186.8	237.1	952.1	26.48
146	73	-17102	28782	-38771	209.8	219.0	951.9	26.60
148	74	-8654	32386	-38662	259.9	157.3	951.2	26.60
150	75	-9344	32358	-38587	258.0	164.4	951.0	26.73
152	76	-9390	32404	-38521	257.6	166.3	950.8	26.85
154	77	-17111	28891	-38639	209.8	221.9	951.1	26.85
156	78	-14827	30117	-38675	227.7	206.0	950.3	26.85

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: AUSTRALIAN DEVELOPMENT LTD
HOLE NO: P17P1
LEASE:
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 11-7-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: P17P1A.ADL

EASTING???			NORTHING ???			RL ???		
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
158	79	-7753	32698	-38643	269.4	152.0	950.0	26.85
160	80	-3555	33523	-38547	285.5	118.7	949.7	26.97
162	81	-10158	32157	-38550	256.9	173.8	949.4	26.91
164	82	-12007	31489	-38561	248.0	189.6	948.9	27.09
166	83	-9927	32121	-38626	260.5	171.7	949.2	27.03
168	84	-11785	31517	-38627	250.3	187.4	949.1	27.15
170	85	-14634	30254	-38647	234.0	210.8	948.1	27.22
172	86	-13949	30620	-38609	238.7	206.9	947.5	27.15
174	87	-15189	30126	-38525	229.0	217.7	947.7	27.40
176	88	-26323	21452	-38315	114.9	294.0	947.8	27.52
178	89	-31057	14052	-38196	32.8	311.8	948.0	27.58
180	90	-33508	-6474	-38165	-154.7	273.1	947.7	27.64
182	91	-20321	-27416	-38195	-300.1	97.5	947.3	27.76
184	92	-16197	-30014	-38204	-311.7	54.0	947.3	27.95
186	93	-1605	-33964	-38303	-305.5	-83.7	947.0	28.07
188	94	12534	-31523	-38391	-245.7	-201.0	947.2	28.19
190	95	20302	-27243	-38340	-184.7	-258.3	946.8	28.13
192	96	31233	-13730	-38218	-30.3	-316.9	947.1	28.31
194	97	32546	10859	-38059	195.1	-254.4	946.0	28.44
196	98	16307	30219	-38012	317.8	-51.4	946.2	28.44
198	99	13283	31723	-37957	322.4	-18.9	945.0	28.62
200	100	13875	31422	-38023	323.9	-26.2	944.4	28.80
202	101	12932	31722	-38089	326.6	-18.7	944.3	28.62
204	102	14402	31149	-38032	327.1	-32.5	943.4	28.92
206	103	11841	32315	-37938	329.1	-3.1	943.1	28.86
208	104	826	34579	-37810	312.6	106.8	942.9	29.05
210	105	-1282	34686	-37678	304.2	129.0	943.0	29.11
212	106	-1856	34786	-37537	301.6	136.5	942.6	29.11
214	107	-1190	34869	-37499	304.4	132.0	942.4	29.29
216	108	-5777	34427	-37491	284.0	171.9	942.4	29.35
218	109	-13341	32147	-37571	241.5	231.4	941.0	29.35
220	110	-18002	29622	-37659	206.0	265.2	941.2	29.41
222	111	-13489	31936	-37713	244.7	233.0	940.0	29.41
224	112	-9439	33419	-37654	272.1	203.0	939.2	29.60
226	113	-7044	34125	-37521	283.1	185.1	940.1	29.66
228	114	-5157	34638	-37378	291.2	171.9	939.9	29.60
230	115	-2263	35042	-37273	304.5	151.1	939.7	29.66
232	116	-4408	34958	-37170	294.8	171.1	939.1	29.72
234	117	-8653	34151	-37181	273.4	206.7	938.8	29.90

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: AUSTRALIAN DEVELOPMENT LTD
HOLE NO: P17P1
LEASE:
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 11-7-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: P17P1A.ADL

EASTING???		NORTHING ???			RL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
236	118	-9384	33858	-37267	270.2	212.6	937.8	29.90
238	119	-5019	34775	-37274	295.8	175.8	938.1	29.90
240	120	-11465	33144	-37382	257.9	226.9	938.2	30.02
242	121	-9439	33831	-37286	272.5	214.0	936.8	30.02
244	122	6485	34731	-37109	338.8	75.1	936.6	30.08
246	123	7928	34586	-37005	343.0	65.5	936.0	30.08
248	124	1935	35621	-36846	326.9	126.5	935.7	30.14
250	125	446	35501	-36998	322.4	134.8	935.9	30.14
252	126	-10568	33693	-36700	265.3	226.6	936.4	30.27
254	127	-12001	33180	-37202	257.5	236.4	935.7	30.27
256	128	-9708	33739	-37220	275.2	218.3	935.2	30.27
258	129	-7285	34390	-37162	291.3	200.1	934.8	30.33
260	130	-7109	34472	-37087	293.2	200.8	934.0	30.39
262	131	-645	35409	-36857	320.9	147.2	934.7	30.33
264	132	-4021	35315	-36745	305.0	180.2	934.0	30.39
266	133	-6231	35130	-36651	293.8	202.8	933.3	30.39
268	134	-8932	34507	-36671	279.6	226.2	932.1	30.51
270	135	-14055	32622	-36778	243.7	265.3	932.0	30.51
272	136	-20843	28653	-36896	182.4	312.8	930.7	30.63
274	137	-24820	25106	-37012	134.9	334.7	931.5	30.57
276	138	-34456	7959	-36945	-65.7	355.8	931.2	30.57
278	139	-34761	-7126	-36836	-211.6	294.7	930.6	30.57
280	140	-29545	-19959	-36639	-310.7	187.5	930.7	30.57
282	141	-26956	-23573	-36498	-334.0	145.5	930.2	30.57
284	142	-22147	-28298	-36393	-358.4	78.4	928.6	30.76
286	143	-3170	-35714	-36454	-344.2	-127.6	929.2	30.76
288	144	8556	-34635	-36648	-285.0	-227.8	930.2	30.69
290	145	7456	-34819	-36724	-293.9	-218.0	929.6	30.76
292	146	8945	-34544	-36780	-288.1	-228.8	928.8	30.88
294	147	4607	-35369	-36763	-316.5	-193.7	927.1	30.82
296	148	5162	-35451	-36668	-314.8	-202.9	925.9	30.88
298	149	6327	-35505	-36451	-307.2	-215.9	925.3	31.00
300	150	5708	-35743	-36110	-306.1	-214.9	926.1	30.88
302	151	1167	-36304	-35970	-330.4	-180.5	925.6	30.94
304	152	5504	-36145	-35874	-306.3	-222.6	924.3	31.00
306	153	5754	-36263	-35883	-307.6	-224.4	923.5	31.00
308	154	11099	-34533	-36108	-273.5	-267.0	923.1	30.94
310	155	17656	-31450	-36407	-220.9	-310.6	923.4	31.00
312	156	8427	-35156	-36440	-297.6	-241.1	922.7	31.12

DOWNHOLE MAGNETOMETER SURVEY

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: AUSTRALIAN DEVELOPMENT LTD
HOLE NO: P17P1
LEASE:
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 11-7-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: P17P1A.ADL

EASTING???			NORTHING ???			RL ???		
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
314	157	1000	-36149	-36302	-342.0	-178.4	921.5	31.06
316	158	1370	-36395	-36008	-335.7	-186.6	922.2	31.12
318	159	3895	-36503	-35695	-319.6	-215.1	921.8	31.24
320	160	7511	-35960	-35646	-297.0	-248.5	921.0	31.06
322	161	16435	-32629	-35868	-226.6	-313.3	921.3	31.06
324	162	17240	-31925	-36162	-222.6	-315.9	921.2	31.12
326	163	7206	-35422	-36337	-309.2	-237.0	920.0	31.18
328	164	2110	-36084	-36292	-342.9	-193.5	918.1	31.24
330	165	214	-36406	-36047	-351.1	-180.9	917.3	31.24
332	166	1786	-36633	-35763	-341.8	-202.6	915.9	31.30
334	167	16324	-33049	-35804	-229.6	-323.6	916.7	31.37
336	168	25156	-27097	-35448	-124.4	-373.9	918.1	31.30
338	169	36328	-7263	-35381	120.1	-379.5	916.5	31.30
340	170	32971	16776	-35441	330.0	-226.4	915.6	31.49
342	171	28791	23109	-35526	369.7	-156.6	915.0	31.30
344	172	23889	28100	-35555	395.1	-85.2	914.2	31.30
346	173	20828	30471	-35518	404.5	-42.9	913.1	31.49
348	174	24564	27671	-35422	399.1	-92.7	911.2	31.30
350	175	25026	27434	-35290	402.1	-95.4	909.8	31.49
352	176	27616	25062	-35129	395.6	-131.9	908.0	31.49
354	177	28541	24232	-34977	394.6	-142.3	907.4	31.61
356	178	25054	28000	-34817	412.2	-84.0	906.8	31.55
358	179	30039	22691	-34731	388.7	-160.5	906.4	31.61
360	180	26552	26806	-34646	408.2	-101.9	906.7	31.55
362	181	24046	29123	-34609	417.2	-63.7	906.0	31.61
364	182	23944	29250	-34571	418.2	-61.7	905.4	31.55
366	183	27791	25775	-34429	408.9	-116.3	904.2	31.55
368	184	30168	23303	-34211	402.2	-149.8	902.5	31.73
370	185	24314	29397	-34164	426.5	-57.8	902.0	31.55
372	186	20846	31658	-34430	428.7	-16.8	902.6	31.73
374	187	16249	33974	-34696	428.2	36.6	902.1	31.79
376	188	12217	35568	-34735	424.7	84.6	900.5	31.85
378	189	1295	37677	-34597	382.2	208.8	899.6	31.79
380	190	14150	35269	-34318	429.5	72.0	899.1	31.91
382	191	16906	34340	-34024	433.8	45.5	899.0	31.85
384	192	9747	37127	-33837	416.3	135.0	898.2	31.91
386	193	10339	36872	-33969	420.2	125.6	898.2	31.85
388	194	5900	37608	-34198	403.8	169.7	897.9	31.98
390	195	-1295	37930	-34333	366.6	240.8	897.8	31.85

DOWNHOLE MAGNETOMETER SURVEY

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: AUSTRALIAN DEVELOPMENT LTD
HOLE NO: P17P1
LEASE:
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 11-7-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: P17P1A.ADL

EASTING???		NORTHING ???			RL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
392	196	-2025	37911	-34305	364.4	249.9	896.1	31.98
394	197	-2469	37810	-34371	362.1	253.4	895.5	31.85
396	198	5151	37735	-34179	404.0	178.5	896.2	31.98
398	199	14224	35579	-33826	434.4	82.9	896.0	32.04
400	200	3958	38264	-33641	395.7	202.9	894.7	32.10
402	201	-5392	38054	-33682	336.5	291.8	894.2	32.04
404	202	-8574	37193	-33967	314.9	316.1	893.7	32.04
406	203	-12578	35793	-34244	281.6	346.5	893.9	32.16
408	204	-8204	36965	-34327	325.5	310.4	892.3	32.16
410	205	5475	37617	-34161	414.1	178.2	891.9	32.22
412	206	13733	35707	-33902	440.7	87.4	892.3	32.22
414	207	13003	36245	-33619	437.9	103.2	892.5	32.04
416	208	2413	38600	-33376	392.7	226.3	890.2	32.22
418	209	-3256	38467	-33473	356.1	279.8	890.1	32.22
420	210	-17240	34035	-33925	231.9	387.9	891.2	32.28
422	211	-18830	33011	-34106	217.1	399.1	889.7	32.34
424	212	379	38087	-34011	391.4	237.8	887.7	32.28
426	213	15343	35106	-33779	453.1	71.1	887.8	32.34
428	214	19171	33538	-33419	455.5	29.6	889.1	32.40
430	215	5900	38293	-33318	414.7	194.3	888.2	32.28
432	216	-10054	37320	-33382	303.1	345.4	887.3	32.28
434	217	-24259	29728	-33655	140.7	436.9	887.0	32.28
436	218	-38030	3198	-33924	-212.3	407.5	886.7	32.46
438	219	-38021	-2811	-33982	-274.7	374.1	884.4	32.40
440	220	-38049	3855	-33838	-209.6	418.6	882.2	32.34
442	221	-37956	-5943	-33652	-312.4	349.1	882.2	32.46
444	222	-34267	-17856	-33399	-405.8	223.4	884.8	32.53
446	223	-28838	-26024	-33191	-453.6	111.2	883.1	32.59
448	224	-23215	-31261	-33067	-469.7	18.2	881.4	32.53
450	225	212	-38764	-33268	-389.8	-263.5	881.0	32.53
452	226	12327	-36479	-33556	-291.7	-370.4	880.5	32.59
454	227	7740	-37625	-33700	-339.9	-332.5	878.4	32.65
456	228	267	-38554	-33533	-400.4	-264.7	875.9	32.65
458	229	3125	-38634	-33277	-376.9	-297.2	875.9	32.71
460	230	27365	-27837	-32990	-93.1	-470.4	876.9	32.71
462	231	38676	-6888	-32723	201.2	-436.7	876.0	32.59
464	232	34727	18823	-32434	435.7	-214.5	873.5	32.71
466	233	27050	28560	-32604	480.8	-72.3	873.3	32.71
468	234	19892	33539	-32993	483.5	27.5	874.1	32.77

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

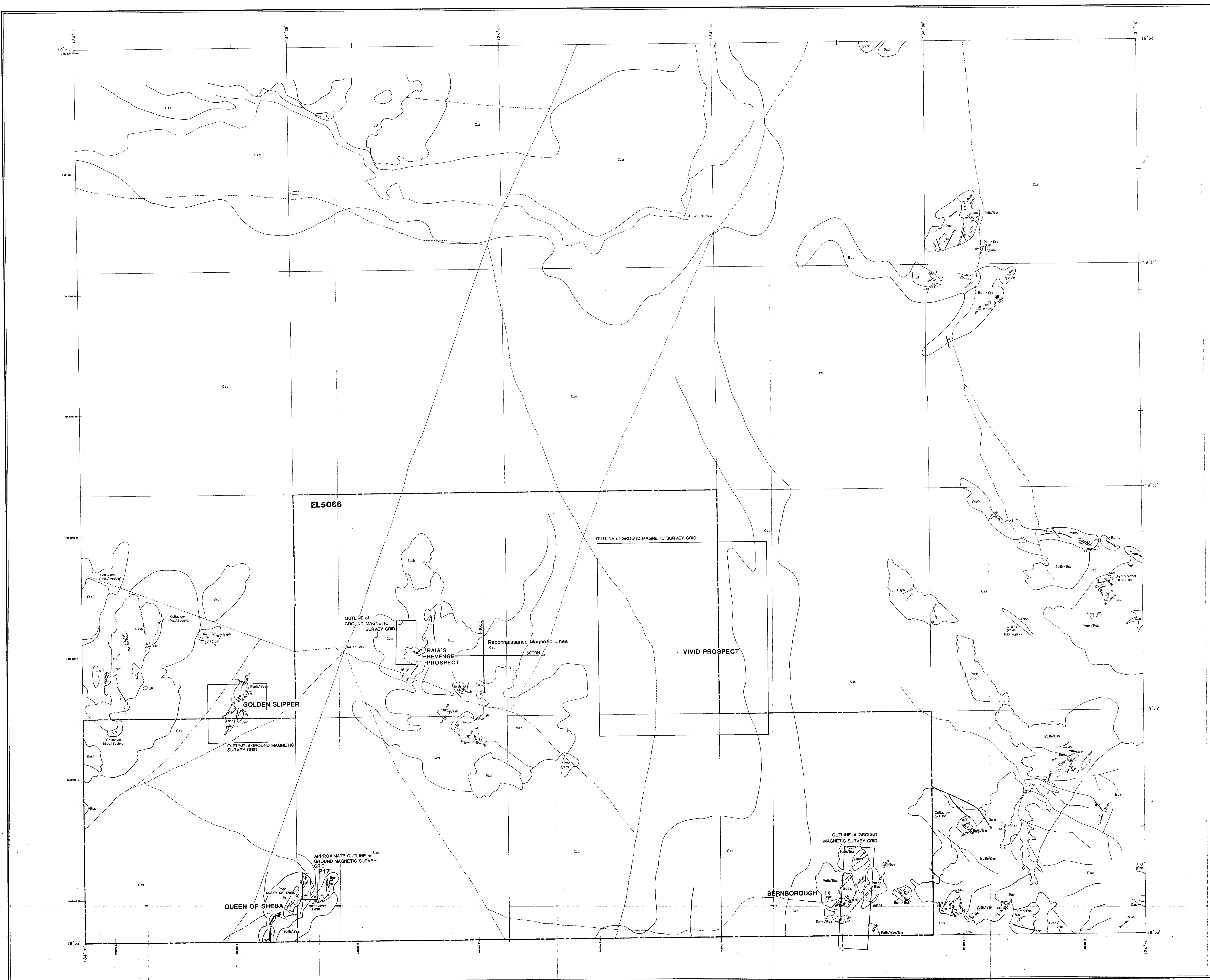
COMPANY: AUSTRALIAN DEVELOPMENT LTD
HOLE NO: P17P1
LEASE:
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 11-7-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: P17P1A.ADL

EASTING???		NORTHING ???			RL ???			
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
470	235	25081	29809	-33040	486.4	-53.4	871.3	32.83
472	236	35578	16304	-32907	420.6	-254.3	869.9	32.77
474	237	30676	24755	-32509	470.8	-137.4	870.8	32.83
476	238	15147	36667	-32247	477.0	113.0	870.9	32.95
478	239	1626	39732	-32138	409.2	272.1	870.0	32.89
480	240	-8242	38719	-32369	331.8	363.0	869.8	32.95
482	241	-19488	34161	-32659	213.2	442.2	869.9	32.95
484	242	-17278	35241	-32658	244.0	431.7	867.3	32.95
486	243	1525	39148	-32687	421.5	266.2	866.1	32.83
488	244	20724	33568	-32265	495.1	30.7	867.0	32.95
490	245	22768	32556	-32000	494.9	8.8	868.4	33.01
492	246	8340	39026	-31739	452.8	206.0	866.8	33.07
494	247	-3692	39837	-31771	372.4	331.6	865.8	33.01
496	248	-10425	38160	-32172	313.9	386.6	866.3	33.07
498	249	-18832	34646	-32441	222.2	446.6	864.8	33.14
500	250	-3026	39372	-32367	387.0	321.0	862.9	33.01
502	251	4946	39462	-32042	442.8	241.5	862.2	33.01
504	252	19050	35137	-31896	495.0	67.3	865.2	33.01
506	253	11633	38500	-31747	469.9	171.8	864.8	33.20
508	254	-2684	40295	-31582	380.8	329.1	863.1	33.14
510	255	-13320	37920	-31861	282.4	416.6	863.2	33.07
512	256	-23734	32030	-32255	155.7	477.1	863.1	33.20
514	257	-26814	29443	-32389	108.9	491.9	862.5	33.26
516	258	-37774	12320	-32390	-150.1	484.5	859.9	33.32
518	259	-37626	13535	-32115	-137.5	488.9	860.0	33.26
520	260	-40105	-3781	-31752	-336.1	377.0	861.7	33.32
522	261	-35286	-19566	-31443	-462.3	206.3	861.1	33.26
524	262	-28600	-28619	-31263	-504.6	88.8	859.2	33.44
526	263	-9288	-39304	-31505	-468.2	-202.9	858.9	33.26
528	264	10042	-38629	-31970	-321.9	-389.1	861.9	33.26
530	265	7452	-39124	-32113	-353.4	-365.8	859.4	33.32
532	266	-1325	-39735	-32041	-427.8	-284.1	856.9	33.44
534	267	-4349	-39710	-31777	-446.2	-254.0	856.8	33.32
536	268	18356	-35873	-31540	-226.2	-457.4	858.9	33.44
538	269	27410	-29281	-31147	-85.9	-502.9	859.1	33.44
540	270	39785	-8641	-30918	220.4	-464.2	857.2	33.50
542	271	40359	2902	-31302	339.0	-387.2	856.9	33.56
544	272	37557	13940	-31659	428.8	-283.6	856.9	33.50
546	273	32692	23744	-31649	490.8	-157.6	855.9	33.50

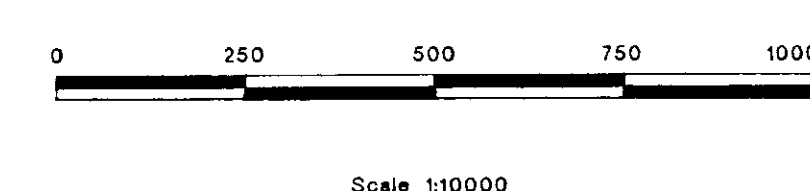
SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116COMPANY: AUSTRALIAN DEVELOPMENT LTD
HOLE NO: P17P1
LEASE:
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORYDATE: 11-7-90
ENGINEER: EDWARDS
JOB NO:
SERVICE: MAGPROBE
FILE NO: P17P1A.ADL

	EASTING???			NORTHING ???			RL ???	
SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
548	274	31795	24473	-32027	497.3	-147.9	854.4	33.50
550	275	28826	27987	-31895	511.7	-88.0	853.7	33.62
552	276	24303	31973	-31262	519.1	-6.4	854.3	33.68
554	277	18578	35758	-31273	512.2	83.5	853.9	33.68
556	278	20307	34883	-31263	514.8	60.7	854.0	33.62
558	279	14157	37936	-30943	496.9	150.4	853.4	33.68
560	280	6036	40166	-30728	456.6	252.7	852.2	33.68

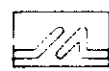


- REFERENCE**
- Cza ALLUVIUM, CREEK SEDIMENTS
 Czs SAND, SOIL, COLLUVIUM, GRAVEL
 Czi PISOLITE LATERITE, FERRUGINOUS SOIL & RUBBLE
 Egi GRANITE
 Eak HYDROTHERMAL ALTERATION - KAOINIZATION
 WARRAMUNGA GROUP - CARRAMUN FM
 Pssh COARSE GRAINED ARENACEOUS SANDSTONE, PROBABLY EPICLASTIC COMPONENT
 Pss MINOR FINE GRAINED SANDSTONE & SHALES LOW IN HEMATITE
 Bssh HEMATITE SHALES & SILTSTONE UP TO FINE GRAINED SANDSTONE
 BERNBOROUGH FM
 Bsv PYROCLASTIC (V) PORPHYRY WITH ANGULAR GREEN PLAGIOCLASE (LASTS) - FELDSPATHIC GREYWACKE
 Bsh EPICLASTIC HEMATITE SANDSTONE
 Bsh/ Psh INTERCALATED SHALE
 Bsh/ Psh COARSE GRAINED SLICIFIED
- QUARTZ VEIN
 120° IRONSTONE, SHOWING STRIKE TREND
 [X] IRONSTONE IN SLICIFIED COUNTRY ROCK (JASPER)
 q fl QUARTZ FLOAT
 ▲▲▲ BRECCIA

- DAM
 CREEK
 TRACK
 FENCE
 TANK
 TRIG STATION & ELEVATION
 OLD WORKINGS
 SHEAR ZONE
 WRENCH FAULT
 GEOLOGICAL BOUNDARY
 X 405924 #67 ROCK CHIP SAMPLES
 X 8106 BEDDING STRIKE & DIP
 CLEAVAGE STRIKE & DIP
 CLEAVAGE VERTICAL
 PITCH OF LINEAMENT ON CLEAVAGE PLANE
 FRACTURE DIP & STRIKE
 FRACTURE VERTICAL
 YOUNGING DIRECTION
 SLICKENSIDES
 FOLD AXIS, PLUNGE
 MINOR SYNFORM
 MINOR ANTIFORM

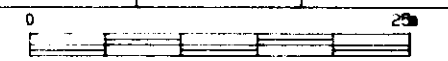


PROJECT TENNANT CREEK			
TITLE BERNBOROUGH (405924)			
GEOLOGICAL PLAN			
COMPILED	SCALE 1:10000	DATE REVISED	PLATE
DRAWN C.W.S.	DATE 20/8/90	PLAN No NT24-105	1



CR01/175

SCALE	DATE	SHEET
1:500	29/01/91	of
	REF NO.	



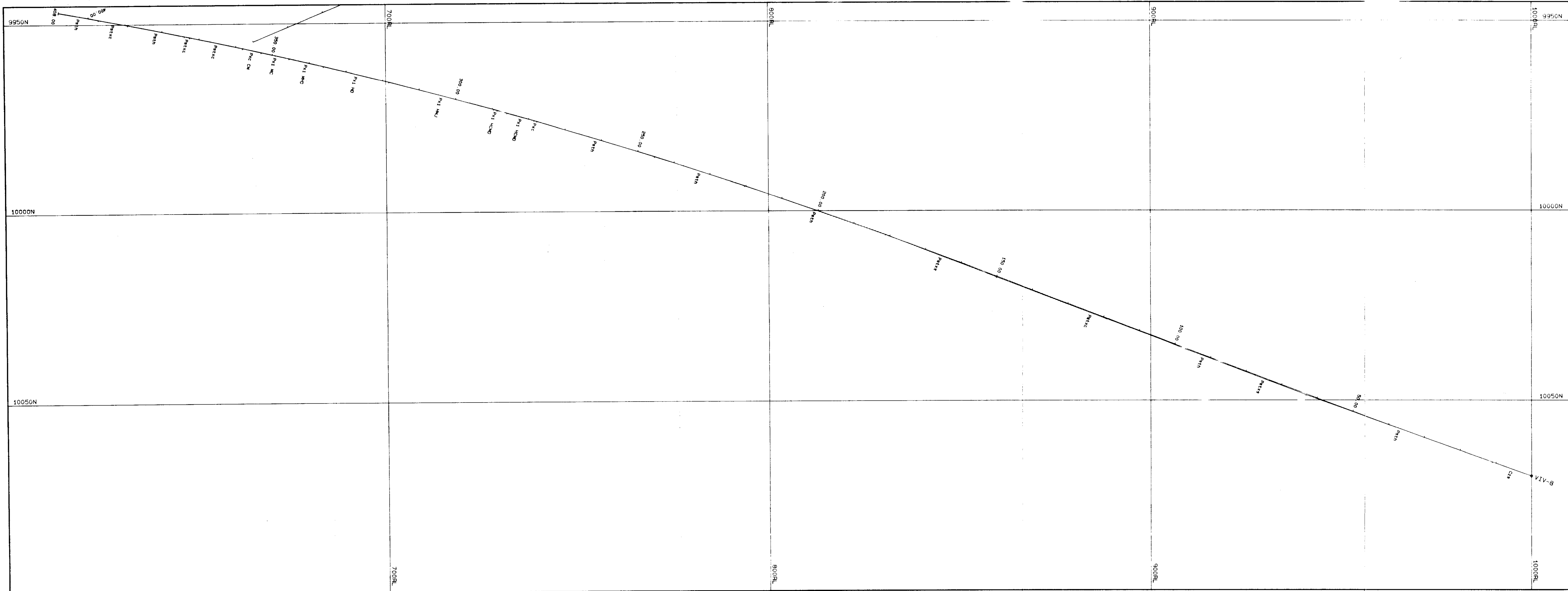
NORTHERN TERRITORY
PHILLIP CREEK

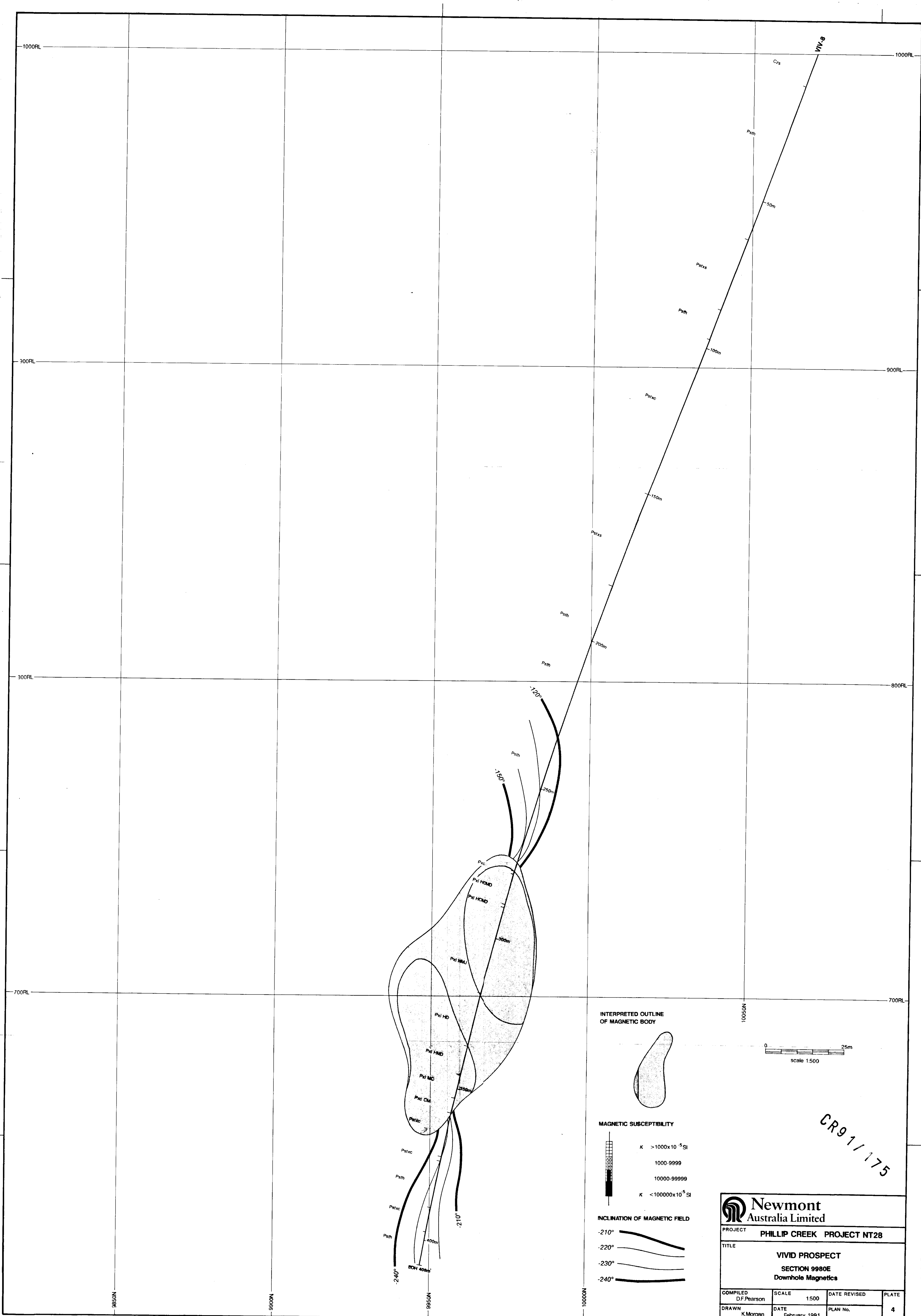
GEOLOGY

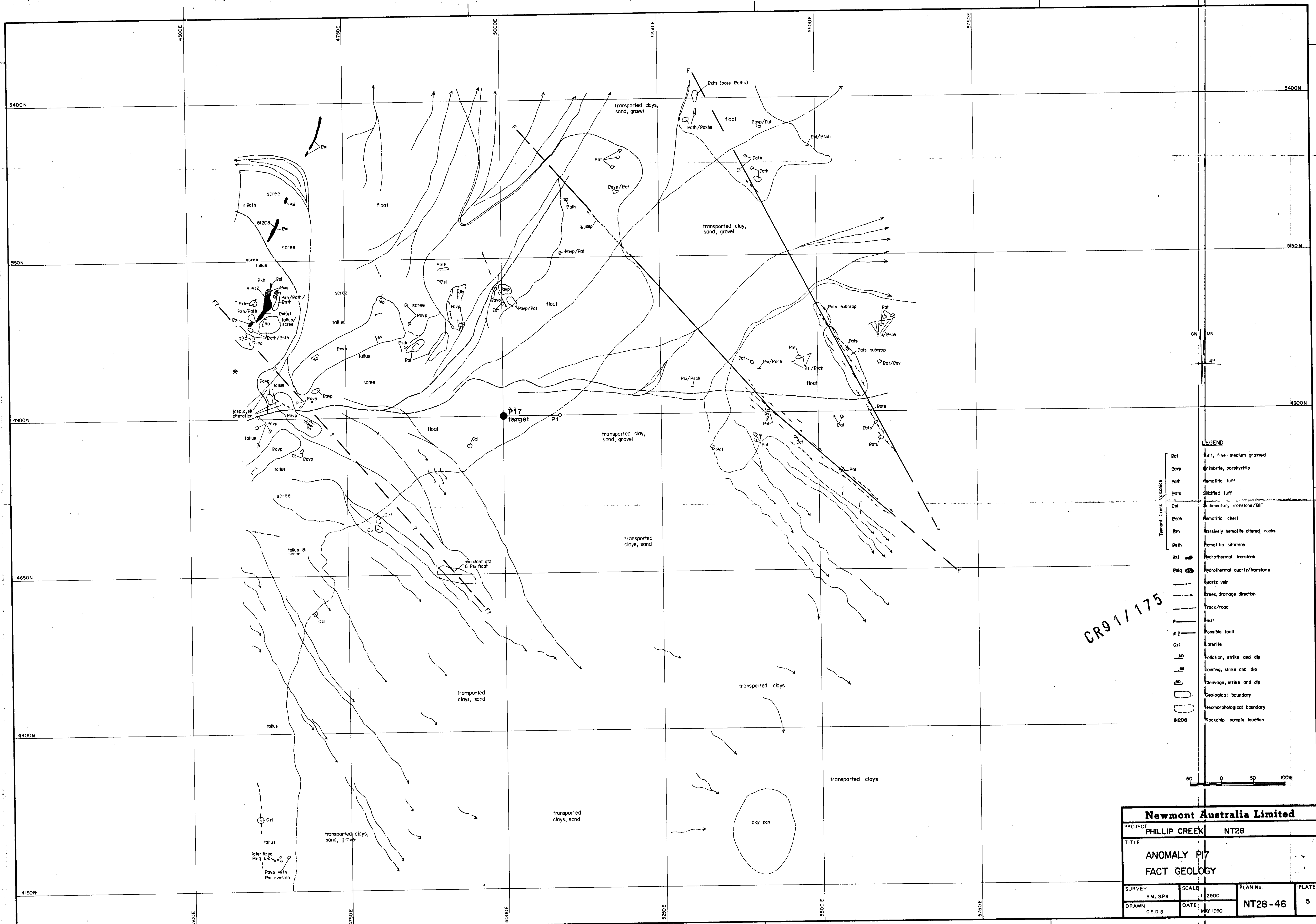
PLATE 2

NEWMONT AUSTRALIA LTD
VIVID PROJECT
Section 9980E

NT28-50

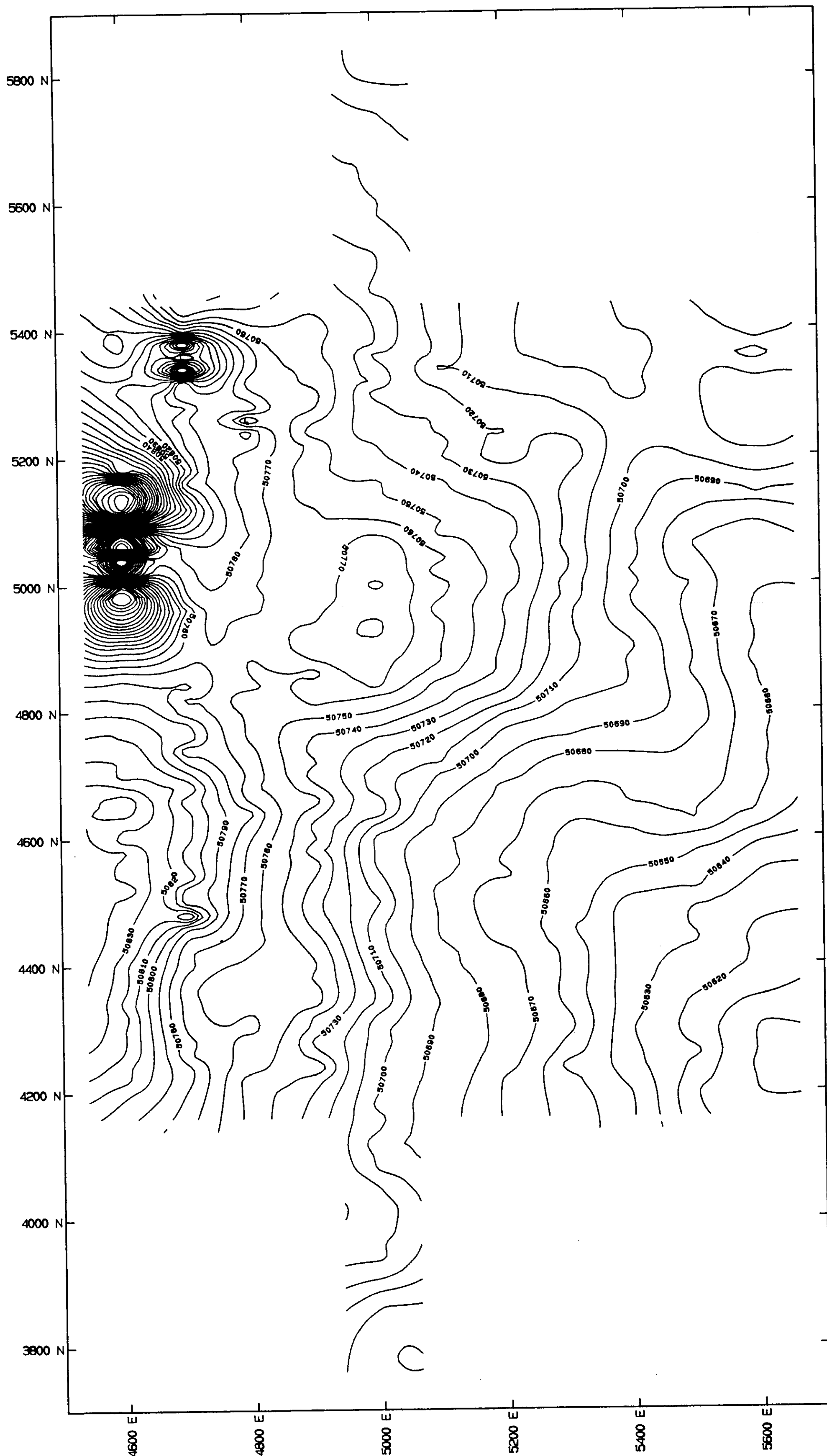






- LEGEND**
- Pat Tuff, fine-medium grained
 - Pavp lignite, porphyritic
 - Path Hematitic tuff
 - Pats Silicified tuff
 - Psi Sedimentary ironstone/BIF
 - Esch Hematitic chert
 - Psh Massively hematite altered rocks
 - Psh Hematitic siltstone
 - Pxi Hydrothermal ironstone
 - Pxiq Hydrothermal quartz/ironstone
 - quartz vein
 - Creek, drainage direction
 - Track/road
 - F Fault
 - F? Possible fault
 - Czi Laterite
 - 30° Foliation, strike and dip
 - 45° Jointing, strike and dip
 - 60° Cleavage, strike and dip
 - Geological boundary
 - Geomorphological boundary
 - Rockchip sample location

Newmont Australia Limited			
PROJECT		NT28	
PHILLIP CREEK		NT28	
TITLE			
ANOMALY P17			
FACT GEOLOGY			
SURVEY	SCALE	PLAN No.	PLATE
S.M., S.P.K.	1:2500		
DRAWN	DATE	NT28-46	5
C.S.D.S.	MAY 1990		



SURVEY SPECIFICATIONS

Line direction	Grid north-south
Line spacing	100 m
Station spacing	5 m
Magnetometer	EDA Omni IV
Sensor height	3 m
Surveyed by	Goanna Exploration Ltd
Survey dates	20/22nd April 1990
Levelling	Diurnal
Grid cell size	20 m
Contour interval	10 nT

CR91/175

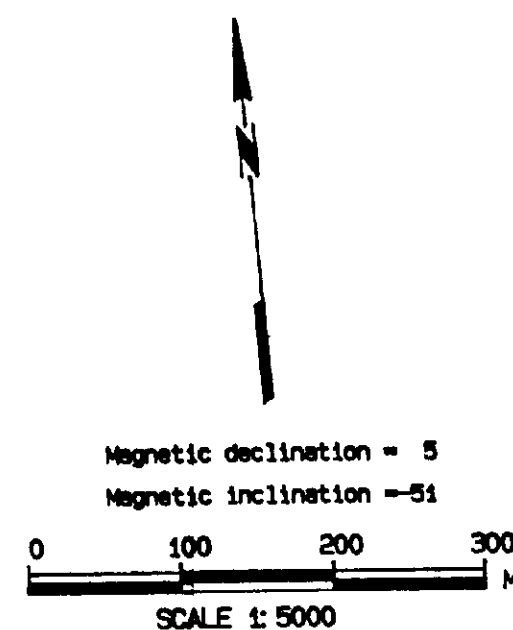


PLATE 6

NEWMONT AUSTRALIA LIMITED

NORTHERN TERRITORY

TENNANT CREEK
EL5085 PHILLIP CK
P47 PROSPECT
CONTOURS OF TOTAL MAGNETIC INTENSITY

M.FLIS PERTH APRIL 1990

5000 E

5050 E

5100 E

SECTION 4900N

W

E

P17P-1

Czsg

Pale brown &
orange clays,
minor str (w)
Pst, trace Psi

Str oxid (hem)
Pst & Psp,
trace Pxi/Psi

q/a but less
oxidized

Very sk oxid
Pst & Psp

Fresh, grey (occas-
ionally brownish)
Pst & Pst
trace Posp/Pot

WATER TABLE

⊗ MAGNETIC
TARGET

EOH
280m

LEGEND



REVERSE CIRCULATION DRILLHOLE COLLAR & TRACE



MAGNETIC DRILL TARGET

Czsg

SURFACE SOIL (& TRANSPORTED CLAY & GRAVEL)

Pst

PROTEROZOIC SILTSTONE

Psp

PROTEROZOIC CLAYSTONE / SHALE

Posp

PROTEROZOIC VOLCANIC (PERPHYRITIC) - IGNIMBRITE

Pot

PROTEROZOIC TUFF (INCL. TUFFACEOUS? SEDIMENT)

Psi

PROTEROZOIC SEDIMENTARY IRONSTONE (BIF)

Pxi

PROTEROZOIC HYDROTHERMAL IRONSTONE

(w)

WEATHERED

WARRAMUNGA GROUP

0 25 50metres

CR91/175

Newmont Australia Limited

PROJECT PHILLIP CREEK NT 28

TITLE
ANOMALY P17
RC DRILLHOLE P17P-1: GEOLOGY
SECTION 4900N

SURVEY	SCALE	PLAN No.	PLATE
S. P. K. & S. M.	1:500	NT28-49	7
DRAWN	DATE		
C. S. D. S.	NOV. 1990		