NT27/2

SECOND ANNUAL REPORT
McDOUALL RANGE EL5723
NORTHERN TERRITORY
TENNANT CREEK 1:250,000 SHEET

S Mather
October, 1990

DISTRIBUTION:

Department of Mines & Energy
Belmont
Darwin
Tennant Creek
Melbourne

CR91/050

SUMMARY

Exploration carried out on the McDouall Range licence (EL5723) during the second year concentrated on the evaluation of the 2 magnetic anomalies (Bullseye and Gateway) and the coincident magnetic/geochemical anomaly (Hopeful Star East/Eastern) outlined in year 1.

The Gateway anomaly was mapped and drill tested with one reverse circulation hole to 147m. This prospect was subsequently downgraded.

The Hopeful Star East/Eastern anomaly was drill tested with 22 shallow vacuum holes, and subsequently downgraded.

The Bullseye anomaly was further drill tested with one reverse circulation hole to 159m. Results here are inconclusive, and further work, including downhole magnetometer surveying, is recommended.

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EL5723

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INTRODUCTION

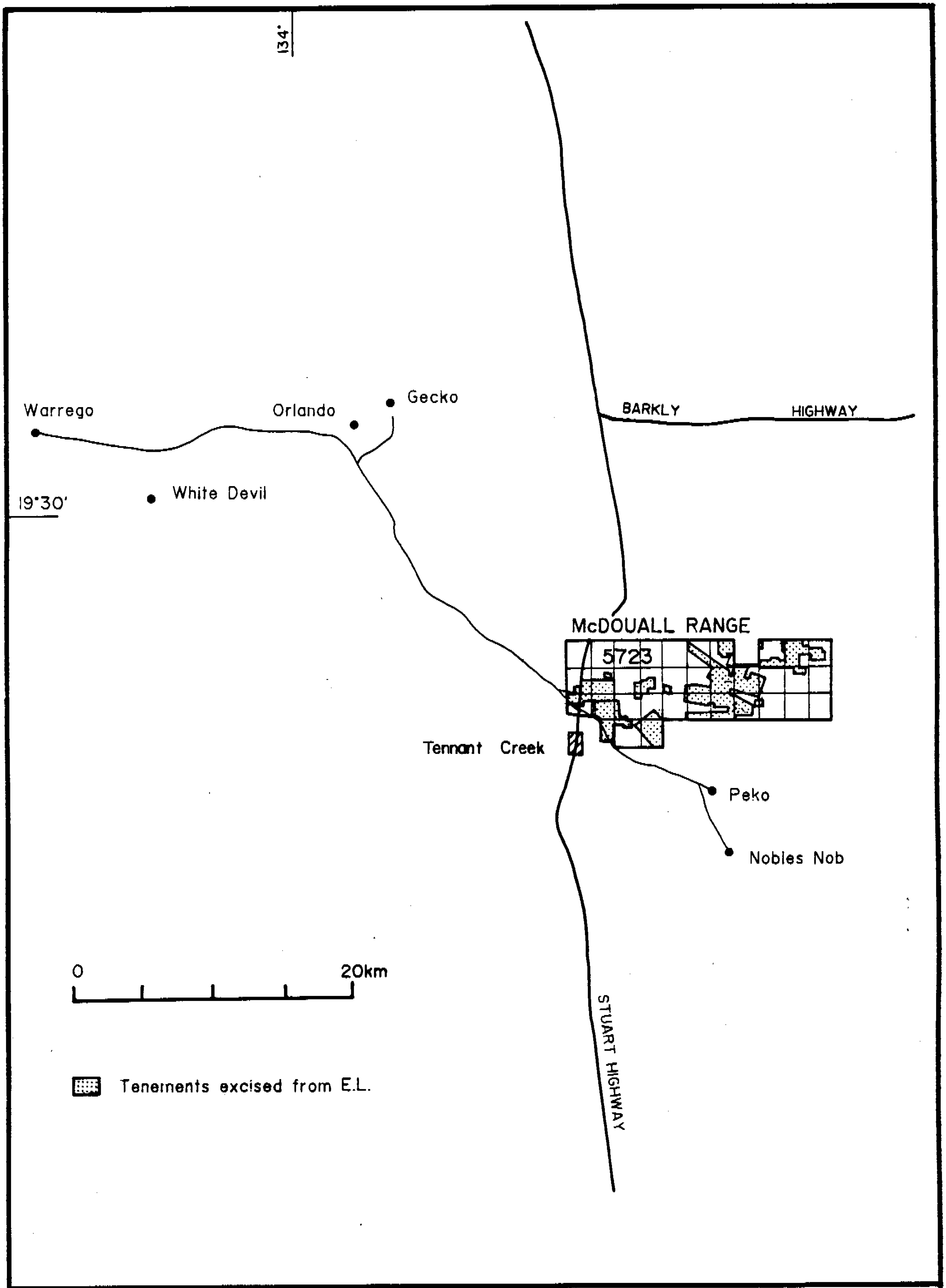
GENERAL

During July, 1987 the Northern Territory Department of Mines and Energy invited applications to be lodged over two Policy Reserves adjacent to the Tennant Creek township. These Policy Reserves were initially established in the late 1950's to encourage exploration and mining by prospectors and small syndicates by limiting application to mining tenements. Newmont Australia was successful in its application for the northern Policy Reserve, with the southern Policy Reserve granted to another mining company. Exploration Licence EL5723 (northern Policy Reserve) was issued on November 16, 1988, covered 35 blocks and granted for a period of 6 years. This Exploration Licence covered a number of existing mineral claim leases which remained in good standing.

This prospect has been called McDouall Range, as the licence straddles the western part of the McDouall Ranges on Tennant Creek Station.

LOCATION AND ACCESS

EL5723 is located 2km NE of the Tennant Creek township (Figure 1), and is approximately 5km wide, 19km long and trends E-W from the Stuart Highway to several kilometres past the Hopeful Star in the east. The sealed Stuart Highway provides access to the western side of the exploration licence. Access off the Stuart Highway is via the sealed road to the Mary-Anne Dam and several disused tracks. The central and eastern parts of the exploration licence are reached via the unsealed Tennant Creek-Golden Mile road. Access from this road is via disused pastoral and exploration tracks.



Newmont Australia Limited

COMPILED	SCALE
DRAWN C.S.D.S.	DRAWING No.
DATE Nov. 1990	FIGURE No. 1

NORTH

NORTHERN TERRITORY
TENNANT CREEK DISTRICT
McDOUALL RANGE
EXPLORATION LICENCE
TENEMENT MAP

GEOLOGY

REGIONAL GEOLOGY

The McDouall Range project area is located within the Carraman Formation of the early Proterozoic Warramunga Group. Dodson and Gardener (1978) provide the most recent formal stratigraphic subdivision for this group. These authors subdivide the uppermost formation, the Carraman Formation into six greywacke and two acid volcanic units (Gecko and the Warrego Volcanics). This sequence is underlain by acid volcanics and siltstones of the Bernborough Formation and the Whippet Sandstone respectively, 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) proposed an informal subdivision of the Carraman Formation recognising lower, middle and upper units. The middle unit, called 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 complex with three deformation periods resulting in moderate to steep open folds orientated ESE-WNW with numerous plunge reversals. Two main periods of faulting are recognised 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 whilst the sediments were only partially consolidated.

The Warramunga Group has been subjected to low grade metamorphism (greenshist). Local contact metamorphism is present between intrusive granites and sediments. 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. These later features are not known to be mineralized.

LOCAL GEOLOGY

The local geology comprises sedimentary rocks of the Warramunga Group (Lower Proterozoic age) consisting predominantly of a shaly horizon overlain by a sequence of interbedded greywacke and shale. Several beds show evidence of deposition from turbidity currents. This includes a number of pebble beds north west of the Mary-Anne Mine which contain subangular fragments of greywacke and shale in a shaly matrix. Conglomeritic beds consisting of rounded quartzite pebbles up to 5cm long outcrop intermittently in the sedimentary pile. Haematitic shale horizons are interbedded with the greywacke and shale and outcrop along an E-W trend. Several stratiform porphyries and associated grit horizons have been identified.

The sedimentary sequence is isoclinally folded and slightly asymmetric with the north facing limbs gentler dipping than the south facing limbs. This suggests a north directed thrust system associated with the major folding event.

The Mary Anne - Lane Shear zone is a prominent structural and magnetic WNW-ESE lineament. Its strike length is almost covered by the McDouall Range exploration licence. The zone is several hundred metres wide between the Mary Anne and Mascot Mines narrowing to several metres wide south east of the True Blue Mine. Highly strained conglomerates suggest that the Mary Anne - Lane Shear underwent early, relatively ductile dip-slip movement. A number of small ironstones, jasper, quartz, porphyry, diorite and lamprophyre dykes and veins, as well as sheared, chloritized, silicified and iron-enriched sedimentary rocks are associated with the shear.

Numerous ironstones outcrop within the exploration licence, however the majority of these have been excised through mineral leases and mineral claims.

EXPLORATION PROGRAMME

PREAMBLE

The magnetic nature of the ore bodies at Tennant Creek was recognised early in the history of the field. As a result, the use of magnetic surveys by the major explorers in the field since the early 1960's has been the principal exploration tool.

Magnetics has been a very successful exploration method with major ore bodies such as Juno and Warrego and more recently, smaller zones such as Argo and TC8 having been discovered and ultimately mined as a result of its use. Other ore zones however, such as Nobles Nob, have very subtle magnetic signatures and may have remained undetected were it not for geochemically anomalous outcrops.

As a result of the past success of prospecting for discrete magnetic anomalies, most if not all the attractive anomalies are currently covered by Mineral Claims controlled by the two major local explorers, Geopeko and ADL.

In view of this situation, Newmont decided to pursue a non-model specific exploration programme in the field, with the intention of discovering significant mineralisation with subtle magnetic signatures or significant mineralisation in non-magnetic settings.

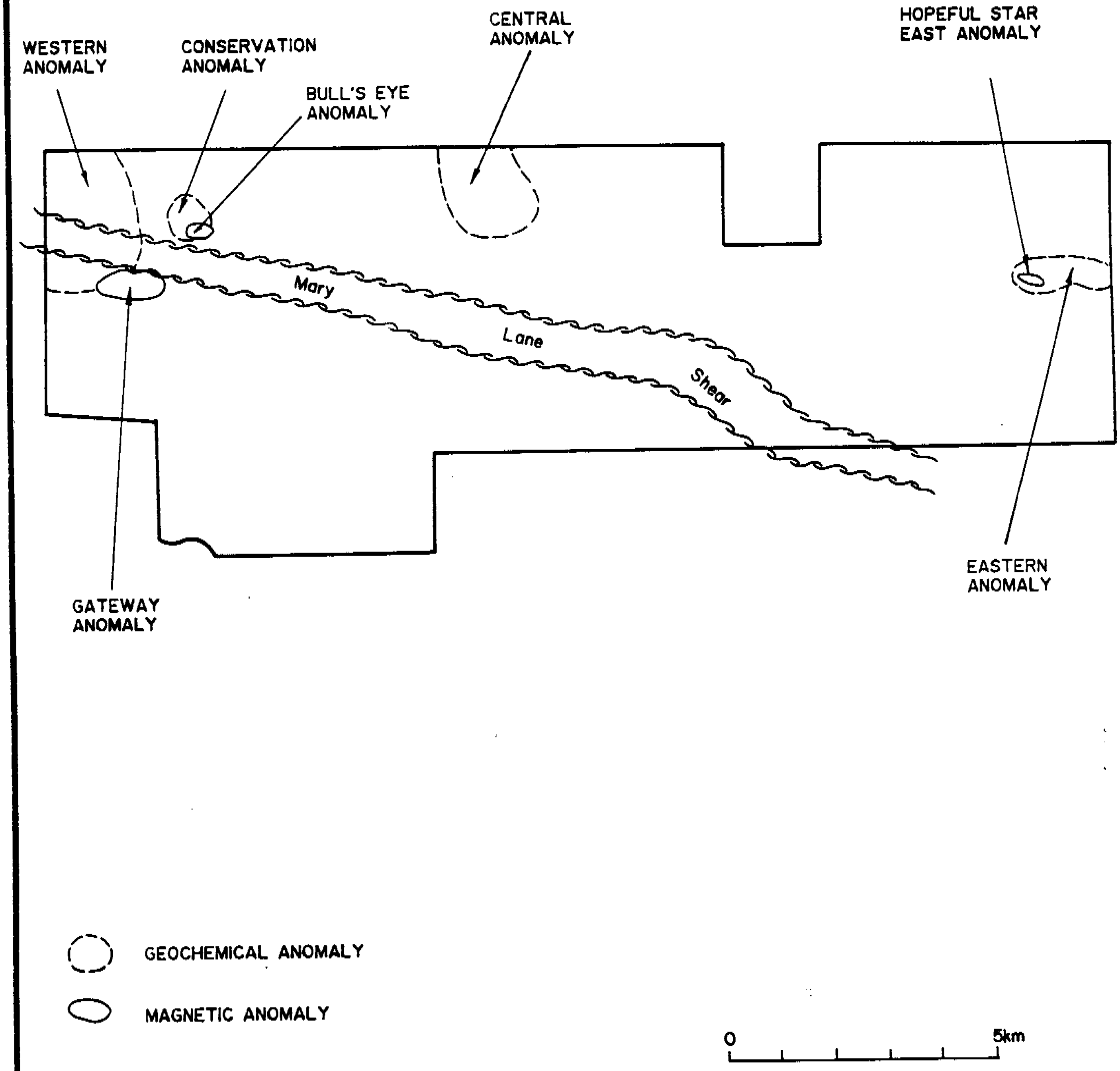
The McDouall Range project area represents a tract of prospective ground, however the majority of the "bull's eye" magnetic targets and outcropping hydrothermal ironstones are covered by a number of existing mineral claims and mineral leases. As a result of this situation exploration in the first year of the licence was directed towards the search for non-magnetic ore bodies.

This work consisted of a first pass broad grid soil geochemical survey and interpretation of low level airborne geophysics. Three geochemical anomalies were identified and follow-up soil sampled (refer Figure 2). As a result one anomaly (the Central anomaly) was downgraded and the other 2 anomalies (the Western and Eastern anomalies) were enhanced. The Western anomaly was subsequently divided into 2 anomalous areas - the Western anomaly and the Conservation anomaly.

The Western, Conservation and Eastern geochemical anomalies were then subjected to detailed ground magnetic surveys.

One magnetic anomaly (the Gateway anomaly) was identified on the southern side of the Western geochemical anomaly. Three magnetic anomalies were identified at the Conservation geochemical anomaly, but only one of these (the Bullseye anomaly) was considered worthy of follow-up work. A 5 to 10nT magnetic ridge coincident with the geochemical trend was identified at the Eastern geochemical anomaly. This anomaly became known as the Hopeful Star East anomaly (refer Figure 2).

The Western geochemical anomaly was then vacuum and RAB drilled. The Conservation geochemical anomaly was RAB drilled and subsequently downgraded. The Bullseye magnetic anomaly was RC drilled and subsequently recommended for follow-up work.



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COMPILED	S.M.	SCALE	
DRAWN	C.S.D.S.	DRAWING No.	
DATE	OCT 90	FIGURE No.	2

NORTH

McDOUALL RANGE NT 27
GEOCHEMICAL AND MAGNETIC ANOMALIES

Both the Eastern geochemical/Hopeful Star East magnetic anomaly and the Gateway magnetic anomaly were recommended for follow-up work in the second year of the licence.

WORK COMPLETED

Gateway Magnetic Anomaly

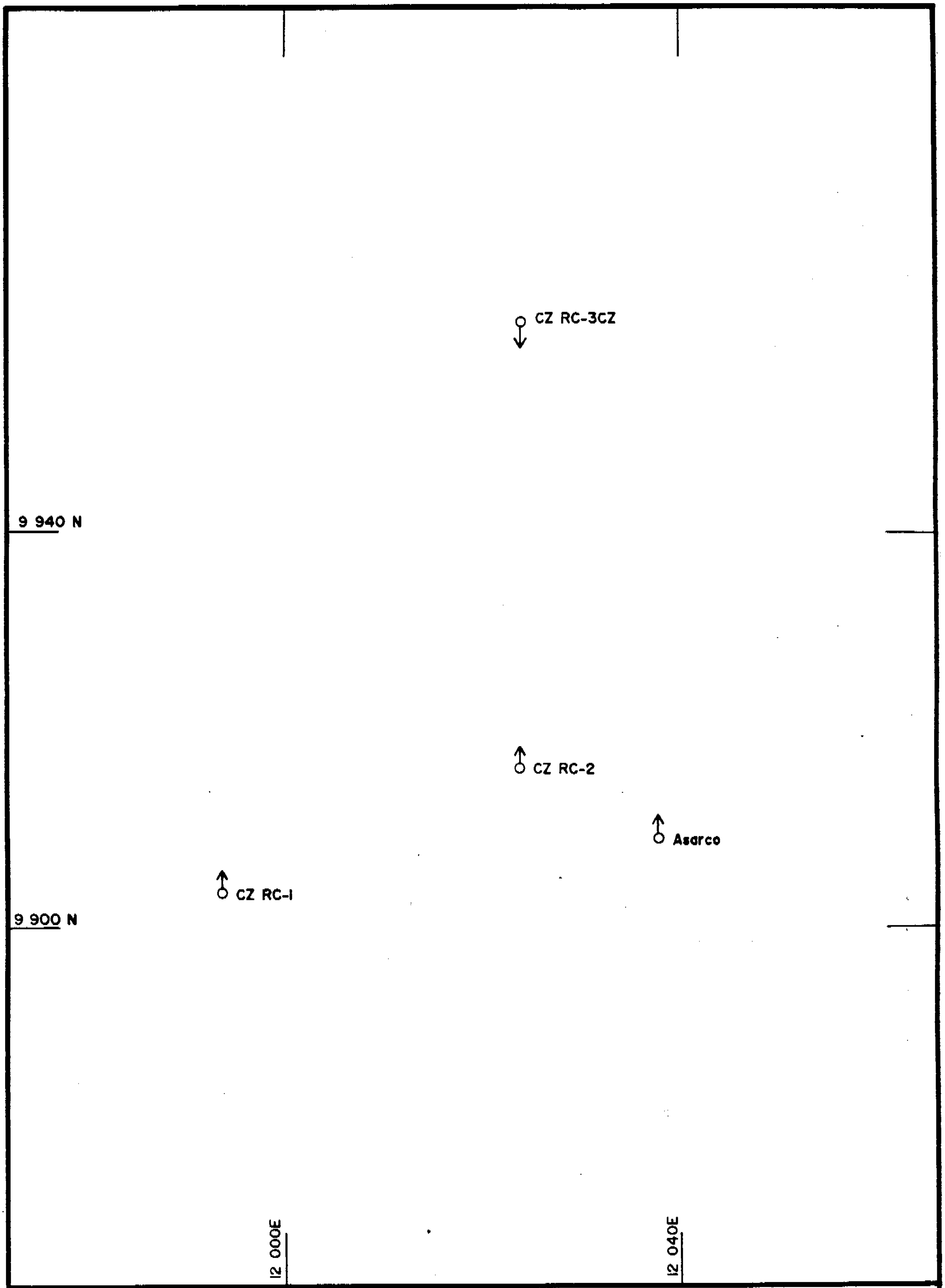
Detailed geological mapping at 1:2,500 scale was completed over the Gateway anomaly (refer Plate 1). The geology consists of sedimentary rocks of the Warramunga Group. These are mainly greywackes and claystones/shales. Very minor tuffs and porphyry and dolerite intrusives occur in the south western corner of the grid area. A major antiformal anticline trends approximately 100° through the prospect. Although this is seen to be plunging to the east in the middle of the mapped area, it is known to plunge towards the west immediately to the west of the grid. Towards the north of the grid area bedding and cleavage becomes contorted and erratic as the Mary Ann-Mary Lane Shear zone is approached. The shear zone lies immediately to the north of the Gateway anomaly. Abundant quartz veining occurs over the entire prospect. This predominantly trends approximately 020°-045°, but a minor trend of approximately 080°-095° also occurs.

One reverse-circulation drill hole (GPP-1, 147m) was drilled by Gomex at the Gateway anomaly (refer Plate 2 and Appendix 1). Although the hole had not reached it's target depth of about 270mdh it was abandoned at 147m due to excessive flattening. Four metre composite drill chip samples for the length of the hole were assayed by Classic Laboratories, AAS for Au, Ag, Cu, Pb, Zn & Bi. Only one weakly anomalous assay was returned (16-20m, 0.12ppm Au). The hole encountered siltstones and greywackes which were moderately magnetite-rich from 125-147mdh. The hole was downhole magnetometer surveyed by Surtron Technologies (refer Appendix 2). It was concluded that the ground magnetic anomaly was the result of folded magnetic sediments. The prospect was thus downgraded.

Bullseye Magnetic Anomaly

Drill holes CZ1 (CZRC-1), CZ2 (CZRC-2) and the previously drilled Asarco? hole were downhole magnetometer surveyed by Surtron Technologies (refer Figure 3 and Appendix 2). Analysis of this data by Newmont geophysicist M.Flis indicated a significant untested magnetic anomaly below the ironstone intersected in CZRC-2.

One reverse circulation drill hole (CZRC-3, 159m) was drilled by Gomex (refer Plate 3 and Appendix 1). This hole was aimed at a target approximately 50m vertically below the ironstone intersection in CZRC-2. The hole intersected a total of 11mdh of ironstone/talc/chlorite schist within a talc/chlorite schist alteration halo. Four metre composite drill chip samples were submitted to Classic Laboratories (0-100m and 120-159m, AAS for Au, Ag, Cu, Pb, Zn and Bi) and Analabs (100-120m, FA for Au). One metre samples for the interval 100-120m were submitted to Classic Laboratories, AAS for Au, Ag, Cu, Pb, Zn and Bi. Slightly anomalous Cu from 102-111m, Pb from 96-120m and Zn from 113-156m results were returned, with no anomalous Au. The hole will be downhole magnetometer surveyed in the third year of the licence.



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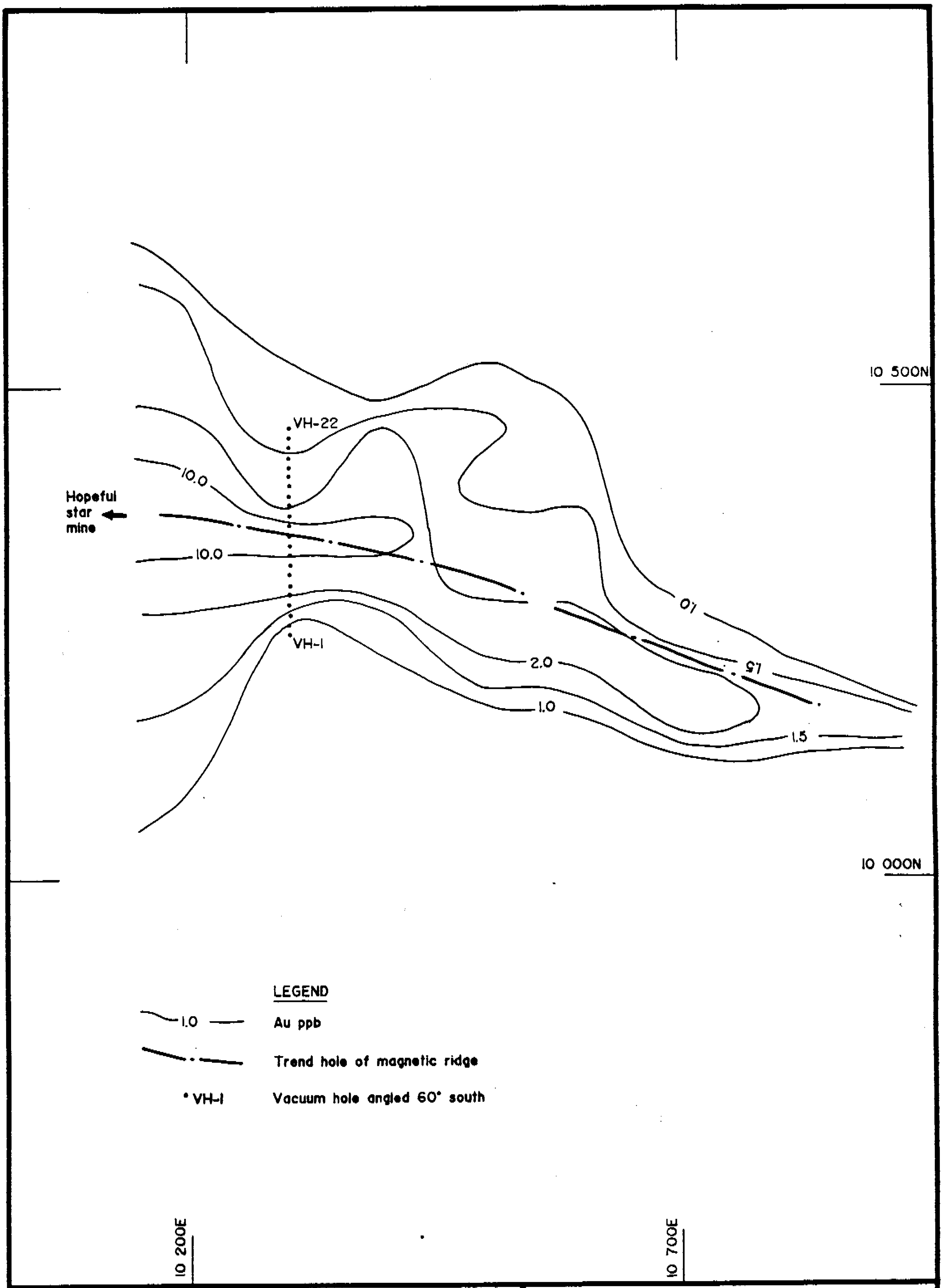
DATE	NOV. 1990	FIGURE No.	3

NORTH

McDOUALL RANGE PROJECT
BULL'S EYE PROJECT
DRILL HOLE LOCATION PLAN

Hopeful Star East Magnetic Anomaly/Eastern Geochemical Anomaly

Twenty-two vacuum holes for 393m were drilled on line 10300E between 10250N and 10460N (refer Figure 4 and Appendix 1). The holes were spaced 10m apart, angled 60° to the south and drilled to a maximum depth of 20m. Four metre composite samples were assayed by Classic Laboratories, AAS for Ag, Cu, Pb, Zn and Bi and Au by the BLEG method. The gold and base metal assays showed surface enrichment in all holes (1.47 to 6.00ppb Au in 0-4m composites), tailing off to EOH (maximum 0.90ppb Au in basal 4m composite). The results indicated surface contamination from the nearby Hopeful Star mine, and the prospect was downgraded.



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DATE OCT. 1990
FIGURE No. 4

MN
NORTH

EASTERN/HOPEFUL STAR EAST ANOMALY Contoured BLEG

CONCLUSIONS

Work carried out during the second year of the licence has significantly downgraded the Gateway and Hopeful Star East/Eastern anomalies. Results for the Bullseye anomaly are inconclusive, and further work is required here.

The reverse circulation hole drilled at the Gateway anomaly encountered magnetite bearing sediments, and although target depth was not reached, there was sufficient evidence to conclude that the anomaly was due to folded magnetic sediments. The prospect was thus downgraded.

The assays for the 22 vacuum holes drilled at the Hopeful Star East/Eastern anomaly indicate that the geochemical anomaly was due to contamination from the nearby Hopeful Star mine. The prospect was subsequently downgraded.

Although an ironstone was intersected in the reverse circulation hole drilled at the Bullseye anomaly assay results were barely anomalous. The hole will be downhole magnetometer surveyed in the third year of the licence.

REFERENCES

Dodson, R.G., and Gardner, J.E.F., 1978: Tennant Creek Northern Territory 1:250,000 Geological Series -Explanatory Notes. Australian Government Publishing Service, Canberra.

Preston, V.A., 1989: First Annual Report, McDouall Range, EL5723, Northern Territory, Tennant Creek, 1:250,000 sheet. Newmont Australia Limited, unpublished report to the Department of Mines & Energy.

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Williams, B.T., 1987: Exploration of the Tennant Creek Mineral Field, NT. In: Geology and Geochemistry of Gold-Copper Ironoxide Systems: Tennant Creek and Starra Districts. University of Tasmania, Volume 1, 28-60.

McDOUALL RANGE EL5723

YEAR 2 EXPLORATION EXPENDITURE

November 25, 1989 to November 24, 1990

ITEM		**EXPENDITURE** **$**
Salaries, Wages and Overheads		52,487
Contracted Services:-		
Assays	3,662	
Drafting	988	
Economic Study	375	
Surveying	1,078	
Drilling	10,343	
Geophysics	2,519	
	Sub Total	18,965
Administration and Support:-		
Office Costs	7,824	
Supplies	2,045	
Vehicles	1,866	
Travel, Accom. & Freight	4,735	
Administration	4,056	
	Sub Total	20,526
	TOTAL	**$91,978**

APPENDIX 1

DRILL HOLE LOGS: GPP-1, CZRC-3 AND VH1-VH22

NEWMONT HOLDINGS PTY. LTD.

DRILLING RECORD

Hole No. GPP-1

PROJECT M^cDOUALL RANGE **TITLE** "GATEWAY"

LOCATION 500 m NE OF STUART HIGHWAY AND ENTERSECTION WITH MARY-ANNE DAM ROAD.

COLLAR CO-ORDS 8990 GN 11164 GE **COLLAR R.L.**

BEARING AT COLLAR 357° MAG grid ______ mag ______ true

DIP AT COLLAR -70° N **TOTAL DEPTH** 147 m (ABANDON)

OBJECT OF HOLE TO INTERSECT MAGNETIC TARGET MODELLED FROM GROUND AND AERIAL MAGNETOMETER SURVEYS. TARGET IS AT ~250 M DEPTH BELOW GRID CO-ORDINATES 9080 N, 11,264E

REMARKS ORIGINAL TARGET WAS AT -250 m BELOW 9080N 11,200E BUT DUE TO GROUND ACCESS (TOPOGRAPHY) DRILLHOLE HAD TO BE SHIFTED (STEPPED OUT) 36 m WEST.

BOREHOLE SURVEYS

METHOD EASTMAN SINGLE SHOT CAMERA

depth (m)	bearing (mag)	bearing (grid)	dip (degrees)
12 M	357°		-69.7°
27 m	IN RODS		-68.5°
48 m	"		-67°
72 m	358°		-65°, -65.5°
96 m	IN RODS		-61.5°
120 m	"		-57°
144 m	001°		-52°, -52°

DRILLING RIG GOMEX RCD 150

OPERATOR G. DIER. (GOMEX DRILLING)

DATE STARTED 21/4/90

DATE COMPLETED 23/4/90

CORE SIZES. 4½" RC HAMMER FROM SURFACE TO EOH.

~~WEDGES PLACED~~ CASING (50 mm PVC) TO 126 M SAFE TO PROBE, BUT BEYOND THAT PROBE MAY NOT PASS DUE TO BROKEN CASING JOINT - DANGEROUS TO PROBE BEYOND 126M.

SUMMARY OF RESULTS

from	to	length	geological description

mineralisation				

LOGGED BY S.P. KENNEDY **DATE** 23/4/90

Newmont Australia Limited

DRILL LOG

DATE 2/4/90
PAGE N° 1/7

PROJECT McDOUALL RANGE
AZIMUTH 356°
DRILL RIG Gomex RCD 15

HOLE N° GPP-1
8990 GN
11164 GE
PROSPECT GATEWAY
DECLINATION -70°N
GEOLOGIST SPKENNEDY

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT KG	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	AAS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	B pp
0	1	b r	h w	p s t	C z s	h - kaol		pl-med brn, blchd siltst + occ ferrug qtz stringers + float	55	NOW H	GPP-1, 0-4	<0.01							
	2	b r	h w	p s t	f s w	h - k		buff-pl rd br, blchd + hem alt siltstone, mod-str blchd.	33										
	3	b r	h w	p s t	p s w	h - k		a/a with occ mod ferrug qtz stringers, strongly blchd	28										
	4	b r	h w	p s t		h - k		buff-pl rd brn siltst, blchd w/- occ qtz stringers	40				0-4	<0.01	<1	165	25	22	<10
	5	b r	h w	p s t		h-k		a/a pulverized	39		GPP-1. 4-8	<0.01							
	6	b r	h w	p s t		h-k		a/a	40										
	7	b r	h w	p s t		h-k		a/a buff-pl rd brn	60										
	8	b r	h w	p s t		h-k		a/a w/- minor blchd character	40				4-8	<0.01	<1	33	17	16	<10
	9	b r	h w	p s t		h-k		a/a mod str blchd	54		GPP-1. 8-12	<0.01							
	10	b r	h w	p s t		h-k		a/a pulverized	30										
	11	b r	h w	p s t		h-k		a/a	30										
	12	b r	h w	p s t		h-k-s		a/a w/- minor qtz stringers (partially crust invaded)	30				8-12	<0.01	<1	18	14	20	<10
	13	b r	h w	p s t		h-s-k		brn hem + sericite altered siltst w/- occ qtz stringers.	43		GPP-1. 12-16	<0.01							
	14	b r	h w	p s t		h-s-k		a/a mod str blchd	36										
	15	b r	h w	p s t		h-s-k		a/a pulverized	40										
	16	b r	h w	p s t		h-s-k		a/a	200				12-16	<0.01	<1	14	13	20	<10
	17	b r	h w	p s t		h-s-k		a/a brn siltstone	55		GPP-1. 16-20	0.12							
	18	b r	h w	p s t		h-s-k		a/a occ qtz stringers (wh-pl brn + ferry-pl gry)	46										
	19	b r	h w	p s t		h-s-k		a/a	44										
	20	b r	h w	p s t		h-s-k		a/a pulverized + mod str blchd	60				16-20	0.12	<1	9	13	21	<10
	21	b r	h w	p s t		h-s-k		a/a	54		GPP-1. 20-24	<0.01							
	22	b r	h w	p s t		h-s-k		a/a w/- occ pl gry qtz stringers	60										
	23	b r	h w	p s t		h-s-k		a/a pulverized.	51										
23	24	b r	h w	p s t				a/a brn-buff, pulverized siltst w/- qtz stringers	39				20-24	<0.01	<1	13	13	21	<10

TIME STARTED 0925
FINISHED 1030
ASSAY LAB CLASSIC
P/O N° NT 1620

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DRILL LOG

DATE 21/4/90

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PROJECT McDOUALL RANGE

AZIMUTH 356°

DRILL RIG RCD 150

HOLE Nº: GPP-1 8990 GN 11,164GE

PROSPECT GATEWAY

DECLINATION -70°N

GEOLOGIST SFK

DEPTH FROM	DEPTH TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE ~~WEIGHT KG~~ MAG	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	AAS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
24	25	b r	h w	p s t		h - s - k		buff - brn, hem + seric ± kaol siltst (pulverized) ± qtz string	48	H	GPP-1. 24-28	<0.01	~~24-28~~						
	26	b r	h w	p s t		h - s - k		brn ± buff ± rd brn siltstone + rare qtz stringers. blchd i/p	45										
SURV	27	r d	m w	p s w		h ± k		mod - str weathered, pl rd brn hem alt greywacke ± seric.	35	68.5°									
	28	b r	m w	p s w	p s t	h - k - s		a/a i/p + brn (± blchd) siltst + incr qtz stringers	49				24-28	<0.01	<1	9	15	17	<10
	29	b r	m w	p s w	p s t	h - s - c		a/a predom hem greywacke + occ thin chlorite arg bands	39		GPP-1. 28-32	<0.01							
	30	b r	m w	p s w	p s t	h - s - c		a/a w/- occ - mod abund qtz (ferrug + pl grey) stringers	37										
	31	r d	m w	p s w	p s t	h ± s		pl rd - purp ± brn (hem) greywacke, rare qtz veinlets	50										
	32	r d	m w	p s w		h		a/a pl rd brn - pl purp brn, mod str blchd greywacke	87				28-32	<0.01	<1	8	8	19	<10
	33	r d	m w	p s w		h		a/a wkly - mod blchd, S1-S2 (mod str) cleaved/shrd	180		GPP-1. 32-36	<0.01							
	34	r d	m w	p s w		h		pl rd brn ± purp brn, wkly blchd, hem greywacke	59										
	35	r d	m w	p s w		h		a/a mod - wkly blchd	98										
	36	r d	m w	p s w		h		a/a + occ pl grey qtz stringers	60				32-36	<0.01	<1	6	7	13	<10
	37	b r	m w	p s t	p s w	h ± s - k		brn ± rd brn siltst w/- lesser greywacke (pulverized)	80		GPP-1. 36-40	<0.01							
	38	b r	m w	p s t	p s w	h ± s - k		a/a wk sericite alter? i/p. (pulv)	99										
	39	b r	m w	p s t	p s w	h ± s - k		a/a w/- rare ferrug qtz stringers	80										
	40	b r	m w	p s t		h ± s - k		a/a rare greywacke, mod blchd,	220				36-40	<0.01	<1	8	10	15	<10
	41	b r	m w	p s t		h ± s - k		a/a	160		GPP-1. 40-44	<0.01							
	42	b r	m w	p s t		h ± s - k		a/a pulverized, wk - mod blchd.	160										
	43	b r	m w	p s t		h ± s - k		a/a with incr qtz stringers (pl grey - pl brn)	150										
	44	b r	m w	p s t		h ± s - k		a/a but rare qtz, pulverized wk - mod blchd.	170				40-44	<0.01	<1	9	6	21	<10
	45	b r	m w	p s t		h ± s - k		a/a with occ thin (< 2mm) magnetite ironstone stringers	170		GPP-1. 44-48	<0.01							
	46	b r	m w	p s t		h ± s - k		a/a siltst + ferrug qtz + ironstone stringers	180										
	47	b r	m w	p s t		h ± s - k		a/a ironstone is weakly - non magnetic	190										
47	48	b r	m w	p s t	p s p	h ± - c - k		a/a w/- occ wkly chlor altered pelitic bands ± occ ironst.	190				44-48	<0.01	<1	21	12	54	<10

SURVEY (-67°)

TIME STARTED 1050 FINISHED 1130

ASSAY LAB CLASSIC P/O Nº NT 1620

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DRILL LOG

DATE 21 / 4 / 90

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PROJECT McDOUALL RANGE

AZIMUTH 356°

DRILL RIG RCD 150

HOLE Nº : GPP-1   8990 GN   11164 GE

PROSPECT GATEWAY

DECLINATION -70° N

GEOLOGIST JPK

DEPTH		LITHOLOGICAL DESCRIPTION															SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT ~~Kg~~ MPG	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	AAS Au g/t	As ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
48	49	b g	r a	m	w	p	s	p		p	s	t		h-c ± k		str laminated, wkly chlor ± hem alt pelite ± qtz rare ironst stringers	62	H	GPP-1. 48-52	<0.01							
	50	i	r	m	w	p	s	p						h-c		a/a rare - occ ironst stringers, occ qtz.	80										
	51	b	-	m	w	p	r	p						h-c		a/a pulverized.	70										
	52	i	r	m	w	p	s	t		p	s	p		h ± c - k		predom wk-mod hem, buff-brn siltst rare chlor pelite	71				48-52	<0.01	<1	10	8	71	<10
	53	b	r	m	w	p	s	t		p	s	p		h ± c - k		a/a w/- rare ironst stringers, occ chlor pelite	80		GPP-1. 52-56	<0.01							
	54	i	r	m	w	p	r	t		p	s	p		h - k		a/a rare - nil chlor alt pelite. rare ironst.	75										
	55	b	-	m	w	p	s	t		p	s	p		h - k ± c		a/a pulverized.	75										
	56	b	r	m	w	p	s	t		p	s	p		h - k ± c		predom mod hem, pl rd brn siltst + occ chlor alt pelite (lam)	86				52-56	<0.01	<1	6	12	65	<10
~~[illegible]~~	57	h g	r a	m	w	p	s	p		p	s	t		h - c - k		hem ± chlor pelitic sed, i/p finely laminated	60		GPP-1. 56-60	<0.01							
	58	b	r	m	w	p	s	p		p	s	t		h - c ± s - k		a/a w/- seric altern i/p. w/- rare ironst. stringers	54										
	59	b	r	m	w	p	r	p		p	s	t		h - c ± s - k		a/a pulverized	74										
	60	b	r	m	w	p	s	p		.				h - c - k		a/a rare - nil qtz stringers.	70				56-60	<0.01	<1	6	14	115	<10
	61	b	-	m	w	p	s	t		p	s	w		h - k ± c		a/a i/p with occ rd brn, hem greywacke, tt chlo-	74		GPP-1. 60-64	<0.01							
	62	b	r	m	w	p	s	t		p	s	p		h - k		interbedded siltst + pelite, hem (wk-mod), nil-rare ironst.	72										
	63	b	r	m	w	p	s	t		p	s	p		h ± s - k		a/a w/- incr hem + wk-mod seric altern i/p.	70										
	64	b	r	m	w	p	s	t		p	s	p		h ± s		a/a w/- occ qtz stringers (w/- slickensides)(ferry)	67				60-64	<0.01	<1	5	13	82	<10
	65	i	r	m	w	p	s	t		p	s	p		h		buff-brn, hem siltst + pelite w/- occ qtz ± ironstone stringers	68		GPP-1. 64-68	<0.01							
	66	b	r	m	w	p	s	t		p	s	p		h		a/a pulverized, occ ironst/magn qtz stringers.	80										
	67	b	r	m	w	p	s	r		p	s	p		h		a/a occ qtz (p/grey) stringers with v.thin ironst surfaces	76										
	68	b	r	m	w	p	s	t		p	s	p		h		interbedded silt/pelite w/- occ pl-mod pnk qtz stringers (± ironst)	70				64-68	<0.01	<1	10	13	27	<10
	69	b	r	m	w	p	s	t		p	s	p		h		a/a qtz stringers have ironst (v.thin) surfaces. (pulv)	74		GPP-1. 68-72	<0.01							
	70	b	r	m	w	p	s	t		p	s	p		h		a/a wkly ?bl'chd, (pulverized)	73										
	71	b	r	m	w	p	s	t		p	s	p		h		a/a pl rd brn, hem alt seds (pulverized).	75										
71	72	b	r	m	w	p	s	t		p	s	p		h ± c		a/a w/- rare chlor alt pelite (laminated) bands	72				68-72	<0.01	<1	10	13	17	<10

SURVEY (-65.5°).

TIME STARTED 1050   FINISHED 1115

ASSAY LAB   P/O Nº

Newmont Australia Limited

DRILL LOG

DATE 21/4/90

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PROJECT McDOUALL RANGE

AZIMUTH 356°

DRILL RIG RCD 150

HOLE Nº: GPP-1 8990 6 N 11164 6 E

PROSPECT GATEWAY

DECLINATION -70°N

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION															SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	SAMPLE ~~WEIGHT~~	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	AAS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
72	73	p r	v j	m	w	p	s	w		p	s	t		h (BO oxid)		pl rd brn - pl purple, wkly - mod blchd greywacke + wh - pl gry qtz	80	H	GPP-1. 72-76	<0.01							
	74	p r	v d	m	w	p	s	w						h		a/a mod abund - occ qtz veinlets w/- thin ironst surfaces	150										
	75	p r	v d	m	w	p	s	w						h		pl purple grey - pl purple rd greywacke + qtz (± ironst) vlts	150										
	76	p	u	m	w	p	s	w						h		a/a w/- nil - tr ironst, occ translvc - pl gry qtz stringers	80				72-76	<0.01	<1	7	13	19	<10
	77	p	u	m	w	p	s	w						h ± k		a/a w/- stronger blchg + kaolinized	160		GPP-1. 76-80	<0.01							
	78	g	r	m	w	p	s	w		q	t	z		wk hem		pl gry - pl purple gry, blchd, wkly hem alt greywk + abund qtz	210										
	79	b g	r y	m	w	p	s	w		q	t	z		mod h		a/a pulverized, v. soft w/- abund mlky - pl gry - ferrug qtz vns	200										
	80	b g	r y	m	w	p	s	w						h		pl - med gry br, soft (pulv), partially hem greywacke + blchg.	190				76-80	<0.01	<1	11	13	29	<10
	81	b g	r y	m	w	p	s	w						partial h		pl brn gry - pl gry, partially hem oxid, blchd greywacke	175		GPP-1. 80-84	<0.01							
	82	b g	r y	m	w	p	s	w						partial h		a/a soft.	200										
	83	b g	r y	m	w	p	s	w						h		wkly - mod hem (partial) ± ? seric alt, greywacke.	210										
	84	g	y	m	w	p	s	w						partial h		i/p brn (hem) + i/p pl gry (blchd), greywacke, tr qtz stringers	260				80-84	<0.01	<1	14	17	38	<10
	85	g	y	m	w	p	s	w						partial h		a/a nil qv.	300		GPP-1. 84-88	<0.01							
	86	g	y	m	w	p	s	w						partial h		a/a with occ pl gry - sli ferrug qtz stringers	350										
	87	b	u	s m	w w	p	s	t		p	s	w		partial h		buff - pl gry siltst, occ greywacke a/a, occ mlky qv, harder	250										
	88	y b	y u	m	w	p	s	t		p	s	w		"		a/a being mod hard, not completely pulverised.	150				84-88	<0.01	<1	40	24	39	<10
	89	g	y	m	w	p	s	t		p	s	w		wk h i/p		pl gry - buff, interbedded siltst + greywacke, wk partial hem	150		GPP-1. 88-92	<0.01							
	90	g b	y r	m	w	p	s	w		p	s	t		mod h		a/a but mod hem greywacke > wk hem + blchd siltstone	200										
	91	b g	r y	m	w	p	s	w						mod h		med brn gry, wkly - medly hem greywacke.	200										
	92	b g	r y	m	w	p	s	w						w - m hem		a/a mod hard, not pulverized	210				88-92	<0.01	<1	6	19	33	<10
	93	g	g	s	w	p	s	t						c		pl grn gy, wkly ?chlor alt siltstone	190		GPP-1. 92-96	<0.01							
	94	g	y	s	w	p	s	t						c ± h		pl brn gy - pl grn gy, ?chlor alt, wkly hem alt siltstone	240										
	95	g	y	s	w	p	s	t						c ± h		a/a	210										
95	96	b g	r y	s m	w w	p	s	t						?c + h		60% a/a, 40% brn, str - mod str hem siltstone.	200				92-96	<0.01	<1	6	18	31	<10

TIME STARTED 1215 FINISHED 1710

ASSAY LAB P/O Nº

Newmont Australia Limited

DRILL LOG

DATE 21-22/4/90

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PROJECT McDOUALL RANGE

AZIMUTH 356°

DRILL RIG RCD 150

HOLE Nº: GPP-1 8990 G N 11164 G E

PROSPECT GATEWAY

DECLINATION -70° N

GEOLOGIST JPK

21/4/90

22/4/90

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT KG	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	AAS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
96	97	b r g y	m w	p s t	p s w	h + wk ? c		pl gn/brn gry wkly hem ± ?chlor alt siltst grad to wacke	210	H	GPP-1. 96-100	<0.01							
	98	b r g y	m w	p s t	p s w	h + wk ? c		a/a	200										
	99	b r g y	m w	p s t	p s w	h(wk) ± ?c		pl gn/brn gry, wkly hem ± ?chlor alt silt grad to wacke	210										
	100	g y	m w	p s t	p s w	wk h		pl-med grey, i/p pl brgry. siltst grading to greywacke.	240				96-100	<0.01	<1	5	24	31	<10
	101	b r g y	s w m w	p s w	p s t	wk h		a/a but increasingly greywacke in texture.	220		GPP-1. 100-104	<0.01							
	102	b r g y	s w m w	p s w	p s t	wk h		a/a greywacke grading to siltstone, pl-med brn gry	210										
	103	g y	s w	p s w		v.wk h		a/a pl gry - pl brn gry greywacke	220										
	104	g y	F s w	p s w		v.wk h i/p		a/a only occasionally with weak hem alt, sli weath - fresh	200				100-104	<0.01	<1	4	24	34	<10
	105	g y	F s w	p s w		v.wk h i/p		a/a with occ strongly hem alt bands, predom med gry.	210		GPP-1. 104-108	<0.01							
	106	g y	F s w	p s w		wk h i/p		a/a with 2-5% mky-ferrug qtz veinlets	360										
	107	g y	s w	p s w		wk h		a/a but with wk hem alt becoming more pervasive, 2% qv	300										
	108	b r g y	s w	p s w		wk h		med brn gry - med gry, wk hem throughout, occ str hem bands, tr qv	260				104-108	<0.01	<1	10	14	34	<10
	109	b r g y	s w	p s w		wk h		a/a mod fresh greywacke, nil-tr qv.	260		GPP-1. 108-112	<0.01							
	110	b r g y	s w	p s w		wk h		a/a nil qv.	240										
	111	b r g y	s w	p s w		wk h		a/a	200										
	112	b r g y	s w	p s w		wk h		med gry - med brn gry, sli oxid (hem) greywacke	210				108-112	<0.01	<1	7	19	34	<10
	113	b r g y	s w	p s w		wk h		a/a mod hard, mod fresh	210		GPP-1. 112-116	<0.01							
	114	b r g y	s w	p s w		wk h		a/a	60										
	115	g y	s w	p s w		v.wk h		a/a but being fresher, + rare surface coatings of str hem	230										
	116	g y	s w	p s w		v.wk h		a/a with decr oxid and occ fresh frags	200				112-116	<0.01	<1	10	20	40	<10
	117	b r g y	s w	p s w		wk h		predom med brn gry (wk hem), small amount purp gry fresh, greywacke	230		GPP-1. 116-120	<0.01							
	118	g y	F s w	p s w		wk h i/p		60% a/a 40% purp grey + fresh greywacke.	80										
	119	g y	s F w	p s w		wk h i/p.		40% pl-med gry (fresh), 60% wkly hem and pl-med brn gry.	60										
119	120	p v g y	F	p s w	WET	occ h		predom pl-med purple grey, fresh greywacke, occ wk hem.	50				116-120	<0.01	<1	20	17	37	<10

TIME STARTED 1710 (21/4) FINISHED 1040 (22/4)

ASSAY LAB CLASSIC

P/O Nº NT 1620

Newmont Australia Limited

DRILL LOG

DATE 22 / 4 / 90

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HOLE Nº: GPP-1   8990 E N   11164 E E

PROJECT M^cDOUALL RANGE

PROSPECT GATEWAY

AZIMUTH 356°

DECLINATION -70°N

DRILL RIG RCD 150

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION																	SAMPLES								
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	AAS Au g/t	SAMPLE Nº	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
120	121	g	y	F		p	s	w	t?	W	E	T		occ h		med-dk gry (± purp ± brn), predom fresh, hard, WET greywacke	200	H	GPP-1. 120-124	<0.01							
	122	g	y	F s	w	p	s	w	t?	W	E	T		occ h		a/a predom fresh - sli weathered, wk hem alt in part	200										
	123	g	y	s	w	p	s	w	t?	W	E	T		h i/p		a/a w/- occ stronger hem bands. 2% trnsluc-mlky qtz vns	150										
	124	g	y	F s	w	p	s	w	t?	D	R	Y		h i/p		med purp (± brn) grey, mod fresh - fresh greywacke + partial hem	200				120-124	<0.01	<1	21	18	34	<10
	125	b g	r y	F s	w	p	s	w	t?		↓			h i/p.		50% med gry, fresh greywacke, 50% w/- wk hem (brn gry)	600		GPP-1. 124-128	<0.01							
	126	b g	r y	F s	w	p	s	w	t?					h i/p.		60% gry. fresh, 40% brn gry greywacke/?tuff (siliceous)	800										
	127	b g	r y	F s	w	p	s	w	t?					h i/p		a/a w/- mnr fresh character, hard, ?siliceous greywacke/?tuff	370										
	128	b g	r r	F s	w	p	s	w	t?					h i/p		a/a but predom med brn gry, sli weath/hem ?tuffaceous sed	270				124-128	<0.01	<1	9	17	39	<10
	129	b g	r	F s	w	p	s	w	t?	W	E	T		wk h i/p		a/a 70% wk pervasive hem alt, 30% med gry fresh ?tuff/greywacke	550		GPP-1. 128-132	<0.01							
[illegible]	130	b g	r	s	w	p	s	w	t?	W	E	T		wk h		a/a 80-90% wkly hem alt (med brn gry)	160										
1315	131	g	r	F s	w	p	s	w	t?	W	E	T		wk h i/p		75% fresh, pl-med gry greywacke, 25% wkly pervasively hem	350										
338	132	g	r	F		p	s	w	t	W	E	T		occ wk h		predom hard. fresh, med grey, siliceous tuff/?greywacke	1800				128-132	<0.01	<1	9	22	35	<10
1350	133	g	r	F		p	s	w	t		↓			"		a/a 80-90% fresh, 10-20% sli hem (brn gry) bands/fracts	600		GPP-1. 132-136	<0.01							
1401	134	g	r	F		p	s	w	t					magnetite alt occ wk h ± ?c		a/a 80% fresh + magnetite spots, med grey, siliceous, hard tuff/?greywacke, wk ?chl;	p1500										
1422 1427	135	g	r	F		p	s	w	t					mag occ wk h ± ?c		a/a 10-15% w/- wk hem ± ?chlor (wk) alterⁿ + mag; hard, silic.	750										
1434	136	g	r	F		p	s	w	t					mod str m		20-25% wk hem ± ?chlor tuff/greywacke bands, 75% fresh g'wacke	2000				132-136	<0.01	<1	14	20	36	<10
1503	137	g	r	F		p	s	w	t	p	s	t	t	?chlorite + m		mag alt med gry - med grn gry, hard, fresh, siliceous, wkly ?chl alt siltst/tuff?	2000		GPP-1. 136-140	<0.01							
1526	138	g	r	F		p	s	w	t	p	s	t	t	wk ?c + str m		a/a predom wkly ?chlor alt. fresh, hard, silic greywacke/siltst? (?tuff)	2000										
1548	139	g	r	F		p	s	w	t	p	s	t	t	mag wk ?c i/p		WET a/a ?chlor alterⁿ less pronounced. occ wk hem band	2000										
16	140	g	r	F		p	s	w	t	p	s	t	t	wk ?chlor rm		a/a hard, siliceous (saccaroidal texture), v.wkly ?chlor alt thru	2100				136-140	<0.01	<1	21	17	38	<10
1619 1626	141	g	r	F		p	s	w	t	p	s	t	t	mag ± wk h		a/a but 30% with magnetite alterⁿ, wk pervasive partial hem alt. hard.	850		GPP-1. 140-144	<0.01							
1641	142	g	r	F		p	s	w	t	p	s	t	t	wk ?c, ± h, mag		a/a predom fresh, med ?grn gry (wk ?chlor), 10% w/- mod hem alt	2000										
1658 1707	143	g	r	F		p	s	w	t	p	s	t	t	wk ?c ± h.		WET a/a 95%, tr-10% w/- hem alterⁿ (fract/?bands).	2400										
143	144	g	r	F		p	s	w	t	p	s	t	t	wk ?? c, mag		a/a only tr hem alt (fractures). predom med gry	2400				140-144	<0.01	<1	18	9	35	<10

TIME STARTED 1040   FINISHED 1617

ASSAY LAB CLASSIC   P/O Nº NT 1620

Newmont Australia Limited

DRILL LOG

DATE 22/4/90

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PROJECT McDOUALL RANGE

AZIMUTH 356°

DRILL RIG RCD 150

HOLE Nº: GPP-1 8990 G N 11164 G E

PROSPECT GATEWAY

DECLINATION -70°N

GEOLOGIST JPK

WET

DEPTH		LITHOLOGICAL DESCRIPTION															SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg MAG	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	AAS Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
144	145	g	r	F		p	s	w	t	p	s	t	t	wk ?c $\overset{\text{mag}}{\pm}$ h i/p		med grn ± grn gry (wk pervasive chl.-?) + Magnetite alt occ rd pu (hem) ± qz stringers	900?	H	GPP-1. ~~144~~-147	<0.01							
	146	g p	r u	F		p	s	w	t					wk ?!c $\overset{\text{mag}}{\pm}$ h i/p		a/a but 5% purd hem alt about (1%) mky qv fringes (? tuff).	500?										
146	147	g b	r r	F s	w	p	s	w	t					wk h $\overset{\text{mag}}{\pm}$?!c		predom med brn gry-gry, sli hem, fractured tuff/greywacke + 1% q.v.	400?										
	~~148~~															EOH					144-147	<0.01	<1	17	15	27	<10
	~~149~~																										
	~~150~~															ABANDON HOLE DUE TO EXCESSIVE DRIFT/DEVIATION											
	~~151~~															OF INCLINATION.											
	~~152~~																										
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~~167~~	~~168~~																										

TIME STARTED 1617 (22/4/90) FINISHED 1755

ASSAY LAB

NEWMONT HOLDINGS PTY. LTD.

DRILLING RECORD

Hole No. CZRC-3

PROJECT McDOUALL RANGE (NT 27) TITLE BULL'S EYE ANOMALY

LOCATION CONSERVATION ZONE - NEAR MARY ANN ARM RESERVE.

COLLAR CO-ORDS 9970 GRID N 12,024 GRID E COLLAR R.L. ______

BEARING AT COLLAR 170° MAG ~~grid~~ ______ mag ______ true

DIP AT COLLAR -73° S TOTAL DEPTH 159 m

OBJECT OF HOLE TO INTERSECT MAGNETIC BODY (IRONSTONE) 35 m VERTICALLY BELOW INTERSECTION IN CZRC-2 (ie. 55 m DOWNHOLE IN CZRC-2) ON SAME SECTION

REMARKS INTERSECTED HYDROTHERMAL IRONSTONE AT PROGNOSED TARGET POSITION, NOT VISIBLY MINERALIZED. IRONSTONE AND HOST SEDIMENTS INTENSELY SHEARED AND ALTERATION WELL DEVELOPED. PVC CASING COULD NOT BE INSTALLED BELOW 100 m DOWNHOLE.

BOREHOLE SURVEYS

METHOD ______

depth (m)	bearing		dip (degrees)
	(mag)	(grid)	
SURFACE	?		-73°
24 m	180°		-72°
48 m	180.5°		-71.75°
72 m	183°		-70.5°
96 m	187°		-69.5°
120 m	193°		-69.5°
144 m	192.5°		-69°
144 m	IN ROD		-69°

DRILLING RIG RCA-150

OPERATOR GOMEX

DATE STARTED 29/9/90

DATE COMPLETED 30/9/90

CORE SIZES. 5¼" RC HAMMER.

WEDGES PLACED ______

SUMMARY OF RESULTS

from m	to m	length m	geological description
0	1	1	SOIL, FLOAT, GRAVEL + CLAY (CZSG)
1	10	9	HEMATITIC + LIMONITIC (SURFACE OXIDIZED) ± BLCHD (MOTTLED) CLAYS + SEDIMENTS
10	80.3	70.3	STRONGLY BLEACHED (± OXID) PINK-YELLOW-BUFF CLAYSTONE (Esp) - WELL CLEAVED
80.3	93	12.7	MED-DK GRN GREY, WEAKLY CHLORITIC + VARIABLY BLEACHED CLAYSTONE - WELL CLEAVED
93	96	3	GRN GREY, STRONGLY SHEARED TALC-CHLOR ALTERED CLAYSTONE, GRADES TO T-C-SCHIST
96	101	5	MED-DK GRN GREY, STRONGLY TALCOSE CHLOR SCHIST (SHEAR) w/- DISSEM MAGNETITE i/p
101	104	3	PALE GRN GREY, BLEACHED, MOD CHLOR ± TALC SCHIST + DISSEM MAG, ± OCC IRONST STRINGERS
104	113	9	MED GRN GREY, SILICIFIED TALC-CHLOR SCHIST + 20% - 70% STRINGERS/? BRECC & SHEARED MAG-HEM-CHLOR IRON
113	117	4	DK GRN GREY, STRONGLY SHEARED CHLOR SCHIST (ex-SEDS) + ABUND FGR DISSEM MAGNETITE
117	121	4	PL GREEN, BLEACHED, SILICIFIED CHLOR ± TALC SCHIST, STR CLEAVED + ABUND MAGNTT a/a.
121	123	2	a/a BUT WITH 15% - 40% MAG-HEM-IRONSTONE STRINGERS + ±-2% MKY-FERRUG QV.
123	127	4	PL GRN GREY, BLEACHED, SILICIFIED CHLOR ± TALC SCHIST AS PER 117-121 m
127	146	19	BANDED, DK GRN + PL GRN (VARIABLY BLEACHED) CHLOR ± TALC SCHIST GRADING TO CHLOR SEDS
146	159	13	MED-DARK GRN GREY, FRESH, MOD CLEAVED (? WK SHRD) CHLORITIC SILTST + CLAYSTONE, ± TALC
	(EOH)		(BASE OF OXIDIZATION = 79 m)
			(WATER TABLE = 110 m)

LOGGED BY SPK DATE 29/9/90

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AZIMUTH 170° MAG

DRILL RIG RCD 150

HOLE N°: CZRC-3 9970 N 12024 E

PROSPECT Bulls Eye

DECLINATION -70° S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION															SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	~~SAMPLE WEIGHT~~ 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
0	1	r	d			C	z	s		C	z	s	g	hem, lim		surface soil, gravel, clay + float (qtz, lsth).	60	H	0-4	<0.01							
	2	r b	d r	E	w	l	s	w		l	s	t		h + l		str oxid rd brn (± pl grey/blchd) micaceous greywacke ± siltstone	50										
	3	b c	r r	E	w	l	s	w		l	s	t		h + l		a/a but 40% crm - pl grey (blchd) clayey siltstone, MOTTLED	30										
	4	r c	d r	E	w	l	s	t		l	s	p		h + l		30% crm (str blchd) 70% wk-mod blchd (pl rd) siltst + clayst	20				0-4	<0.01	<1	32	16	16	<10
	5	r c	d r	E	w	l	s	p		l	s	t		h		a/a, predom pink-pl rd, mod blchd clayst - pulverised	40		4-8	<0.01							
	6	r c	d r	E	w	l	s	p		l	s	s		h		a/a predom pulverized - mottled to mod blchd, tr ferrug qv.	20	tr qv									
	7	p r	k d	E	w	l	s	p		l	s	t		h		70% mod str blchd, pink siltst/clayst, 15% micac lsw, 15% str bl	20										
	8	r	d	H	W	l	s	t		l	s	p		h		a/a but being darker (↑ hem) + sli less blchd throughout	20	tr qv			4-8	<0.01 <0.01	<1	16	12	5	<10
	9	r	d	H	w	l	s	t		l	s	p		h		predom wkly blchd, red siltst. occ mottled pink clayst, pulv.	20	tr qv	8-12	<0.01							
	10	r	d	H	w	l	s	z		l	s	w		h		rd hem siltst ± greywacke (predom pulv), tr qv, tr ironst stringers	30	tr qv									
	11	p	k	E	w	l	s	p		l	s	t		h		pulverized predom - pink, mod str blchd clayst ± siltst	60										
	12	p	k	E	w	l	s	p						h		a/a soft + pulv	40				8-12	<0.01	<1	15	9	4	<10
	13	p	k	E	w	l	s	p						h		a/a sli less str blchd.	20		12-16	<0.01							
	14	p	k	E	w	l	s	p						h		a/a soft, blchd, well cleaved.	30										
	15	"		"		"								h		a/a predom pulv	20										
	16	"		"		"								h		a/a	30				12-16	<0.01	<1	32	8	7	<10
	17	p	k	H	w	l	s	p		l	s	w		h		a/a, tr ferrug qv, tr - occ rd, hem, micaceous lsw + lst	20		16-20	<0.01							
	18	p	k	H	w	l	s	p						h		a/a nil - tr qv.	10										
	19	p	k	H	w	l	s	p						h		a/a tr ferrug qv, pulv, predom pink (mod str blchd)	10										
	20	p	k	H	w	l	s	p						h		a/a nil - tr qv.	10				16-20	<0.01	<1	14	10	63	<10
	21	p	k	H	w	l	s	p						h		a/a tr - 1% ferrug qv	15		20-24	<0.01							
	22	p	k	H	w	l	s	p						h		1-2% qv a/a.	15										
	23	p r	k d	H	w	l	s	p		l	s	t		h		tr qv. + occ rd, part blchd, hem siltst	20										
	24	p	k	H	w	l	s	p						h		soft, pink, mod str blchd well clvd clayst predom pulv	20				20-24	<0.01	<1	14	<4	7	<10

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AZIMUTH 170° MAG
DRILL RIG RCD-150

HOLE N°: CZRC-3   9970 N   12024 E
PROSPECT BULLS EYE
DECLINATION -70°S
GEOLOGIST SPK

DEPTH FROM	DEPTH TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MAG SAMPLE WEIGHT Kg cwt	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi pp
24	25	pk	Hw	l s p		h		pk ± crm, mod-str blchd, predom pulverized, wll clvd clayst	20	H	24-28	<0.01							
	26	pk	Hw	l s p		h ± lim		a/a pink ± crm ± pl brn (? lim)	30										
	27	"	"	"		" "		a/a	30										
	28	"	"	"		" "		a/a brn pl yel brn (lim) i/p	20				24-28	<0.01	<1	15	9	12	<1
	29	rd yel	"	"	l s t	" "		70% buff-pl yel clayst, 20% rd hem clayst 10% rd siltst, tr gv	10		28-32	<0.01							
	30	"	"	"	"	" "		40% a/a. 40% a/a 20% a/a	15										
	31	yel rd	Hw	l s p		h + l		90% buff-pl yel clayst (not wll clvd) 10% clvd rd clayst	15										
	32	"	"	l s p		l + h		80% a/a blchd. 20% a/a	15				28-32	<0.01	<1	23	10	30	<1
	33	"	"	"		l + h		a/a predom soft? + pulv	15		32-36	<0.01							
	34	rd yel	"	"		h + l		70% pk-rd (mod blchd) clayst. 30% yel brn clayst, tr gv	10										
	35	"	"	"		h + l		70% a/a 30% a/a blchd tr gv	15										
	36	yel	Hw	l s p	g v	[illegible] + l		90% pl yel brn blchd ± lim clayst. 10% ferrug gv	20				32-36	<0.01	<1	29	11	29	<1
	37	"	"	"		lim		a/a. tr gv.	10		36-40	<0.01							
	38	yel pk	Hw	l s p		lim + hem		predom yel-pink (lim ± hem + blchd) clayst, pulv	15										
	39	"	"	"		" "		a/a. nil-tr gv.	10										
	40	yel	Hw	l s p	g v	lim ± hem		pulv yel-buff clayst. + tr ferrug gv	20				36-40	<0.01	<1	20	7	28	<1
	41	"	"	"		"		predom pulv pl yel-buff, occ pink clayst	20		40-44	<0.01							
	42	"	"	"		"		a/a	20										
	43	pk	Hw	l s p		hem ± lim		a/a but becmg predom pink (wk-mod blchd) 10% buff.	20										
	44	"	"	"		"		a/a	25				40-44	<0.01	<1	17	7	47	<1
	45	"	"	"		"		a/a	15		44-48	<0.01							
	46	rd	Hw	l s p		hem		predom wkly blchd, red ± pink clayst, tr gv.	25										
	47	"	"	"		"		a/a	25										
	48	"	"	"		"		a/a	25				44-48	<0.01	<1	18	8	27	<1

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AZIMUTH 170° MAG

DRILL RIG RCD - 150

HOLE Nº: CZRC-3 9970 N 12024 E

PROSPECT BULLSEYE

DECLINATION -70° S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	MOB ~~SAMPLE WEIGHT~~ kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
48	49	y el	H w	l s p		lim ± hem		buff - pl yel brn ± pink, mod str - str blchd, pulv clayst	20	H	48 - 52	<0·01							
	50	"	"	"		" "		a/a predom pulverised.	20										
	51	p k	"	"		hem ± lim		pink, mod blchd clayst + tr ferrug - mky qv	20										
	52	"	"	"		"		a/a tr qv	15				48 - 52	<0·01	<1	23	6	25	<10
	53	"	"	"		"		a/a nil - tr qv	15		52 - 56	<0·01							
	54	"	"	"		"		a/a bcmg yel - pk i/p	15										
	55	"	"	"		"		a/a	15										
	56	p k	H w	l s p		hem ± lim		pink - pl rd brn ± pl yel brn, predom pulv, mod blchd clayst	15				52 - 56	<0·01	<1	20	11	51	<10
	57	"	"	"		"		a/a.	15		56 - 60	<0·01							
	58	"	"	"	g v	"		a/a w/- 1-2% ferrug qv + 1% ironst stringers	25	W.W									
	59	p k b r	H w	l s p		hem		a/a, tr qv, nil ironst. ↓ blchg, ↑ hem	15	↓									
	60	b r	H w	l s p		"		rd brn +/- pink (blchd) clayst wll clvd bcmg harder ↓ blchg	20				56 - 60	<0·01	<1	17	6	37	<10
	61	"	"	"		"		a/a + occ ferrug - mky qv.	20		60 - 64	<0·01							
	62	"	"	"		"		a/a " ↓↓ blchg. (v.wk + partial)	25										
	63	"	"	"		"		a/a " nil - tr blchg (only wk).	20										
	64	b r	H w	l s p		h ± lim		80% rd brn, 20% yel brn (lim), wll clvd clayst/shale, harder.	20				60 - 64	<0·01	<1	16	6	28	<10
	65	"	"	"		"		a/a bcmg less pulv but occ buff blchd bands	25		64 - 68	<0·01							
	66	"	M W	"		"		a/a	15										
	67	b u	m w	l s p		h + l		bcmg buff - pl rd brn, mod wll blchd, clvd clayst, tr qv	15										
	68	b " h -	M w	"		"		a/a nil qv.	15				64 - 68	<0·01	<1	18	8	48	<10
	69	r d	m w	l s p		h ± l		10% a/a (wk - mod blchd), 90% rd brn, hem clayst, clvd	20		68 - 72	<0·01							
	70	b u	m w	"		l ± h		90% buff, blchd ± lim clayst. 10% rd brn clayst	25										
	71	b u p k	"	"		h + l		70% buff, 30% pink, mod blchd clayst	20										
	72	"	"	"		h ± l		pink - pl purple wk blchd clayst + occ buff bands	20				68 - 72	<0·01	<1	15	<4	110	<10

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AZIMUTH 170° MAG

DRILL RIG RCD-150

HOLE N°: CZRC-3 9970 N 12024 E

PROSPECT BULLSEYE

DECLINATION -70° S

GEOLOGIST SPK

OXID BAND

DEPTH		LITHOLOGICAL DESCRIPTION															SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	~~SAMPLE WEIGHT Kg~~ 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
72	73	p b	k u	M	w	l	s	p						h ± l		60% pink-pl purp-pl rd, hem, sli blchd clayst, 40% buff clayst	25	H	72-76	<0.01							
	74	p b	k u	M	w	l	s	p						h		75% a/a. 20% buff, blchd bands, 5% gry, silic bands	30										
	75	p b	k u	m	w	l	s	p						h		65% a/a. 30% a/a 5% a/a.	30										
	76	b p	k	M	w	l	s	p						wk l ± h		20% a/a 80% a/a tr mlky qv.	30				72-76	<0.01	<1	26	8	90	<10
	77	b	u	m	w	l	s	p						wk l ± h		predom buff, blchd, mod hard, clvd clayst, 2% mlky/fer qv	45		76-80	<0.01							
	78	"		"		"								" l ± h		a/a buff - pl brn, occ purple. 1% qv	40										
	79	b	u	M	w	l	s	p						" l ± h		a/a tr-1% mlky qv	25										
	80	b g	x y	m	w	l	s	p		l	s	p	c	wk lim + wk chl		65% buff-pl brn (blchd) 35% med gry, wkly chlor clayst, clvd	25				76-80	<0.01	<1	16	<4	79	<10
	81	g b	y k	s	w	l	s	p	c	l	s	p		wchl ± wk lim?		70% med gry, wkly chlor, wll clvd clayst, 30% wkly blchd, buff	25		80-84	<0.01. <0.01							
	82	g g	n y	s	w	l	s	p	c					wk chlor		predom a/a, wll clvd, chloritic, occ blchd buff bands, tr qv.	25										
	83	"		"		"								"		a/a med-dk (grn) gry, wll clvd (? shrd), chlor clayst	20										
	84	"		"		"								"		a/a becmg harder, fresher + unblchd, rare buff, blchd bands	25				80-84	<0.01 <0.01	<1	5	<4	49	<10
	85	g g	^ y	s F	w	l	s	p	c					"		med grn gry, dk gry, v. wll clvd (? shrd) chlor clayst, mineral lineat^{n}	25		84-88	<0.01							
	86	"		s F	w	l	s	p	c					"		a/a rare blchd fractures, strongly developed mineral lineat^{n} on clayst	30										
	87	"		"		"								"		med-dk grn gry, mod wll - wll clvd clayst w/ wk chl alt, rare oxid	40										
	88	g g	^ y	F		l	s	p	c					"		dk grn gry, fresh, wkly chloritic (? regional alt) clayst, clvd	30				84-88	<0.01	<1	32	8	52	<10
	89	"		"		"								"		a/a v. wll clvd, rare spotty hem on some faces, wk chlor	40		88-92	<0.01							
	90	"		"		"								"		a/a rare blchd fractures/bands	40										
	91	"		F H	w	l	s	p	c	qv				wk chl ± l ± h		a/a but becmg highly fractured + blchd + oxid i/p. 2% ? shrd ferrug qv	300										
	92	g g	^ y	F H	w	l	s	p	c					" (blchd)		30% dk grn gry, 70% pl grn gry (blchd + soft) clayst ? shrd chlor,	50				88-92	<0.01	<1	270	16	96	10
	93	"		F		"								wk chlor ± blchd		90% a/a fresh 10% " (clayey, fract/? shrd, soft).	45		92-96	<0.01							
	94	g g	^ y	F		l	s	p	c	t	a	l	c	mod chl, str talc		10% a/a 90% grn gry, strongly talcose alt Lspc? (shrd).	25										
	95	"		"		l	s	p	c	t	a	l	c	str talc-chlor		10% dk gry, 90% grn gry, str talc-chlor alter^{n} (shrd).	55										
	96	"		"		"				t	a	l	c	"		a/a predom talc-chlor + cleaved (shrd) Lspc	60				92-96	<0.01	<1	47	47	52	40

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PROJECT NT 27
AZIMUTH 170° MAG
DRILL RIG RCD - 150

HOLE Nº: C2RC-3 9970 N 12024 E
PROSPECT BULLS EYE
DECLINATION -70°S
GEOLOGIST GPK

DEPTH		LITHOLOGICAL DESCRIPTION																SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	MAG SAMPLE WEIGHT Kg SUSC	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
96	97	g y	n y	F		l	m	z ●	●	t	a	l	c	str talc + chlor		10% blk/dkgry. 90% dk grn gry, str talcose, chloritic schist/ claystone	800	H	96-100	<0.01							
	98	"		"		l	m	z			"			" "		20% ", a/a sheared, strongly cleaved, fresh ?fgr magnetite	4500										
	99	"		"		l	m	z			"			" "		a/a str talcose alter^n. - sheared, sft, fresh, schist	2000										
	100	"		"		l	m	z			"			" "		5% blk, chloritic ± magnetite, 95% str talc, chlor, grn, clvd.	8000				96-100	<0.01	<1	46	330	35	120
	101	g	y	F		l	m	z	?c	—	—			wk chlor		pl (grn) gry, wll clvd (shrd). blchd, ?wk chlor alt siltstone/schist	3800		100-104	<0.008 FA	100-101	<0.01	<1	33	120	30	50
	102	g g	n y	"		l	m	z	?c	t	a	l	c	mod chl ± talc		a/a + bands of talcose + chlor alt (mod) ± ironst	21,000				101-102	<0.01	<1	66	91	120	30
	103	"		"		l	m	z	?c	t	a	l	c	" + "		pl grn gry, wk-mod talcose + chlor alt sst/schist ± "	24k				102-103	<0.01	<1	230	59	17	<10
	104	" b	k	"		l	m	z	●	l	x	:		mod chl + talc		a/a w/- 5% str magnetitic ironst stringers	25k				103-104	<0.01	<1	63	36	28	10
	105	b g	k n	"		l	x	i		l	s	t	c	sil chl-talc-mag		50% ironstone. 50% silic talc-chlor alt schist IRONSTONE	27k		104-108	<0.008 FA	104-105	<0.01	<1	240	62	37	<10
	106	g b	n k	"		l	m	z	c	l	x	;		" "		5-10% a/a. 90% shrd talc-chlor schist/seds (silic) schist	20k				105-106	<0.01	<1	460	68	28	10
	107	g b	n k	"		l	m	z	c	l	x	i		" "		40% a/a 60% a/a (silic-talc-chlor) schist	25k				106-107	<0.01	<1	280	61	33	<10
	108	g b	n k	"		l	m	z	c	l	x	i		" "		40% a/a 60% a/a " tr cpy ± pyr.	34k				107-108	<0.01	<1	70	18	41	<10
	109	g b	n k	F		l	m	z	c	l	x	i		" "		30% mag-hem-chlor shrd ironst. 70% talc-chlor-shrd seds/sch	20k		108-112	<0.008 FA	108-109	<0.01	<1	580	55	44	<10
	110	b g	k n	F		l	x	i	c	l	m	z	c	" "		50% " " " shrd ironst. 50% " (silic) schist/seds	23k	DRY			109-110	<0.01	<1	650	130	38	<10
	111	b g	k n	F		l	x	i	c	l	m	z	c	silic+talc-chl-mag		70% a/a + 30% talc-chlor alt shrd seds (silic)/schist	24k	WET			110-111	<0.01	<1	280	140	73	20
	112	g b	n k	F		l	s	t	c	l	x	i	c	sil-chl-mag		70% chlor-silic-altered shrd seds. 30% mag-hem-chlor ironst.	20k				111-112	<0.01	<1	26	46	39	30
	113	"		"		"				"				sil-chl ± talc-m		80% a/a (str shrd, chlor-sil ± talc seds), 20% ironst	15K		112-116	<0.008 FA	112-113	<0.01	<1	18	50	7	50
	114	b	k	"		l	m	z	c					chl-mag		predom dk grn gry-blk, str chloritic schist (ex-sed) + abund fgr magnet	20k				113-114	<0.01 <0.01	<1	89	110	170	50
	115	b	k	"		l	m	z	c					chl-mag		a/a str sheared (schistose) chlor-magnetite schist	7500				114-115	<0.01	<1	200	320	260	10
	116	b	k	"		l	m	z	c					" "		a/a w/- occ blchd + chlor (pl grn) bands ± oxid.	9000				115-116	<0.01	<1	25	45	230	<10
	117	"		"		"								" "		a/a + 1% ferug - mlky qv.	25K		116-120	0.009 FA	116-117	<0.01	<1	29	57	130	40
	118	g	n	F		l	m	z	t					silic-talc-chl		pl-mod grn, sheared, silic, blchd, talc-chlor schist grad to (shrd seds)	2000				117-118	<0.01	<1	11	260	93	20
	119	g	n	F		l	m	z	t					" " "		a/a blchd, highly sheared/cleaved	2600				118-119	<0.01	<1	30	1460	79	80
	120	g g	n y	F		l	m	z	s					sil ± talc ± chl		str silic ± talc ± chl, str blchd schist (ex seds) tr qv.	700				119-120	<0.01	<1	13	140	33	10

TIME STARTED
FINISHED 1200
ASSAY LAB CLASSIC
P/O Nº NT 1643.

Newmont Australia Limited

DRILL LOG

DATE 29/9/90

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PROJECT NT 27

AZIMUTH 170° MAG

DRILL RIG RCD-150

HOLE Nº: CZRC-3 9970 N 12024 E

PROSPECT BULLS EYE

DECLINATION -70°S

GEOLOGIST SPK

DEPTH		LITHOLOGICAL DESCRIPTION																SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	MAG ~~SAMPLE WEIGHT KG~~ SUSC	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
120	121	g g	y n	m F	W	ℓ	m	z	s					s±t±chl		pl grn gry - crm, str blchd, silicified ± talc ± wk chl schist (ex-sed) str clvd	900	H	120-124	<0.01							
	122	g b	y k	F		ℓ	m	z	v	ℓ	x	i	c	s±t±chl+mag		a/a + tr mlky-glssy qtz vn, + 30-40% maghem ironstone	8000	WET									
	123	g g	n y	F		ℓ	m	z	s	ℓ	x	i	c	s±t±chl±mag		15-20% ironst (shrd) in highly sheared seds/schist (sil ± t ± chlor) 2% qv	15000	↓									
	124	g g	n y	F		ℓ	s	w	c					s±chl		tr shrd seds/ℓmzs (chlor), predom silic + chlor (pl grn gry) ℓsw/?tuff.	3,500				120-124	<0.01	<1	26	45	32	<10
	125	g g	n y	F		ℓ	m	z	c	ℓ	x	i	c	s±t±chl±mag		blchd, pl grn gry. str shrd seds/ℓmzc + 2-5% shrd ironst, tr qv	2,300		124-128	<0.01							
	126	g g	n y	F		ℓ	s	w	c	ℓ	m	z	c	s±chl		pl grn gry, blchd, wkly-mod shrd (partially) chlor greywacke.	900										
	127	g g	n y	F		ℓ	m	z	c	ℓ	s	w	c	s±t?+chl		as per 124-125m, ↑ shrg/clvge	350										
	128	b	k	F		ℓ	m	z	c					str chlor		dk grn gry-blk, intensely shrd, str chloritic schist (ex-seds)	270				124-128	<0.01	<1	29	23	140	20
	129	b	k	F		ℓ	m	z	c	ℓ	s	p	c	str chlor		a/a chlorite schist grading to str sheared chlor clayst.	250		128-132	<0.01							
	130	b	k	F		ℓ	s	p	c					mod str chl		dk grn gry-blk, mod str chloritic clayst, fresh, mod str clvd/shrd	50										
	131	"		"		"								"		a/a str shrd/clvd.	50										
	132	b g	k n	F		ℓ	s	p	c/	ℓ	m	z	c	"		a/a w/- 5% pl grn gry, blchd (±?silic) bands	40				128-132	<0.01	<1	10	77	330	30
	133	g g	n y	F		ℓ	s	p	c/	ℓ	m	z	c	wk-mod str chl		90% pl grn gry-pl gry, str blchd, shrd/clvd clayst, 10% blk clayst	30		132-136	<0.01							
	134	"		"		ℓ	s	p	c	ℓ	s	p	t	" ±talc		70% a/a (blchd talcose) 30% dk grn gry (chlor ± ?? f gr magnetite)	200	↓									
	135	g g	n y	F		ℓ	s	p	c	ℓ	s	p	+	str talc i/p mod-str chl		50% a/a (blchd, pl grn gry, talcose i/p, shrd) 50% dk grn gry a/a.	100	WET									
	136	"		"		"				"				"		30% a/a (str shrd/clvd + blchd) 70% a/a (str shrd)	95				132-136	<0.01	<1	15	85	190	20
	137	g g	n y	F		ℓ	s	p	c	ℓ	m	z	t	mod str chl		80% dk grn gry, 20% pl-mod grn gry (blchd), all str shrd	50		136-140	<0.01							
	138	"		"		"								" ±talc		95% a/a intensely clvd/shrd. 5% blchd a/a clayst	50										
	139	"		"		ℓ	m	z	t	ℓ	s	p	c	" +talc		50% a/a 50% blchd, pl grn gry, talcose, shrd → schist.	100										
	140	"		"		ℓ	m	z	t					str talc + chlor		predom pl grn gry, str talcose + chlor schist, blchd, intense shrg	70				136-140	<0.01	<1	14	76	140	10
	141	"		"		ℓ	m	z	t					" "		a/a med grn gry - dk grn gry, intensely shrd, talc chlor schist	150		140-144	<0.01							
	142	"		"		"								" "		a/a predom med grn gry. str talcose, wk-mod blchd	100										
	143	"		"		"								" "		a/a intensely shrd/clvd. str talcose.	40										
	144	"		"		ℓ	m	z	t					" "		a/a w/- min amt dk grn gry (less blchd, ↓ talc).	200				140-144	<0.01	<1	13	17	130	10

TIME STARTED

FINISHED 1430

ASSAY LAB CLASSIC

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Newmont Australia Limited

DRILL LOG

DATE 29/9/90

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PROJECT NT 27

AZIMUTH 170° MAG

DRILL RIG RCD-150

HOLE Nº: CZRC-3 9970 N 12024 E

PROSPECT BULLS EYE

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	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
144	145	s g	n y	F		l	m	z	c	l	s	t	c	chlor ± talc		mod-dk grn gry, str chloritic siltst grad to schist, str shrd predom	220	H	144-148	<0.01							
	146	"		"		l	s	t	c	l	m	z	c	" ± talc		a/a bcmg progressively less clvd/shrd, & chl, tr talc	150	WET									
	147	b g	k n	"		l	s	t	c					chlor (str)		dark grn gry, mod str cleaved (?shrd) siltstone, tr carb vnlts	65	↓									
	148	b g	k n	"		l	s	t	c	l	s	p	c	chlor (str)		a/a claystone grading to siltstone, chloritic, mod clvd, tr qvlts	80	DRY			144-148	<0.01	<1	9	33	300	20
	149	g g	n y	"		l	s	t	c					" "		dark grn grey, mod str clvd siltstone, chloritic, nil blchg	50	DRY	148-152	<0.01							
	150	"		"		l	s	t	c					" "		a/a mod wll cleaved chloritic siltstone, fresh, mod hard.	200	WET									
	151	"		"		l	s	p	c	l	s	t	c	" "		mod-dk grn gry, wll cleaved chlor clayst + 5% mod clvd siltst.	60	"									
	152	g g	n y	F		l	s	t	c	l	s	p	c	" "		15% a/a 85% as per 149-150m (dk grn gry siltst)	50	"			148-152	<0.01	<1	8	25	170	30
	153	"		"		l	s	p	c	l	s	t	c	" "		mod-dk grn gry, wll clvd/shrd clayst ± siltst, grad to schist i/p	50	"	152-156	<0.01							
	154	"		"		l	s	p	c	l	s	t	c	" "		a/a w/- tr mlky qtz veinlets, mod str-str clvd	90	↓									
	155	"		"		l	s	t	c	l	s	p	c	str chlor		dk grn gry, mod str-str shrd/clvd chlor siltst ± clayst, tr talc	80										
	156	"		"		l	s	t	c					" "		a/a mod str cleaved (?shrd) siltstone, rare talc.	90				152-156	<0.01	<1	15	31	100	<10
	157	"		"		l	s	t	c	l	s	p	c	str chlor, ± talc		a/a but incr abund (~10%) talcose, pl-mod grn bands	200		156-159	<0.01							
	158	"		"		l	s	t	c	l	s	p	c	" "		a/a rare talcose + chloritic (sli blchd?) clayst	80										
158	159	g g	n y	F		l	s	t	c	l	s	p	c	mod-str chlor		fresh, dakgrn gry, mod hard, mod str cleaved, strongly/modly	80	WET									
	EOH															chloritic claystone grading to siltstone					156-160	<0.01	<1	27	12	80	30
																EOH AT 159m.											

TIME STARTED

FINISHED 1520

ASSAY LAB CLASSIC

P/O Nº NT 1643

Newmont Australia Limited

Vacuum DRILL LOG

DATE 22/ 3 /90 PAGE N° 1 / 1

PROJECT McDowall Range AZIMUTH GN05° DRILL RIG Vacuum Drillings

HOLE N°: VH1 10250 N 10300 E PROSPECT Hopeful Star East DECLINATION 60° GEOLOGIST VAP.

DEPTH FROM	DEPTH TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ppb	SAMPLE N°	F:A Au ppb	APS → As ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	b v	E w	Q u a t		Ox hem		Bulldust: fine clay		Blade	9501	1·98							
1	2	r d	E w	C z		"		Ox siltst:		"									
2	3	r d	E w	C z		"		Oxidized siltst:		"									
3	4	r d	E w	C z	q	"		Oxidized siltst: qtz.		"			9501	1·98	<1	22	33	5	<1
4	5	p v	S w	P s t h		hem		Hematitic siltstone: Slightly kaolinized Mn on planes		"	9502	0·93							
5	6	p v	S w	P s t h		"		" "		"									
6	7	p v	S w	P s t h		"		" "		"									
7	8	p v	S w	P s t h		"		" "		"			9502	0·93	<1	<2	47	7	<1
8	9	p v	S w	P s t h		hem		Hematitic siltst: Slightly kaolinized. Mn on planes		Blade	9503	0·36							
9	10	p v	S w	P s t h		"		" "											
10	11	p v	S w	P s t h		"		" "											
11	12	g r	S w	P s t h		hem+k		Hem siltst: slightly inc in kaolin. Dissem. magn in sets					9503	0·36	<1	6	35	7	<1
12	13	g r	S w	P s t h		hem+k		" " "		Blade	9504	2·55							
13	14	p v	S w	P s t h		hem		Hem siltst: dec in kaolin. No magn.											
14	15	p v	S w	P s t h		hem		"											
15	16	p v	S w	P s t h		hem		"					9504	2·55	<1	<2	54	6	<1
16	17	p v	S w	P s t h		hem		Hem siltst: massive, foliated.		Blade	9505	0·30							
17	18	p v	S w	P s t h		"		" " "											
18	19	p v	S w	P s t h		"		" "											
19	20	p v	S w	P s t h		"		" "					9505	0·30	<1	4	55	7	<1
20	21																		
21	22							Stopped at 20m ∵ drilling too slow.											
22	23							all holes down to 20m from now on.											
23	24																		

TIME STARTED 11h45 FINISHED 12h15

ASSAY LAB NT1614 P/O N°

Newmont Australia Limited

Vacoum DRILL LOG

DATE 23/3/90

PAGE N° 1 / 1

HOLE N°: VH2

10260 N

10300E E

PROJECT McDouall Range

PROSPECT Hopeful Star East

AZIMUTH GN 05

DECLINATION 60°S

DRILL RIG Vacoum Drill. Spe

GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ~~g/t~~ ppb	SAMPLE N°	Au ~~g/t~~ ppb	As ppm	Cu ~~Ni~~ ppm	Pb ~~Zn~~ ppm	Zn ppm	B pp
0	1	R D	E W	G U a f		hem.		Bulldust. fine clay + hematitic transported soil.			9506	1.47							
1	2	R D	E W	C Z S		hem.		Transported soil; qtz, clay.											
2	3	R D	E W	C Z S		hem		" " ; qtz,											
3	4	R D	M W	C Z S	l s t h	hem.		Transported soil + hem. siltst.					9506	1.47	<1	38	23	20	<1
4	5	P U	S W	l s t h		hem.		Hem siltst: kaolinized, limonite skin, Fe st, qtz			9507	1.14							
5	6	P U	S W	l s t h		"		"											
6	7	P U	S W	l s t h		"		"											
7	8	P U	S W	l s t h		"		" coarse grained.					9507	1.14	<1	[illegible]	42	8	<10
8	9	P U	S W	l s t h		hem-k.		Hem siltst; kaolinized, qtz, ±limonite			9508	0.48							
9	10	P U	S W	l s t h		hem-k		" "											
10	11	P U	S W	l s t h		h		" "											
11	12	P U	S W	l s t h		h		" Inc in kaolinization Calcrete layer.					9508	0.48	<1	45	25	11	<1
12	13	P U	S W	l s t h		h		Hem siltst: massive, ± qtz veinlets, foliation Mn/Mg? on plane			9509	0.69							
13	14	P U	S W	l s t h		h		" "											
14	15	P U	S W	l s t h		h		" "											
15	16	P U	S W	l s t h		h		" "					9509	0.69	<1	44	44	8	<1
16	17	P U	S W	l s t h		h limonite		Hem siltst: kaolinized, qtz veinlets, Intercalation coarse+fine grnd			9510	0.81							
17	18	P U	S W	l s t h		h		" " . - ~~Hem~~ Mn or magn on											
18	19	P U	S W	l s t h		h		" joints											
19	20	P U	S W	l s t h		h		"					9510	0.81	<1	12	54	46	<1
20	21																		
21	22																		
22	23																		
23	24																		

TIME STARTED 12h28

FINISHED 13h20

ASSAY LAB NT1614

P/O N°

Newmont Australia Limited

VACUUM DRILL LOG

DATE 22/3/90

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PROJECT McDOUALL RANGE

AZIMUTH GN 05°

DRILL RIG VACUUM DRILL. SPE

HOLE Nº: VH3   10270 N   10300 E

PROSPECT ~~HOPEPOL~~ STAR EAST

DECLINATION 60 S

GEOLOGIST VAP

DEPTH FROM	DEPTH TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~ppm~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	R D	E W	Q u a t	C Z S	h		Bulldust - clay + Transported soil		Blade	9511	1.62							
1	2	R D	E W	C Z S		h		Transported soil ; qtz - ferrocrete.											
2	3	R D	E W	C Z S		h	"	" "											
3	4	R D	E W	C Z S		h	"	+ qtz. pisolitic material					9511	1.62	<1	19	19	11	<1
4	5	p u	m w	P s t h		h		Hem. siltst : Siltst - massive, foliation minor leaching/		Blade	9512	0.96							
5	6	p u	m w	P s t h		h	"	kaolinization. Qtz c̄ shearing. Mn/Mn											
6	7	p u	m w	P s t h		h	"	on joint surfaces.											
7	8	p u	m w	P s t h		h	"						9512	0.96	<1	3	28	4	<10
8	9	p u	m w	P s t h		h-k		Hem. siltst : Siltst - massive, foliation. micaceous.		Blade	9513	0.69							
9	10	p u	m w	P s t h		h-k	"	limonite stain. ± Festone. Increase ÷											
10	11	p u	m w	P s t h		h-k	"	leaching/ kaolin.											
11	12	p u	m w	P s t h		h-k	"						9513	0.69	<1	7	13	2	<10
12	13	p u	m w	P s t h		h-k		Hem siltst: Siltst - massive, foliated. Qtz fragments.		Blade	9514	0.18							
13	14	p u	m w	P s t h		h-k	"	Inc leaching / kaolinization. Mn/Mg on											
14	15	p u	m w	P S t h		h-k	"	joint planes											
15	16	p u	m w	P s t h		h-k	"						9514	0.18	<1	<2	<5	6	<1
16	17	p u	m w	P s t h		h-k		Hem siltst : Alternating fgnd + cgnd siltstone.		Blade	9515	0.27							
17	18	p u	m w	P s t h		h-k	"	massive, micaceous, foliated ± qtz											
18	19	p u	m w	P s t h		h-k	"												
19	20	p u	m w	P s t h		h-k	"						9515	0.27	<1	<2	<5	4	<10
20	21																		
21	22																		
22	23																		
23	24																		

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inc k

TIME STARTED 13h31   FINISHED 14h25

ASSAY LAB NT1614   P/O Nº

Newmont Australia Limited

Vacuum DRILL LOG

DATE 22/3/90 PAGE Nº 1/1

PROJECT McDouall Range AZIMUTH G.N. 05° DRILL RIG Vacuum Drill SA

HOLE Nº: VH4 10280 N 10300 E PROSPECT Hopeful Star East DECLINATION 60.5 GEOLOGIST VAP

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~g/t~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	R D	E W	Q u a t		hem		Bulldust clay + Transported soil: ferrocrete + qtz		Blade	9516	2.58							
1	2	R D	E W	C z s		hem		Transported soil: ferrocrete hem, magn.		"									
2	3	R D	E W	C z s	q	hem	"	inc in qtz		"									
3	4	R D	E W	C z s	q	hem	"	"		"			9516	2.58	<1	20	24	12	<10
4	5	p u	m W	l s t h		hem		Hem siltst: clay (soft) + hem (hard) intercalated		Blade	9517	1.05							
5	6	p u	m W	l s t h		hem	"	milky qtz, Mn or Mg staining on joint		"									
6	7	p u	m W	l s t h		hem + k	"	planes Foliation. cgnd → fgnd.		"									
7	8	p u	m W	l s t h		hem	"	± limonite.		"			9517	1.05	<1	28	15	19	<10
8	9	p u	m W	l s t h		hem + k		Hem siltst: Intercelations of clay + hem silt. Qtz		Blade	9518	0.84							
9	10	p u	m W	l s t h		hem	"	Mn/Mg on joint planes. Foliated.		"									
10	11	p u	m W	l s t h		hem	"	cgnd → fgnd. Minor limonitic staining.		"									
11	12	p u	m W	l s t h		hem + k.	"			"			9518	0.84	<1	5	8	5	<10
12	13	p u	m W	l s t h		hem		Hem siltst: Massive hem siltst. Dec in kaolin.		Blade	9519	1.11							
13	14	p u	m W	l s t h		hem	"	Foliation, minor limonitic. Magn-		"									
14	15	p u	m W	l s t h		hem	"	hem fragments (ironst)		"									
15	16	p o	m W	l s t h		hem	"			"			9519	1.11	<1	<2	17	7	<10
16	17	p u	m W	l s t h		hem		Hem siltst: Massive hem siltst. ~~Be~~ Minor Kaolin.		Blade	9520	0.36							
17	18	p u	m W	l s t h		hem	"	Foliation, minor limonite, Minor		"									
18	19	p a	m W	l s t h		hem	"	ironst fragments, Qtz veinlets.		"									
19	20	p u	m W	l s t h		hem	"			"			9520	0.36	<1	13	11	31	<10
20	21																		
21	22																		
22	23																		
23	24																		

TIME STARTED 14h38 FINISHED 15h50

ASSAY LAB NT 1614 P/O Nº

Newmont Australia Limited

Vacuum DRILL LOG

DATE 22/3/90

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PROJECT McDougall Range

AZIMUTH G.N. 05°

DRILL RIG Vacuum Drill. S

HOLE N°: VH5

10290 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60°S

GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ~~g/t~~ ppb	SAMPLE N°	Au ~~g/t~~ ppb	As ppm	Cu ppm	Pb ppm	Zn ppm	B pp
0	1	b d	E w	Q o a f	c 2 s	h	Bulldust: clay	Transported soil: ferrocrete, qtz		Blade	9521	3.00							
1	2	r d	E w	C 2 s		h	Transported soil:	ferrocrete, qtz		"									
2	3	r d	E w	C 2 s		h	"			"									
3	4	rd pu	E w	C 2 s	q	h ~	Transported soil	+ Hem siltst: qtz		"			9521	3.00	<1	15	9	10	<1
4	5	p u	m W	l s t h		h	~~Trans~~ Hem siltstone;	Intercalations of hem siltst-		Blade	9522	0.84							
5	6	p u	m w	l s t h		h		and clay. cgnd → fgnd		"									
6	7	p u	m w	l s t h		h		Hem-massive foliated. Qtz · Ironst		"									
7	8	p u	m w	l s t h		h		on joint planes. Inc in kaolinis.		"			9522	0.74	<1	<2	<5	5	<10
8	9	p u	m w	l s t h		h - k.	Hem siltst:	Intercalated hem siltst + kaolin (clay)		Blade	9523	0.33							
9	10	p u	m w	l s t h		h		Massive. Sheared qtz, Limonitic staining.		"									
10	11	p u	m w	l s t h		h		Micaceous, cgnd → fgnd.		"									
11	12	p u	m w	l s t h		h				"			9523	0.33	<1	7	<5	7	<10
12	13	p u	m w	l s t h		h	Hem siltst:	Massive gnd. hem siltst. Whole unit		Blade	9524	0.69							
13	14	p u	m w	l s t h		h	"	has mod. Kaolin. Micaceous Minor		"									
14	15	p u	m w	l s t h		h	"	limonite + ironst.		"									
15	16	p u	m w	l s t h		h	"			"			9524	0.69	<1	<2	<5	11	<10
16	17	p u	m w	l s t h		h	Hem siltst:	Massive gnd hem. siltst. Mod Kaolin.		Blade	9525	0.90							
17	18	p u	m w	l s t h		h	"	Micaceous. Ironst (hem) veinlets		"									
18	19	p u	m w	l s t h		h	"			"									
19	20	p v	m w	l s t h		h	"			"			9525	0.90	<1	4	<5	17	<10
20	21																		
21	22																		
22	23																		
23	24																		

TIME STARTED 16h06

FINISHED 16h42

ASSAY LAB

P/O N° NT 1614

Newmont Australia Limited

VACUUM DRILL LOG

DATE 23 / 5 /90

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PROJECT McDOUGALL RANGE

AZIMUTH GN 05°

DRILL RIG Vacuum Drill. Sp

HOLE Nº: VH 6 10300 N 10300 E

PROSPECT HOPEFUL STAR EAST

DECLINATION 60° S

GEOLOGIST VAP

DEPTH FROM	DEPTH TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg.	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~ppm~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	As ppm	Cu ppm	Pb ppm	Zn ppm	B ppm
0	1	r d	E W	Q u a t		h		Bulldust · clay , Transported soil · qtz, ferrocrete.		Blade	9526	2.58							
1	2	r d	E W	c z s		h		Transported soil: ferrocrete, buckqtz, ironstone (hem		"									
2	3	r d	E W	c z s		h		" + magn)		"									
3	4	r d	E W	c z s	l s t h	h		"		"			9526	2.58	<1	17	17	11	<1
4	5	p u	m w	l s t h		h		Hem. siltst. Massive, foliated hem siltst.		Blade	9527	0.81							
5	6	p u	M W	l s t h		h		Intercalated clay/leached zones		"									
6	7	p u	M w	l s t h		h		Limonitic staining. Micaceous		"									
7	8	p u	M w	l s t h		h				"			9527	0.81	<1	10	13	12	<10
8	9	p u	m w	l s t h		h		Hem siltst Massive, foliated hem. siltst. Intercalated		Blade	9528	0.69							
9	10	p u	m w	l s t h		h		leached/clay horizons. Limonite		"									
10	11	p u	m w	l s t h		h		micaceous. ± Ironstone		"									
11	12	p u	m w	l s t h		h				"			9528	0.69	<1	17	11	18	<1
12	13	p u	m w	l s t h		h		Hem siltst: Massive, foliated hem siltst. Intercalat.		Blade	9529	0.21							
13	14	p u	m w	l s t h		h		leached/clay units. Micaceous. Limonitic		"									
14	15	p u	m w	l s t h		h		Ironst (hem + magn) staining.		"									
15	16	p u	m w	l s t h		h				"			9529	0.21	<1	6	13	15	<1
16	17	p u	m w	l s t h		h		Hem siltst: Massive foliated siltst; micaceous. Minor		Blade	9530	0.30							
17	18	p u	M w	l s t h		h		Ironstone (mag/hem) staining on jt		"									
18	19	p u	m w	l s t h		h		surfaces		"									
19	20	p u	m w	l s t h		h				"			9530	0.30	<1	8	10	26	<1
20	21							EOH - 20m											
21	22																		
22	23																		
23	24																		

TIME STARTED

FINISHED

ASSAY LAB

P/O Nº NUT 1614

Newmont Australia Limited

Vacuum DRILL LOG

DATE 23/3/90

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PROJECT McDouall Range

AZIMUTH GN 05°

DRILL RIG Vacuum Drills

HOLE N°: VH7

10310 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60°S

GEOLOGIST VAP

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ppb	SAMPLE N°	Au g/t ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	B
0	1	rd	EW	Quct		h		Bulldust: transported soil clay, qtz, ferrocrete		Blade									
1	2	rd	EW	czs		h		Transported soil, qtz, ferrocrete, pisolites,		"	9531	3.06							
2	3	rd	EW	Czs		h		" } limonite. Ironstone (mag/hem)		"									
3	4	rd	EW	czs	Psth	h		" staining.		"			9531	3.06	<1	76	17	4	<1
4	5	pu	Ps	Psth		h ± k		Hem siltst: ~~Hem~~ Massive hem siltst. foliated.		Blade									
5	6	pu	mw	Psth		h ± k		" } Intercalated clay / leached units. Ironst		"	9532	0.75							
6	7	pu	mw	Psth		h ± k		" (magn/hem) staining on jts		"									
7	8	pu	mw	Psth		h ± k		"		"			9532	0.75	<1	20	10	15	<1
8	9	wh	mw	Psth		k		Kaolin. siltst: White - grey leached siltstone.		Blade									
9	10	wh	mw	Psth		k		" } Limonite staining. Ironst. (hem/magn)		"	9533	0.57							
10	11	wh	mw	Psth		k		" on joint planes. Micaceous. Altn		"									
11	12	wh	mw	Psth		k		" cgnd + fgnd siltst.		"			9533	0.57	<1	26	<5	11	<1
12	13	wh	mw	Psrh		k		"		Blade									
13	14	pu	mw	Psth		h		Hem siltst: Massive, foliated siltst. Minor		"	9534	0.45							
14	15	pu	mw	Psth		h		" } ironstone staining on jt planes		"									
15	16	pu	mw	Psth		h		"		"			9534	0.45	<1	34	36	9	<1
16	17	pu	mw	Psrh		h		Hem siltst: Massive, foliated, hem siltstone, Ironst.		Blade									
17	18	pu	mw	Psth		h		" staining. Minor qtz veinlets. Micaceous.		"	9535	0.45							
18	19	pu	mw	Psth		h		"		"									
19	20	pu	mw	Psth		h		"		"			9535	0.45	<1	14	30	4	<1
20	21					h		EOH - 20m.											
21	22					h													
22	23																		
23	24																		

TIME STARTED

FINISHED

ASSAY LAB

P/O NMT 1614

Newmont Australia Limited

VACUUM DRILL LOG

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PROJECT McDOUGALL RANGE

AZIMUTH GN05°

DRILL RIG VACUUM DRILL SE

HOLE Nº: VH8 10320 N 10300 E

PROSPECT HOPEFUL STAR EAST

DECLINATION 60°S

GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~ppm~~ ppb	SAMPLE Nº	Au ~~ppm~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	r d	E W	G u a f	C z s	h		Bulldust, clay ; Transported soil: ferrocrete qtz.		Blade	9536	3.06							
1	2	r d	E W	E z s		h		Transported soil. Qtz, ferrocrete.		"									
2	3	r d	E W	C z s		h		"		"									
3	4	r d	E W	C z s	q	h		Transported soil: Qtz, jasperlike siltst, Ironstone.		"			9536	3.06	<1	20	19	2	<10
4	5	p u	M W	l s t h		h		Hem siltst: Intercalated hem siltst and		Blade	9537	0.72							
5	6	p u	M W	l s t h		h	"	leached siltstone, Ironstone (mag/hem)		"									
6	7	p u	M W	l s t h		h	"	staining, limonite alth. cgnd and		"									
7	8	p u	M W	l s t h		h	"	fgnd siltst.		"			9537	0-72	<1	20	<5	28	<10
8	9	p u	M W	l s t h		h	"			"	9538	0.54	9538	0.54	<1	23	<5	25	<10
9	10							EOH - 9m		"									
10	11																		
11	12																		
12	13																		
13	14																		
14	15																		
15	16																		
16	17																		
17	18																		
18	19																		
19	20																		
20	21																		
21	22																		
22	23																		
23	24																		

TIME STARTED

FINISHED

ASSAY LAB

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Newmont Australia Limited

Vacuum DRILL LOG

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PROJECT McDougall Range

AZIMUTH GN 05°

DRILL RIG Vacuum Drill Sf

HOLE N°: VH9

10330 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60°S

GEOLOGIST VAP

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ~~g/t~~ ppb	SAMPLE N°	Au g/t ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	r d	E w	Q o a r	C z s	h		Bulldust: clay ; Transported soil ; qtz, ferrocrete.		Blade	9539								
1	2	r d	E w	C z s		h		Transported soil: Buck qtz, ferrocrete, limonite		"		3.39							
2	3	r d	E w	C z s		h		" cgnd, Ironst.		"									
3	4	r d	E w	C z s		h		"		"			9539	3.39	<1	110	21	79	<1
4	5	p u	E w	P s t h		h		Hem siltst. Altn. hem siltst and leached siltst		Blade									
5	6	p u	E w	P s t h		h		" limonitic staining, Qtz veining,		"	9540	1.89							
6	7	p u	E w	P s t h		h		" Ironst. on jt planes.		"									
7	8	p u	M W	P s t h		h		"		"			9540	1.89	<1	20	25	23	<1
8	9	p u	M w	P s t h		h		Hem siltst: Altn hem siltst + minor clay (kaolin)		Blade		0.75							
9	10	p u	M W	P s t h		h		" units. Qtz veinlets. foliated. Limonite		"	9541								
10	11	p u	M W	P s t h		h		" Stain. Ironston jt planes.		"			9541	0.75	<1	19	6	20	<1
11	12							" EOH - 11m.											
12	13																		
13	14																		
14	15																		
15	16																		
16	17																		
17	18																		
18	19																		
19	20																		
20	21																		
21	22																		
22	23																		
23	24																		

TIME STARTED

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Newmont Australia Limited

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PROJECT McDOUGALL RANGE
AZIMUTH GN 05°
DRILL RIG Vacuum Drill SP

HOLE N°: VH6 10340 N 10300 E
PROSPECT HOPEFUL STAR EAST
DECLINATION 60° S
GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ~~g/t~~	SAMPLE N°	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	B ppm
0	1	r d	E W	Q u a t	C z s	h		Bulldust; clay Transported soil; qtz, ferrocrete		Blade	9542	3.96							
1	2	r d	E W	C z s		h		Transported soil Massive buck + sheared qtz		"									
2	3	r d	E W	C z s		h	"	ferrocrete. Hem siltst.		"									
3	4	p u	M W	P s t h		h		Hem siltst: Massive hem siltst. c̄ intercalated		"			9542	3·96	<1	29	12	22	<1
4	5	p u	M W	P s t h		h	"	leached/clay (kaolin) units		Blade	9543	0.96							
5	6	p u	M W	P s t h		h	"	limonite staining, siltst - micaceous		"									
6	7	p u	M W	P s t h		h	"	foliated. Qtz veinlets c-grnd → f-grnd		"									
7	8	p u	M W	P s t h		h	"			"			9543	0·96	<1	14	8	5	<10
8	9	p u	M W	P s t h		h		Hem siltst Massive foliated siltst, Micaceous.		Blade	9544	0.57							
9	10	p u	M W	P s t h		h	"	c-grnd → f-grnd. Intercalated		"									
10	11	p u	M W	P s t h		h	"	leached/clay (kaolin) zones.		"									
11	12	p u	M W	P s t h		h	"	Qtz veinlets.		"			9544	0·57	<1	15	6	13	<10
12	13	p u	M W	P s t h		h		Hem siltst Massive foliated siltst, micaceous.		Blade	9545	0.87							
13	14	p u	M W	P s t h		h	"	jasper-like material, ironstone staining		"									
14	15	p u	M W	P s t h		h	"	on jt planes, limonitic. Intercalated		"									
15	16	p u	M W	P s t h		h	"	leached zones		"			9545	0·87	<1	16	<5	18	<10
16	17	p u	M W	P s t h		h		Hem siltst: Massive micaceous hem siltstone.		Blade	9546	0.84							
17	18	p u	M W	P s t h		h	"	Foliated ± qtz veining, ironst. staining		"									
18	19	p u	M W	P s t h		h	"	on jt planes		"									
19	20	p u	M W	P s t h		h	"			"			9546	0·84	<1	54	7	38	<10
20	21							EOH - 20m											
21	22																		
22	23																		
23	24																		

TIME STARTED

FINISHED

ASSAY LAB

P/O NT N° 1614

Newmont Australia Limited

Vacuum DRILL LOG

DATE 23/ 3 /96

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PROJECT McDouall Range

AZIMUTH GN 05°

DRILL RIG Vacuum Drill S

HOLE Nº: VH 11   10350 N   10300 E

PROSPECT Hopeful Star East

DECLINATION 60° S

GEOLOGIST VNP

DEPTH		LITHOLOGICAL DESCRIPTION															SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~g/t~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi pp
0	1	r	d	E	w	Q	u	a	t	C	z	s		h		Bulldust: clay. Transported soil: qtz - ferrocrete		Blade	9547	6.00							
1	2	r	d	E	w	C	z	s						h		Transported soil Buck qtz, ferrocrete, ironstone		"									
2	3	r	d	E	W	C	z	s						h		" ((magn/hem) ~~sst~~ stain, pisolites.		"									
3	4	p	v	M	w	l	s	t	h					h		Hem siltst: Massive foliated hem siltst.		"			9547	6·00	<1	20	17	14	<1
4	5	p	v	M	w	l	s	t	h					h		" Micaceous, buck qtz veinlets.		Blade	9548	0.96							
5	6	p	v	M	w	l	s	t	h					h		" Limonitic staining, Ironst. staining		"									
6	7	p	v	M	w	l	s	t	h					h		" Minor intercalations of clay (kaolin)		"									
7	8	p	v	M	w	l	s	t	h					h		" units.		"			9548	0·96	<1	14	11	10	<1
8	9	p	v	m	w	l	s	t	h					h		Hem siltst: Massive, micaceous, hem siltst.		Blade	9549	1.02							
9	10	p	v	m	w	l	s	t	h					h		" ± qtz veinlets. Extensive slaty		"									
10	11	p	v	m	w	l	s	t	h					h		" cleavage		"									
11	12	p	v	m	w	l	s	t	h					h		"		"			9549	1·02	<1	19	10	12	<1
12	13	p	v	m	w	l	s	t	h					h		Hem siltst: Massive micaceous hem siltst.		Blade	9550	0.27							
13	14	p	v	m	w	l	s	t	h					h		" Slaty cleavage. ~~qtz veinlets~~,		"									
14	15	p	v	m	w	l	s	t	h					h		"		"									
15	16	p	v	m	w	l	s	t	h					h		"		"			9550	0·27	<1	11	8	18	<1
16	17															EOH - 16m.											
17	18																										
18	19																										
19	20																										
20	21																										
21	22																										
22	23																										
23	24																										

TIME STARTED

FINISHED

ASSAY LAB

P/O Nº NT 1614

Newmont Australia Limited

Vacuum DRILL LOG

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HOLE N°: VH 12   10360 N   10300 E

PROJECT McDouall Range

PROSPECT Hopeful Star East

AZIMUTH GN 05°

DECLINATION 60° /

DRILL RIG Vacuum DrilS

GEOLOGIST VAP

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ~~g/t~~ ppb	SAMPLE N°	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	B, pp
0	1	r d	E W	~~R~~ ~~o~~ ~~a~~ b	C z ·	h		Bulldust - clay, Transported soil:		Blade	9551	5.19							
1	2	r d	E W	C z s		h		Transported soil: Hem siltst, buck qtz, ferrocrete		"									
2	3	r d	E W	C z s	q	h		" } ± Ironst fragments		"									
3	4	p u	m w	l s t h		h		Hem siltst: Intercalation of hem siltst and		"			9551	5.19	<1	20	18	16	<1
4	5	p u	m w	l s t h		h		" } kaolinized siltst, Qtz, foliation		Black	9552	1.47							
5	6	p u	m w	l s t h		h		" micaceous, qtz veinlets. Ironst		"									
6	7	p u	m w	l s t h		h		" fragments.		"									
7	8	p u	m w	l s t h		h		"		"			9552	1.47	<1	14	10	10	<1
8	9	p u	m w	l s t h		h		Hem siltst: Intercalated hem siltst and		Black	9553	0.72							
9	10	p u	m w	l s t h		h		" kaolinized siltst. Foliated, micaceous		"									
10	11	p u	m w	l s t h		h+k		" Ironst staining.		"									
11	12	p u	m w	l s t h		h		"					9553	0.72	<1	17	5	9	<1
12	13							EOH - 12m											
13	14																		
14	15																		
15	16																		
16	17																		
17	18																		
18	19																		
19	20																		
20	21																		
21	22																		
22	23																		
23	24																		

TIME STARTED   FINISHED   ASSAY LAB   P/O N° NT 1614

Newmont Australia Limited

Vacuum DRILL LOG

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PROJECT McDouall Range

AZIMUTH GN 05

DRILL RIG Vacuum Drill Spec

HOLE Nº: VH13 10370 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60° S

GEOLOGIST VA

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~ppm~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	r d		Q u a t	C z s	h		Bulldust - clay ; Transported soil: qtz, ferricrete.		Blade	9554	4.62							
1	2	r d		C z s		h		Transport soil - Pisolitic material, qtz, Ironst (hem)		"									
2	3	r d		C z s		h	"	{ fragments, Hem(rd) siltst.		"									
3	4	p v		c z s	P s t h	h -		Transported soil ; Hem. siltst.		"			9554	4.62	<1	17	16	14	<10
4	5	p v		P s t h		h		Hem siltst kaolinized hem siltst. Two types of		Blade	9555	3.09							
5	6	p v				h	"	~~hem~~ siltst. purple + red (silicified?)		"									
6	7	p v				h	"	Alternating leached clays, apart from		"									
7	8	p v				h	"	slight k throughout.		"			9555	3.09	<1	14	10	14	<10
8	9	p v		P s t h		h		Hem siltst: Kaolinized hem siltst, limonitic stain,		Blade	9556	0.63							
9	10	p v				h ± k	"	hem - massive, foliation, micaceous.		"									
10	11	p v				h	"	Intercalated leaching or kaolinization		"									
11	12	p v				h	"	on jts. Ironst. staining.		"			9556	0.63	<1	14	7	14	<10
12	13	p v		P s t h		h		Hem siltst: Hem siltst. Massive, foliated,		Blade	9557	0.21							
13	14	p v				h	"	micaceous. Ironst. (Hem/Magn) staining on		"									
14	15	p v				h	"	jt planes. Qtz. Minor limonite stain.		"									
15	16	p v				h	"	Slight kaolin.		"			9557	0.21	<1	44	43	80	<10
16	17	p v		P s t h		h		Hem siltst: Hem siltst - massive foliated, cleavage.		Blade	9558	0.36							
17	18	p v				h	"	Micaceous - c-grd. limonitic. Ironst (hem)		"									
18	19	p v				h	"	fragments. Slight kaolin.		"									
19	20	p v				h	"			"			9558	0.36	<1	13	16	38	<10
20	21							EOH - 20m											
21	22																		
22	23																		
23	24																		

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ASSAY LAB

P/O Nº NT 1614

Newmont Australia Limited

Vacuum DRILL LOG

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PROJECT McDouall Range
AZIMUTH GN 05°
DRILL RIG Vacuum Drill. Spe

HOLE Nº: VH14 10380 N 10300 E
PROSPECT Hopeful Star East
DECLINATION 60°S
GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~g/t~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	B: pp
0	1	r d	E w	Q u a t	C z s	h		Bulldust - clay Transported soil: ferrocrete, qtz		Blade	9559	4·20		~~4~~.					
1	2	r d	E w	C z s		h		Transported soil: pisolites, ferrocrete, buck qtz,		"									
2	3	r d	E w	C z s		h		" { c-gnd, limonite		"									
3	4	r d	E w	C z s	P s t h	h		Transported soil : Hem siltst : Massive, foliated		"			9559	4·20	<1	16	12	14	<1
4	5	p u	m w	P s t h		h		Hem siltst : Hem (red) siltst c̄ alternating		Blade	9560	2·76							
5	6					h		" leached units, qtz, Ironst staining		"									
6	7					h		" on jt planes. , c-gnd.		"									
7	8					h		Same as above but have increased kaolin.		"			9560	2·76	<1	18	17	15	<1
8	9	p u	m w	P s t h		h		Hem siltst : Kaolinized hem siltst Leach/kaolin		Blade	9561	1·71							
9	10					h		" } units intercalated. Hem (purple) massive		"									
10	11					h		" foliated. Sheared qtz. Ironst stain. on		"									
11	12					h		" jt surfaces.		"			9561	1·71	<1	13	11	31	<10
12	13	p u	m w	P s t h		h		Hem siltst : Kaolin hem siltst, slaty cleavage.		Blade	9562	0·15							
13	14					h		" } micaceous, massive, fgnd → cgnd.		"									
14	15					h		" Ironst staining on jts		"									
15	16					h		"		"			9562	0·15	<1	14	8	22	<10
16	17	p u	m w	P s t h		h		Hem siltst Massive, micaceous siltst. Slaty		Blade	9563	0·21							
17	18					h		" } cleavage. Leaching on jts Minor qtz veinlets		"									
18	19					h		" Minor Ironst. staining		"									
19	20					h		"		"			9563	0·21	<1	20	9	23	<1
20	21					h		EoH - 20 m											
21	22																		
22	23																		
23	24																		

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Vacuum DRILL LOG

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PROJECT McDouall Range

AZIMUTH GN 05°

DRILL RIG Vacuum Drill Sp

HOLE Nº : VH 15 10390 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60° S

GEOLOGIST VAP

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~g/t~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	B pp
0	1	r d	E U	G u q t	c z s	h el		Transport soil: Bulldust: clay.											
1	2	r d	E W	C z s		h		Transported soil: hem (red)siltstone. Ironst (hem)			9564	4.65							
2	3	r d	E W	C z s	q	h		" fragments: Sheared qtz.											
3	4	r d	E W	C z s	q	h		Transported soil: Hem siltst:					9564	4.65	<1	3	14	14	<1
4	5	p u	M w	P s t h		h ±k		Hem siltst: c-gnd hem siltst, micaceous,			9565	1.38							
5	6	p u	m w			h ±k		slaty cleavage, qtz veinlets(?), ±											
6	7	p u	m w					limonite staining, minor leached/kaolin											
7	8	p u						intercalation.					9565	1.38	<1	9	11	8	<1
8	9	p u		P s t h		h ±k		Hem siltst: c-gnd → f-gnd hem siltst,			9566	0.45							
9	10	p u						" slaty cleavage, micaceous. Intercalations of											
10	11	p u						" leached/kaolin units. Minor limonitic											
11	12	p u						" staining.					9566	0.45	<1	7	13	10	<1
12	13			P s t h		h∓k		Hem siltst c-gnd hem siltst, inc in leaching			9567	0.18							
13	14							" Minor Festone fragments, qtz veinlets											
14	15					h+k		" Micaceous. Qtz-chl/Fest veinlets.											
15	16					h+k		"					9567	0.18	<1	8	9	11	<1
16	17			P s t h		h ±k		Hem siltst: c-gnd → fgnd hem siltst			9568	<0.05							
17	18							" slaty cleavage, micaceous. Minor qtz											
18	19							" veinlets. Massive unit.											
19	20							"					9568	<.05	<1	20	11	12	<1
20	21							EOH - 20m											
21	22																		
22	23																		
23	24																		

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PROJECT McDouall Range

AZIMUTH GN 05

DRILL RIG Vacuum Drill. Spe

HOLE Nº: V416 10400 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60° 5

GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ppb	SAMPLE Nº	Au ~~g/t~~ ppb	As ppm	Cu ppm	Pb ppm	Zn ppm	Bi pp
0	1	r d	E W	Q u a t	C z s	h		Bulldust: clay Transported soil: ferrocrete/Ironst		Blade	9569	4.26							
1	2	r d	E W	C z s		h		Transported soil: Hem siltst, qtz, ferrocrete, Ironst.		"									
2	3	r d	E W	C z s	q	h		Transported soil: ferrocrete Hem siltst: Hem siltst.		"									
3	4	p o	m w	l s t h		h ± k		Hem siltst. f-gnd Hem siltst, slaty cleavage		"			9569	4.26	<1	10	16	21	<1
4	5	p o	m m	l s t h		h ± k		Hem Siltst ± qtz fragments. Ironst fragments		Blade	9570	1.38							
5	6					h ± k		" + staining on jts. Intercalated		"									
6	7					h ± k		" & kaolin/leading. Micaceous.		"									
7	8					h ± k		"		"			9570	1.38	<1	7	14	19	<1
8	9	p o	m w	l s t h		h ± k		Hem siltst: f-gnd Hem siltst, Intercalations		Blade	9571	0.18							
9	10					h + k		" leaded/Kaolin units, slaty cleavage,		"									
10	11					h ± k		" micaceous, Ironstone fragments + staining		"									
11	12					h ± k		" on jts		"			9571	0.18	<1	5	12	16	<1
12	13	p o	m w	l s t h		h ± k		Hem siltst: Massive f-gnd siltst. Slaty cleavage		Blade	9572	0.15							
13	14					h ± k		" Micaceous, minor limonitic staining.		"									
14	15					h ± k		"		"									
15	16					h ± k		"		"			9572	0.15	<1	8	12	10	<1
16	17	p o	m w	l s t h		h ± k		Hem siltst: Massive f-gnd siltst., Hem siltst; Qtz		Blade	9573	0.12							
17	18					h ± k		massive, slaty cleavage. Intercalations		"									
18	19					h ± k		of (red) Hem siltst. Fest staining on jts.		"									
19	20					h + k				"			9573	0.12	<1	6	12	8	<1
20	21							EOH-20m											
21	22																		
22	23																		
23	24																		

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ASSAY LAB

P/O Nº NT 1614

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Vacuum **DRILL LOG**

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PROJECT Mc Dowall Range

AZIMUTH GN 05°

DRILL RIG Vacuum Drill Sp

HOLE Nº: VH17 10410 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60° S

GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION															SAMPLES										
FROM	TO	COLOUR		DEGREE OF WEATHERING		PRIMARY LITHOLOGY				SECONDARY LITHOLOGY				ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~g/t~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	r	d	E	w	Q	u	a	t					h		Bulldozer: clay Transported soil: ferrocrete		Blade	9574	4.05							
1	2	r	d	E	w	C	z	s						h		Transported soil. Pisolites, ferrocrete, qtz		"									
2	3	r	d	E	w	C	z	s		q				h		" }		"									
3	4	r	d	E	w	C	z	s		ℓ	s	t	h	h±k		Transported soil. ferricrete Hem siltst.		"			9574	4.05	<1	21	22	33	<1
4	5	p	u			ℓ	s	t	h					h±k		Hem siltst: f-grnd → c-grnd siltst. Intercalation		Blade	9575	2.13							
5	6															" of leached hematite silts. Minor qtz +		"									
6	7															" } minor limonitic staining, slaty		"									
7	8															" cleavage.		"			9575	2.13	<1	6	20	8	<1
8	9	p	u			ℓ	s	t	h					h±k		Hem siltst c grnd → f grnd siltst, ~~mass~~ massive		Blade	9576	0.69							
9	10															} slaty cleavage, micaceous intercalations		"									
10	11															of kaolin/leached material. Fest skin		"									
11	12															EOH - 11m		"			9576	0.69	<1	5	11	9	<1
12	13																										
13	14																										
14	15																										
15	16																										
16	17																										
17	18																										
18	19																										
19	20																										
20	21																										
21	22																										
22	23																										
23	24																										

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PROJECT McDouall Range

AZIMUTH GN 05°

DRILL RIG Vacuum Drill Spec

HOLE N°: VA18   10420 N   10300 E

PROSPECT Hopeful Star East

DECLINATION 60° S

GEOLOGIST VAP.

DEPTH FROM	DEPTH TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ppb	SAMPLE N°	Au ~~ppm~~ ppb	As ppm	Cu ppm	Pb ppm	Zn ppm	Bi ppm
0	1	rd	Ew	Quar	Czs	h		Bulldust - clay Transported soil ferrocrete.		Blade	9577	4.35							
1	2	rd	Ew	Czs		h		Transported soil: ? ferrocrete, pisolites, buck		"									
2	3	rd	Ew	Czs	q	h		Transported soil: S qtz Ironstone staining.		"									
3	4	rd	mw	Czs	Psth	h±k		Transported soil: ferrocrete. Hem siltst: siltst		"			9577	4·35	<1	14	18	8	<1
4	5	br	mw	Pstc		k-h		Calcrete. c-gnd calcrete, ± jasper. qtz, Fest.		Blade	9578	2.97							
5	6	pu		Pstb		h±k		Hem siltst: Massive, slaty cleavage, c-gnd		"									
6	7	pu		Psth				" } intercalating leached / kaolin units		"									
7	8	pu						" { Fest fragments + staining. Calcrete.		"			9578	2·97	<1	3	17	10	<10
8	9	pu	mw	Psth		h±k		Hem siltst: c-gnd - f-gnd, slaty cleavage,		Blade	9579	0.69							
9	10							" } micaceous, massive, intercalation		"									
10	11							" { of kaolin / leached units Minor limonite		"									
11	12							" staining.		"			9579	0·69	<1	8	12	26	<10
12	13	pu	mw	Psth		h±k.		Hem siltst: Massive, Slaty cleavage, cgnd.		Blade	9580	0.42							
13	14							" Intercalations of leached / kaolin		"			9580	0·42	<1	7	11	22	<10
14	15							EOH - 14m											
15	16																		
16	17																		
17	18																		
18	19																		
19	20																		
20	21																		
21	22																		
22	23																		
23	24																		

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PROJECT McDouall Range

AZIMUTH GN 05°

DRILL RIG Vacuum Drill S

HOLE Nº: VH19

10430 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60° S

GEOLOGIST VAP.

DEPTH FROM	DEPTH TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au ~~g/t~~ ppb	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	ppm
0	1	r d	E W	Q u a r	C z s	h		Transported soil: Ferrocrete. Bulldust: clay.		Blade	9581	3.54							
1	2	r d	E W	C z s		h		Transported soil: ferrocrete, c-gnd, qtz veinlets,		"									
2	3	r d	E W	C z s		h		" } Ironst fragments, pisolites.		"									
3	4	b r	m w	R s t r	q	cal-		Calcrete siltst. Calcareous hem siltst.		"			9581	3.54	<1	20	20	14	<1
4	5	b r	m w	R s t r		cal		" } ± intercalation of hem siltst, qtz, ironst		Blade	9582	2.49							
5	6	b r	m w	R s t r		cal		" } fragments + staining, Slightly kaolinized		"									
6	7		m w	R s t r	P s t h	cal-h ± k		Cal. siltst: c-gnd. Hem siltst:		"									
7	8		m w	R s t h		h ± k		Hem siltst		"			9582	2.49	<1	9	10	14	<1
8	9	p u	m w	R s t r	R s t h	cal-h ± k		cal. siltst, same as above, intercalated with hem siltst		Blade	9583	0.24							
9	10			R s t h		h ± k		Hem. siltst. c-gnd → f-gnd siltst. Intercalation of		"									
10	11							" } leached/kaolin. siltst, limonitic stain,		"									
11	12							" } slaty cleavage, massive.		"			9583	0.24	<1	7	10	25	<1
12	13	p u	m w	R s t h		h ± k		Hem siltst f-gnd, ± silicified siltst, minor		Blade	9584	0.51							
13	14							" } limonitic staining. Intercalation of		"									
14	15							" } leached/kaolinized units		"									
15	16							"		"			9584	0.51	<1	5	17	27	<1
16	17	p v	m w	R s t h		h ± k		Hem siltst c-gnd → f-gnd. massive, slaty		Blade	9585	0.09							
17	18							" } cleavage, micaceous, ironst. limonite stain.		"									
18	19							" } ± intercalation of leached siltst.		"									
19	20							"		"			9585	0.09	<1	3	12	12	<1
20	21							EOH - 20m											
21	22																		
22	23																		
23	24																		

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ASSAY LAB

P/O Nº NT1614

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Vacoom DRILL LOG

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PROJECT McDonall Range
AZIMUTH GN05°
DRILL RIG Vacoom Drill Spe
HOLE N°: VH20
10440 N
10300 E
PROSPECT Hopeful Star East
DECLINATION 60°S
GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au ~~g/t~~ ppb	SAMPLE N°	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	B
0	1	rd	Ew	Quaf	Czs	h		Bulldust - clay Transported soil - ferrocrete		Blade	9586	4.29							
1	2	rd	Ew	Czs		h		Transported soil - pisolite, ferrocrete, qtz,		"									
2	3	rd	Ew	Czs	q	h		" } (		"									
3	4	pu	mw	Psth	Rstr			Hem siltst - Same as below. ~~[illegible]~~ Col. siltst. c-grnd		"			9586	4.29	<1	14	16	17	<1
4	5	pu	mw	Psth		h±k		Hem siltst: c-grnd → f-grnd, massive ± slaty		Blade	9567	0.54							
5	6							" } cleavage, micaceous, limonitic		"									
6	7							" staining. Intercalated leached/ kaolin		"									
7	8							" siltst unit.		"			9587	0.54	<1	3	27	10	<10
8	9	pu	mw	PsFh		h±k		Hem siltst (possibly bismuth) massive, slaty		Blade	9588	0.09							
9	10							" } cleavage. fine grained, +/- ironst fragments		"									
10	11							" ± staining. limonitic staining.		"									
11	12					h+k				"			9588	0.09	<1	<2	22	17	<1
12	13	pu	mw	Psth		h±k		Hem siltst: c-grnd, ~~[illegible]~~ slaty cleavage, micaceous		Blade	9589	0.09							
13	14							" } ± limonitic staining.		"									
14	15							"		"									
15	16							"		"			9589	0.09	<1	10	18	19	<1
16	17	Pu	mw	Psth		h±k		Hem siltst: c-grnd, slaty cleavage, qtz veinlets.		Blade	4590	<0.05							
17	18							" } micaceous		"									
18	19							"		"									
19	20							"		"			9590	<0.05	<1	7	12	21	<1
20	21							EOH - 20m.											
21	22																		
22	23																		
23	24																		

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Vacuum DRILL LOG

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PROJECT McDonald Range

AZIMUTH GN 05°

DRILL RIG Vacuum Drill.S

HOLE N°: VH21 10450 N 10300 E

PROSPECT Hopeful Star East

DECLINATION 60° S

GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES										
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE N°	Au g/t	SAMPLE N°	Au ~~g/t~~ ppb	As ppm	Cu ppm	Pb ppm	Zn ppm	
0	1	r d	E w	Q u a f	C z s	h		Bulldust clay Transported soil-ferrocrete		Blade	9591	5.07							
1	2	r d	E w	C z S		h		Transported soil. ferrocrete		"									
2	3	b r	m w	P s t r	q	h - r		Cal. siltst. c-gnd. Transported soil: ferrocrete		"									
3	4	b r	m w	P s t r	q	h - r		" { qtz, ironst fragments + staining.		"			9591	5.07	<1	17	16	21	<1
4	5	b r	m w	P s t h	P s t r	h-r		Hem siltst f-gnd Cal. siltst: c-gnd		Blade	9592	1.11							
5	6	p u		P s t h		h+k		Hem siltst: f-gnd, silicified slightly.		"									
6	7	p u				h+k		" } slaty cleavage. Intercalated kaolin/leached		"									
7	8					h+k		" { unit. ± limonitic staining.		"			9592	1.11	<1	<2	14	8	<1
8	9	p u	m w	P s r h		h+k		Hem siltst. - f-gnd slaty cleavage		Blade	9593	0.27							
9	10							" } leaching on jt contacts. Massive.		"									
10	11							"		"									
11	12							"		"			9593	0.27	<1	<2	6	8	<1
12	13	p u	m w	P s r h		h+k		Hem siltst f → c gnd, slaty cleavage,		Blade	9594	0.15							
13	14							" } micaceous, massive. ± leaching on jts		"									
14	15							"		"									
15	16							"		"			9594	0.15	<1	5[illegible]	14	12	<1
16	17	p u	m w	P s t h		h+k		Hem siltst f → c gnd, slaty cleavage.		Blade	9595	0.27							
17	18							" } micaceous, massive, ± leaching on jts.		"									
18	19							"		"									
19	20							"		"			9595	0.27	<1	10	15	16	<1
20	21							EOH - 20m											
21	22																		
22	23																		
23	24																		

TIME STARTED

FINISHED

ASSAY LAB

P/O N° NT1614

adjacent.

Newmont Australia Limited

Vacoom DRILL LOG

DATE 22/ 3 /90

PAGE Nº 1 / 1

PROJECT McDonall Range

AZIMUTH GN 05°

DRILL RIG Vacoom Drill Sp

HOLE Nº : VK 22

10460 N

10300 E

PROSPECT Hopeful Star East

DECLINATION 60° S

GEOLOGIST VAP.

DEPTH		LITHOLOGICAL DESCRIPTION							SAMPLES											
FROM	TO	COLOUR	DEGREE OF WEATHERING	PRIMARY LITHOLOGY	SECONDARY LITHOLOGY	ALTERATION	MINERALISATION	COMMENTS	SAMPLE WEIGHT Kg	BIT TYPE	COMPOSITE SAMPLE Nº	Au g/t	SAMPLE Nº	Au ~~g/t~~ ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	B ppm
0	1	r d	E w	Q u a f	C z s	h		Bulldozer: clay, Transported soil		Blade	9596	3.24							
1	2	r d	E w	C z s		h		Transported soil pisolites, ferrocrete, qtz, limonite.		"									
2	3	r d	m w	C z s	q P s t	h-r		Transported soil sa. above Cal. siltst. c-gnd.		"									
3	4	p v		P s t r		h±r		Cal. siltst. Slight cal. Hem. siltst. qtz (sheared) Fest.		"			9596	3.24	<1	19	15	23	<1
4	5	p v	m w	P s t h		h±k		Hem siltst f-gnd hem siltst, slightly siliceous.		Blade	9597	1.59							
5	6							" Intercalated banded/Kaolin layers,		"									
6	7							" limonite, Fest, Slaty cleavage		"									
7	8							"		"			9597	1-59	<1	5	12	11	<1
8	9	p v	m w	P s t h		h±k±r		Hem siltst f-gnd, siliceous. siltst. equal vol.		Blade	9598	1.08							
9	10							" of banded/Kaolin unit. Qtz-sheared.		"									
10	11					h+k		" minor Festone fragments and staining		"									
11	12					h+k		" limonite. Slaty cleavage, micaceous.		"			9598	1·08	1	3	9	9	<1
12	13	p v	m w	P s t h		h±k		Hem siltst f-gnd, slaty cleavage,		Blade	9599	0.09							
13	14							" micaceous, ± qtz fragments.		"									
14	15							"		"									
15	16							"		"			9599	0-09	<1	<2	10	9	<1
16	17	p v	m w	P s t h		h±k		Hem siltst f-gnd → c-gnd, slaty cleavage,		Blade	9600	0.06							
17	18							" slightly silicified.. micaceous.		"									
18	19							" minor qtz veinlets		"									
19	20							"		"			9600	0·06	<1	<2	12	10	<1
20	21							EOH - 20m											
21	22																		
22	23																		
23	24																		

TIME STARTED

FINISHED

ASSAY LAB

P/O Nº NT1614

APPENDIX 2

DOWNHOLE MAGNETIC SURVEY DATA: GPP-1, CZRC-1, CZRC-2 AND ASARCO? HOLE

NT27
Gateway.

SURTRON
TECHNOLOGIES

The True Direction in Downhole Surveying.

DOWNHOLE MAGNETOMETER SURVEY

NEWMONT AUSTRALIA LIMITED

GDP 1

JUNE 1990

REF:N006/04/MG/90

SURTRON TECHNOLOGIES PTY LTD

PERTH
3/1 High Street, Fremantle. 6160.
Telephone (09) 430 5116
Fax (09) 430 5367

KALGOORLIE
270 Egan Street, Kalgoorlie. 6430.
Telephone (090) 217 562
Fax (090) 217 799

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA	DATE: 29-06-90
HOLE NO: GPP 1	ENGINEER: HUETT
LEASE: GATE WAY	JOB NO: N006/04/MG/90
LOCATION: TENNANT CREEK	SERVICE: MAGPROBE
STATE: NORTHERN TERRITORY	FILE NO: GPP1A.NMT

EASTING 11164 NORTHING 8990 RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
458	3	-43230	-6135	-26314	-346.2	-22.7	937.5	31.30
461	4	-24311	-36266	-26515	-208.8	-268.1	939.8	31.37
464	5	-43743	1400	-26369	-340.6	37.0	939.4	31.43
467	6	-41409	14444	-26235	-318.4	135.2	938.3	31.37
470	7	-35059	26494	-26054	-264.5	228.2	937.1	31.37
473	8	-43330	7501	-26049	-338.7	80.9	937.1	31.30
476	9	-43961	2523	-26013	-346.1	42.0	937.1	31.30
479	10	-43997	2112	-25994	-347.0	38.3	936.7	31.30
482	11	-43677	5894	-25928	-343.3	68.1	936.7	31.30
485	12	-43137	9173	-25861	-338.9	94.5	936.2	31.49
488	13	-43603	6661	-25843	-344.4	75.4	935.4	31.37
491	14	-43813	5547	-25787	-347.0	67.1	935.0	31.12
494	15	-43960	-4281	-25827	-352.8	-11.0	935.7	31.24
497	16	-44188	267	-25723	-353.1	25.3	935.3	31.06
500	17	-43685	6807	-25637	-346.8	77.9	934.2	31.30
503	18	-42705	11712	-25570	-338.7	117.4	934.0	31.06
506	19	-44242	2213	-25553	-355.5	43.5	933.6	31.06
509	20	-43053	-10382	-25575	-351.0	-61.0	933.8	31.18
512	21	-43345	9246	-25514	-346.0	97.6	933.0	31.24
515	22	-43354	9419	-25449	-347.1	99.7	932.8	31.24
536	23	-43125	10406	-25374	-345.6	107.0	931.9	31.12
539	24	-41700	16002	-25200	-344.3	116.0	930.9	30.88
542	26	-44442	168	-25291	-363.2	28.1	930.9	31.06
545	26	-43253	-10272	-25294	-358.0	-61.0	931.6	30.82
548	27	-42356	13767	-25148	-341.0	136.4	930.7	31.00
551	28	-42483	13566	-25017	-344.3	134.8	929.3	31.00
554	29	-43297	10807	-24980	-352.8	114.1	928.7	30.88
557	30	-44541	-2692	-24964	-370.0	3.1	928.5	30.82
560	31	-43050	11831	-24914	-351.5	123.3	927.8	30.82
563	32	-42217	14635	-24848	-344.5	142.9	927.6	30.82
566	33	-43159	11675	-24774	-355.4	118.2	927.2	30.82
569	34	-42857	12790	-24698	-353.3	127.6	927.0	30.82
572	35	-44440	5126	-24719	-370.5	65.0	926.4	30.82
575	36	-44695	3198	-24588	-374.4	49.5	925.8	30.88
578	37	-44430	5948	-24615	-370.7	74.6	925.8	30.94
581	38	-44247	-7241	-24581	-376.3	-36.8	925.8	30.82
584	39	-44274	7309	-24493	-370.3	86.3	924.7	30.88
587	40	-44017	8871	-24418	-368.4	99.4	924.4	30.57
590	41	-44411	6751	-24362	-373.6	81.7	923.5	30.76

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: GPP 1
LEASE: GATE WAY
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: GPP1A.NMT

EASTING 11164 NORTHING 8990 RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
593	42	-43358	12122	-24249	-364.0	125.5	923.3	30.69
596	43	-42424	15119	-24201	-356.6	151.4	921.9	30.63
599	44	-43815	-10310	-24216	-379.5	-65.4	922.3	30.76
602	45	-44867	4276	-24157	-381.9	61.0	921.9	30.69
605	46	-44821	4998	-24063	-383.5	67.4	921.1	30.57
608	47	-44830	5317	-24016	-383.5	70.6	920.2	30.57
611	48	-45168	1061	-23951	-389.8	34.4	920.2	30.69
614	49	-45195	147	-23951	-391.1	29.2	919.6	30.76
617	50	-44290	-9077	-23953	-388.3	-48.3	920.0	30.76
620	51	-44801	6020	-23837	-384.6	82.3	919.0	30.76
623	52	-44289	9309	-23762	-379.8	109.0	918.6	30.76
626	53	-44892	5956	-23734	-387.9	81.2	918.0	30.76
629	54	-45213	1910	-23782	-392.4	43.8	918.2	30.76
632	55	-45277	1234	-23745	-394.0	38.0	918.0	30.76
635	56	-43301	-13077	-23794	-383.4	-89.6	918.6	30.76
638	57	-45194	-3223	-23708	-396.3	-1.5	917.8	30.76
641	58	-45340	1873	-23604	-396.0	45.1	916.9	30.76
644	59	-45285	2878	-23576	-395.1	56.1	916.1	30.76
647	60	-45120	-4739	-23568	-399.2	-10.9	916.7	30.76
650	61	-45376	1453	-23529	-398.6	43.2	915.7	30.69
653	62	-44855	-6776	-23577	-397.4	-32.4	916.7	30.69
656	63	-45340	-2492	-23530	-400.3	4.7	916.1	30.63
659	64	-44653	8441	-23415	-389.9	101.0	915.3	30.69
662	65	-45065	6093	-23378	-395.1	81.2	914.5	30.63
665	66	-45476	1891	-23313	-402.1	44.0	914.5	30.69
668	67	-45311	4613	-23210	-400.6	69.5	913.6	30.69
671	68	-45557	2074	-23116	-405.4	49.4	912.0	30.69
674	69	-44551	9911	-23040	-393.0	119.6	911.8	30.76
677	70	-44249	11117	-23030	-390.4	128.6	911.8	30.76
680	71	-45612	1882	-23051	-407.4	45.0	911.1	30.76
683	72	-45264	6239	-22956	-403.7	83.7	910.7	30.76
686	73	-43635	13692	-22823	-387.8	146.3	909.9	30.76
689	74	-31621	33171	-22556	-275.7	316.9	907.9	30.76
692	75	-44585	10915	-22524	-402.2	120.6	907.0	30.76
695	76	-44292	-11836	-22603	-408.9	-84.7	907.9	30.76
698	77	-42682	-16749	-22642	-397.2	-126.4	908.1	30.76
701	78	-45847	2777	-22413	-418.4	57.1	906.2	30.76
704	79	-44620	11290	-22243	-404.9	137.3	903.9	30.76
707	80	-42002	18999	-22072	-378.0	206.1	903.1	30.76

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: GPP 1
LEASE: GATE WAY
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: GPP1A.NMT

EASTING 11164
NORTHING 8990
RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
710	81	-41463	20087	-22147	-373.2	211.9	903.1	30.76
713	82	-45946	3535	-22104	-424.1	57.5	902.9	30.76
716	83	-43960	14030	-21961	-402.5	154.0	902.1	30.76
719	84	-45963	4557	-21879	-428.3	66.3	901.7	30.76
722	85	-44901	11180	-21736	-416.8	128.9	900.2	30.76
725	86	-45843	6366	-21644	-429.4	84.0	899.4	30.76
728	87	-46346	-430	-21505	-439.0	21.8	897.7	30.69
731	88	-45238	10677	-21287	-426.6	129.1	894.6	30.63
734	89	-45063	11883	-21080	-426.2	144.0	893.2	30.57
737	90	-36215	29396	-20879	-334.3	306.8	891.4	30.63
740	91	-31740	34229	-20784	-291.8	350.1	890.8	30.76
743	92	-42115	20150	-20769	-400.2	217.9	890.3	30.57
746	93	-44457	14522	-20630	-427.4	162.7	888.8	30.82
749	94	-38564	26453	-20533	-368.5	275.2	888.1	30.63
752	95	-40723	23155	-20421	-392.8	243.6	886.6	30.88
755	96	-46001	9260	-20237	-451.2	111.9	885.8	30.82
758	97	-45807	10776	-19909	-452.4	132.4	882.0	30.94
761	98	-41149	23118	-19643	-401.6	257.8	879.2	30.82
764	99	-37169	29084	-19557	-361.1	314.0	878.2	30.82
767	100	-32851	33845	-19612	-320.1	355.0	879.0	30.82
770	101	-29849	36668	-19405	-291.4	383.7	877.2	30.82
773	102	-46225	10045	-19290	-467.9	119.8	875.6	30.82
776	103	-30680	36120	-19058	-300.0	385.3	872.4	30.82
779	104	-44475	16722	-18848	-450.5	197.3	870.7	31.00
782	105	-42443	21518	-18622	-430.6	248.1	868.4	31.00
785	106	-27566	38870	-18420	-270.0	421.9	866.5	30.82
788	107	-38773	27785	-18301	-394.5	311.6	864.5	31.00
791	108	-43484	19764	-18182	-448.8	228.4	864.1	30.88
794	109	-34472	33131	-18065	-351.8	364.7	862.5	31.12
797	110	-37856	29256	-17945	-391.9	325.0	860.8	31.18
800	111	-47261	7696	-17875	-498.9	100.1	861.0	31.06
803	112	-45568	15031	-17630	-479.9	182.8	857.5	31.06
806	113	-44541	18219	-17348	-470.1	221.3	854.2	31.18
809	114	-43772	19982	-17253	-463.3	239.0	853.3	31.24
812	115	-43826	20037	-17075	-468.2	236.5	851.9	31.24
815	116	-36388	31640	-16931	-386.0	359.6	850.1	31.24
818	117	-44832	17881	-16879	-484.1	208.3	849.8	31.06
821	118	-45966	14958	-16701	-498.2	181.3	847.6	31.18
824	119	-43696	20841	-16503	-472.6	250.7	845.1	31.18

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: GPP 1
LEASE: GATE WAY
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: GPP1A.NMT

EASTING 11164 NORTHING 8990 RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
827	120	-42240	23709	-16277	-456.4	283.5	842.6	31.30
830	121	-36887	31484	-16107	-396.6	368.6	841.0	31.12
833	122	-40894	25938	-16108	-446.3	306.1	841.0	31.43
836	123	-21194	43630	-15737	-227.6	498.1	837.4	31.30
839	124	-24102	42204	-15484	-262.5	486.5	834.3	31.37
842	125	-45326	17761	-15079	-512.1	216.4	831.0	31.49
845	126	-39012	29409	-14720	-437.5	360.3	824.1	31.49

SURTRON TECHNOLOGIES PTY LTD
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COMPANY: NEWMONT AUSTRALIA
HOLE NO: GPP 1
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LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: GPP1B.NMT

d	I	B'	Ht	i
3	20.308	-5.931	50979	-51.306
4	19.879	-5.550	51081	-51.082
5	20.037	-5.952	51095	-51.029
6	20.237	-5.162	51104	-51.066
7	20.445	-5.077	51087	-51.051
8	20.385	-4.938	51111	-50.972
9	20.407	-4.967	51143	-50.925
10	20.440	-4.854	51146	-50.934
11	20.488	-4.834	51134	-50.904
12	20.596	-4.897	51125	-50.930
13	20.652	-5.021	51122	-50.961
14	20.706	-5.112	51140	-50.929
15	20.668	-5.175	51165	-50.924
16	20.731	-5.142	51130	-50.876
17	20.831	-5.218	51107	-50.877
18	20.997	-5.199	51134	-50.939
19	20.988	-5.652	51139	-50.894
20	20.883	-5.074	51141	-50.830
21	21.073	-5.108	51139	-50.941
22	21.164	-5.191	51146	-50.942
23	21.212	-5.018	51107	-50.923
24	21.372	-4.966	51109	-50.935
25	21.364	-5.378	51135	-50.940
26	21.297	-5.085	51148	-50.876
27	21.535	-5.247	51147	-50.922
28	21.697	-5.083	51134	-50.927
29	21.765	-5.414	51141	-50.935
30	21.728	-5.452	51131	-50.883
31	21.875	-5.500	51127	-50.967
32	21.904	-4.730	51126	-50.930
33	21.996	-4.527	51115	-50.939
34	22.059	-4.503	51091	-50.919
35	22.099	-4.688	51110	-50.971
36	22.192	-4.782	51112	-50.892
37	22.217	-5.223	51140	-50.924
38	22.215	-5.158	51132	-50.886
39	22.352	-5.217	51123	-50.914
40	22.430	-5.165	51112	-50.904
41	22.495	-5.150	51102	-50.904

COMPANY: NEWMONT AUSTRALIA
HOLE NO: GPP 1
LEASE: GATE WAY
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: GPP1B.NMT

d	I	B'	Ht	i
42	22.637	-4.753	51136	-50.890
43	22.794	-4.746	51128	-50.991
44	22.662	-4.837	51112	-50.886
45	22.758	-5.076	51136	-50.887
46	22.915	-5.050	51117	-50.936
47	22.965	-5.138	51135	-50.913
48	23.038	-5.184	51136	-50.901
49	23.097	-5.730	51149	-50.938
50	23.041	-6.294	51164	-50.859
51	23.170	-6.210	51104	-50.879
52	23.275	-5.820	51116	-50.893
53	23.350	-5.999	51128	-50.921
54	23.268	-5.550	51122	-50.916
55	23.325	-5.550	51141	-50.915
56	23.201	-5.124	51109	-50.883
57	23.355	-5.430	51137	-50.903
58	23.494	-5.816	51150	-50.892
59	23.538	-6.260	51136	-50.896
60	23.540	-6.241	51125	-50.894
61	23.646	-6.138	51134	-50.949
62	23.507	-5.532	51125	-50.893
63	23.605	-5.383	51143	-50.926
64	23.751	-5.390	51121	-50.939
65	23.801	-5.527	51132	-50.932
66	23.861	-5.458	51138	-50.908
67	23.991	-5.698	51118	-50.913
68	24.123	-6.146	51128	-50.908
69	24.253	-6.217	51126	-50.941
70	24.266	-5.858	51107	-50.963
71	24.222	-5.586	51140	-50.934
72	24.357	-5.487	51134	-50.956
73	24.490	-4.617	51111	-50.958
74	24.828	-3.717	51078	-50.998
75	24.842	-4.183	51130	-50.934
76	24.700	-4.636	51115	-50.889
77	24.656	-5.364	51137	-50.863
78	24.985	-6.140	51108	-50.899
79	25.314	-6.491	51119	-50.997
80	25.489	-6.111	51111	-50.976

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: GPP 1
LEASE: GATE WAY
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: GPP1B.NMT

d	I	B'	Ht	i
81	25.418	-5.361	51119	-51.016
82	25.361	-4.754	51109	-50.928
83	25.535	-4.639	51104	-50.929
84	25.671	-4.504	51108	-50.964
85	25.857	-4.605	51123	-50.962
86	25.942	-4.550	51094	-50.950
87	26.088	-4.858	51094	-50.916
88	26.483	-5.145	51123	-51.019
89	26.733	-5.644	51149	-50.985
90	26.977	-5.049	51104	-51.022
91	27.096	-4.403	51098	-51.043
92	27.104	-4.359	51098	-51.035
93	27.227	-4.000	51117	-50.986
94	27.378	-3.358	51074	-51.052
95	27.534	-3.185	51103	-51.059
96	27.691	-3.716	51102	-50.981
97	28.122	-4.502	51096	-50.997
98	28.493	-4.949	51123	-51.020
99	28.586	-4.361	51087	-51.040
100	28.538	-3.096	51081	-51.088
101	28.778	-2.845	51108	-51.069
102	28.882	-3.095	51086	-51.039
103	29.238	-3.606	51080	-51.107
104	29.460	-4.505	51117	-51.038
105	29.781	-4.547	51100	-51.093
106	30.031	-4.052	51089	-51.117
107	30.179	-3.985	51091	-51.122
108	30.233	-3.761	51108	-51.030
109	30.435	-3.230	51111	-51.102
110	30.603	-2.942	51098	-51.137
111	30.583	-3.123	51111	-51.024
112	30.916	-3.879	51119	-51.046
113	31.311	-4.438	51155	-51.075
114	31.422	-4.125	51117	-51.097
115	31.622	-3.348	51125	-51.099
116	31.823	-2.955	51106	-51.143
117	31.806	-2.309	51133	-51.064
118	32.025	-2.965	51142	-51.058
119	32.335	-3.689	51147	-51.117

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

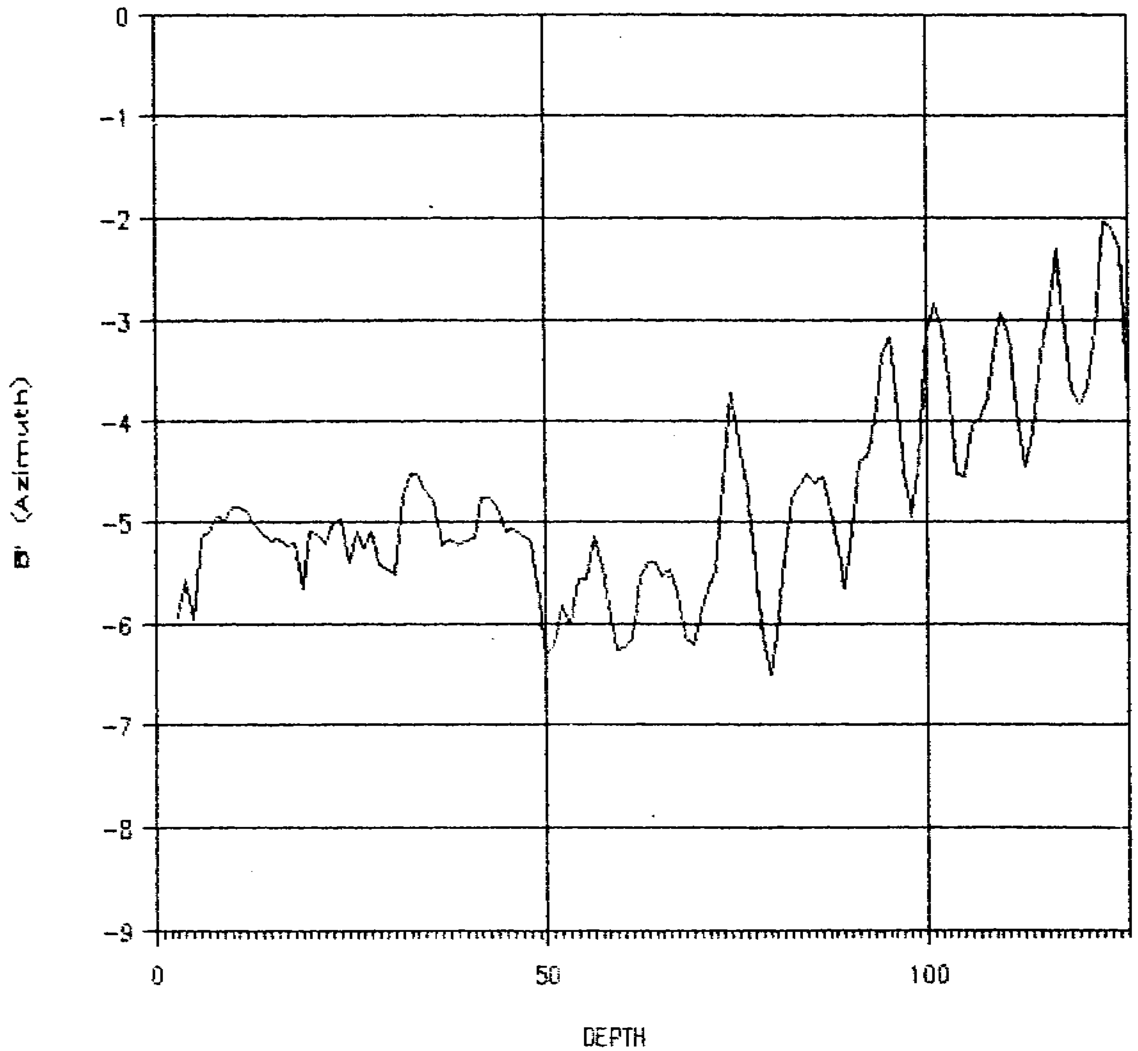
COMPANY: NEWMONT AUSTRALIA
HOLE NO: GPP 1
LEASE: GATE WAY
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: GPP1B.NMT

d	I	B'	Ht	i
120	32.524	-3.835	51101	-51.052
121	32.774	-3.663	51101	-51.105
122	32.761	-3.114	51035	-51.130
123	33.184	-2.049	50994	-51.145
124	33.528	-2.098	51008	-51.186
125	33.783	-2.291	50963	-50.976
126	34.518	-3.767	51025	-51.239

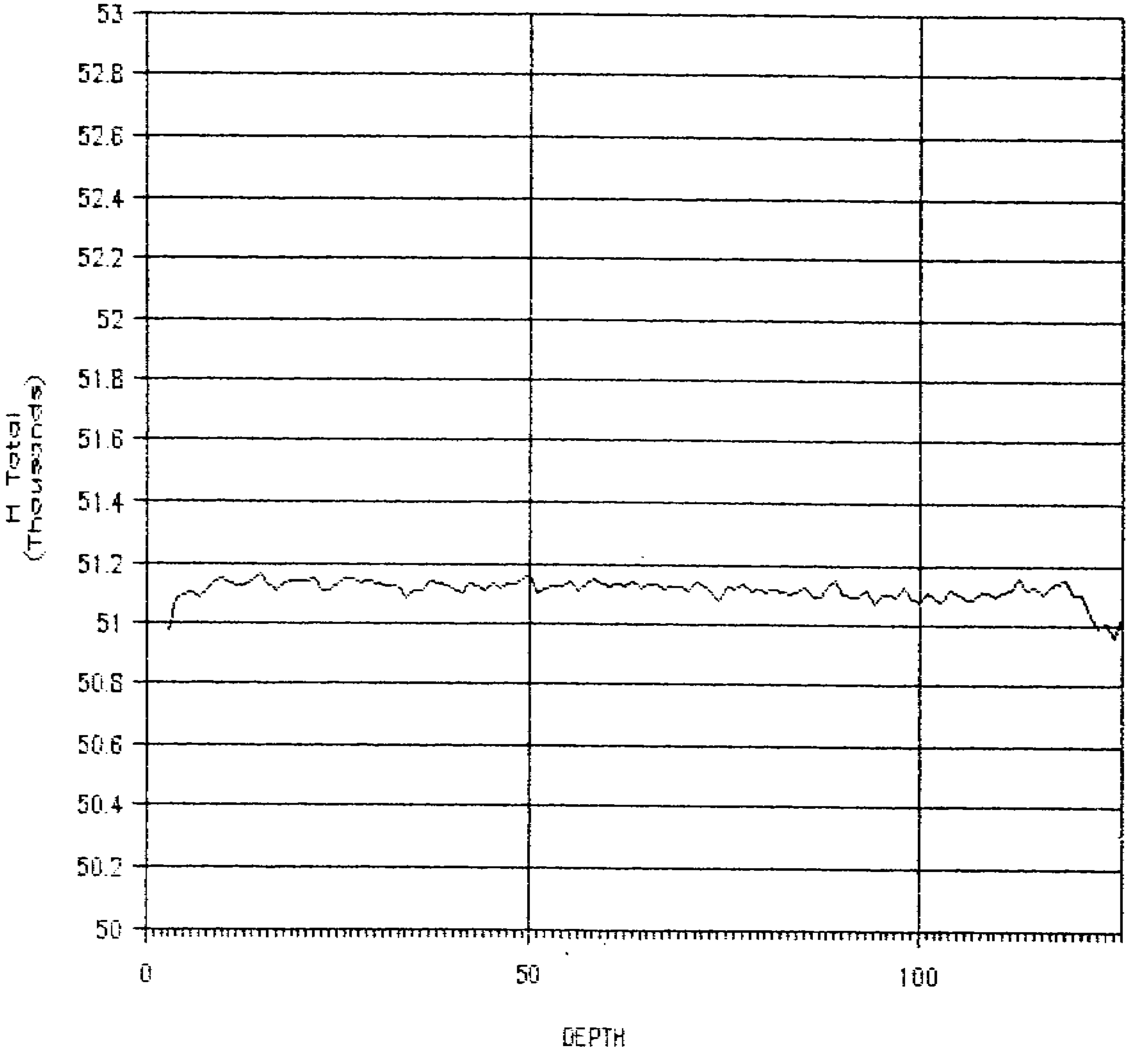
SURTRON TECHNOLOGIES PTY LTD

NEWMONT B' vs DEPTH GPP 1



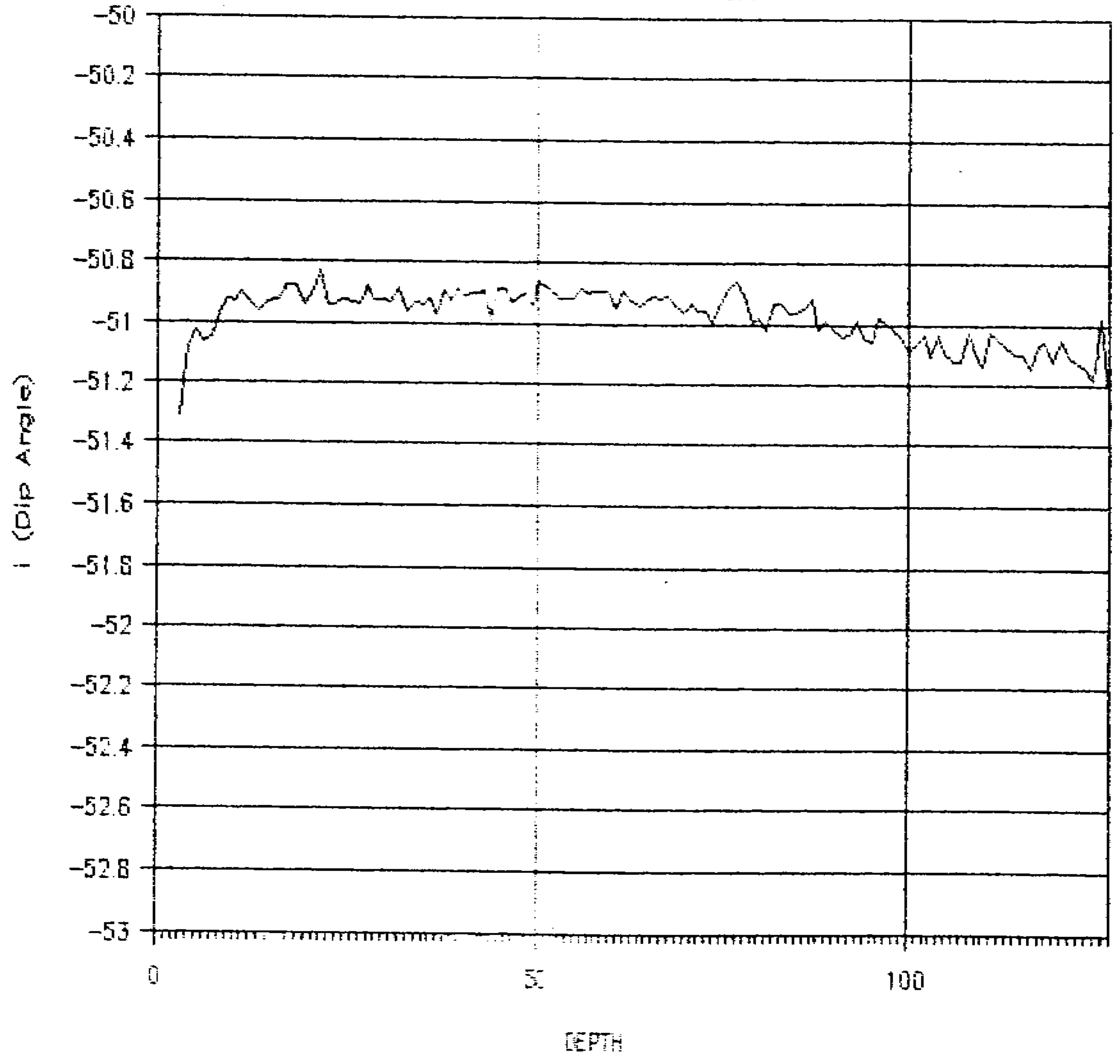
SURTRON TECHNOLOGIES PTY LTD

NEWMONT Ht vs DEPTH GPP 1



SURTRON TECHNOLOGIES PTY LTD

NE[illegible]AT vs DEPTH GPP 1



NT27
Bullseye Area

SURTRON TECHNOLOGIES

The True Direction in Downhole Surveying.

DOWNHOLE MAGNETOMETER SURVEY

NEWMONT AUSTRALIA LIMITED

(BBP 1) CZRC1

JUNE 1990

REF:N006/04/MG/90

SURTRON TECHNOLOGIES PTY LTD

PERTH
3/1 High Street, Fremantle. 6160.
Telephone (09) 430 5116
Fax (09) 430 5367

KALGOORLIE
270 Egan Street, Kalgoorlie. 6430.
Telephone (090) 217 562
Fax (090) 217 799

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA LTD
HOLE NO: BPP 1
LEASE: BULLS EYE
LOCATION: TENANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP1A.NMT

NORTHING: .00 EASTING: .00 RL: .00

SHOT	DEPTH	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
2	3	27472	-35584	-23477	227.5	-332.2	915.1	24.22
5	4	45066	-1977	-23299	404.9	-38.6	913.9	24.41
8	5	41846	-17093	-23265	367.5	-171.6	913.9	24.53
11	6	42597	-15239	-23218	374.7	-155.9	913.3	24.65
14	7	45186	-3557	-23121	404.6	-52.2	913.1	24.71
17	8	45305	114	-23111	408.3	-19.8	913.0	24.90
20	9	44610	-8179	-23057	398.1	-94.2	913.1	24.96
23	10	45105	-4690	-23028	404.4	-62.4	912.6	25.14
26	11	45370	-1740	-23008	408.8	-37.0	912.0	25.26
29	12	45361	1931	-22960	411.1	-3.5	911.8	25.38
32	13	45407	-106	-22961	410.9	-21.9	911.5	25.63
35	14	44675	-8207	-22972	400.1	-93.8	912.2	25.57
38	15	45170	-4700	-22943	407.0	-61.8	911.5	25.69
41	16	45435	771	-22895	412.4	-11.3	911.3	25.87
44	17	45408	2168	-22857	413.3	-.6	910.7	25.93
47	18	45335	3602	-22875	413.7	13.6	910.3	26.12
50	19	45125	-5641	-22887	407.9	-71.4	910.5	26.18
53	20	45473	-1312	-22839	413.1	-31.7	910.3	26.18
56	21	45501	-88	-22810	415.1	-19.4	910.0	26.54
59	22	45428	-2508	-22764	414.0	-40.5	909.6	26.60
62	23	45510	-1394	-22745	415.7	-31.1	909.4	26.67
65	24	45529	-727	-22707	417.0	-25.9	908.8	26.67
68	25	45017	7163	-22621	417.1	48.1	907.9	26.79
71	26	45594	661	-22585	420.3	-12.9	907.7	26.91
74	27	45621	176	-22529	421.6	-17.5	907.1	27.03
77	28	45311	5263	-22499	421.5	30.7	906.7	27.03
80	29	45631	-1632	-22482	421.9	-33.4	906.7	27.15
83	30	45595	-2710	-22491	420.8	-43.0	906.3	27.34
86	31	45558	-3057	-22482	420.8	-46.3	906.1	27.34
89	32	45659	-554	-22453	423.6	-22.5	906.0	27.46
92	33	45238	6414	-22452	423.5	41.4	905.2	27.58
95	34	43802	13162	-22404	413.5	105.7	905.0	27.58
98	35	45714	-1742	-22510	424.7	-33.4	905.0	27.64
101	36	45192	-6519	-22483	419.0	-77.3	905.0	27.70
104	37	45366	-4747	-22464	421.6	-61.2	905.2	27.70
107	38	44763	-8556	-22446	414.9	-95.9	905.0	27.83

DOWNHOLE MAGNETOMETER SURVEY

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA LTD
HOLE NO: BPP 1
LEASE: BULLS EYE
LOCATION: TENANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP1A.NMT

NORTHING: .00 EASTING: .00 RL: .00

SHOT	DEPTH	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
110	39	45312	5080	-22424	426.3	30.5	904.3	27.95
113	40	45129	7098	-22405	426.5	49.3	903.7	28.01
116	41	45723	-1815	-22491	428.0	-34.4	903.3	28.07
119	42	45898	148	-22387	430.4	-15.2	903.1	28.01
122	43	45615	4632	-22330	430.5	26.6	902.3	28.25
125	44	45669	-4181	-22322	428.2	-55.3	902.5	28.19
128	45	44773	9948	-22254	426.9	77.9	901.4	28.13
131	46	45606	4788	-22283	432.7	29.1	901.4	28.25
134	47	45862	1025	-22284	433.8	-6.4	901.8	28.37
137	48	45606	4724	-22292	432.4	30.1	901.6	28.50
140	49	45853	267	-22340	433.2	-13.3	901.4	28.56
143	50	45825	-674	-22397	431.9	-20.6	901.4	28.56
146	51	45459	6075	-22358	432.2	44.5	901.2	28.62
149	52	44682	10450	-22338	426.0	88.4	901.2	28.68
152	53	45450	-6191	-22407	428.0	-71.0	901.0	28.68
155	54	45404	6550	-22404	431.5	50.0	901.0	28.62
158	55	43967	-12959	-22540	411.4	-133.1	901.4	28.68
161	56	43647	-13845	-22624	408.8	-138.1	902.5	28.74
164	57	45705	-2784	-22659	430.5	-31.5	902.6	28.86
167	58	45293	-6867	-22669	425.6	-70.4	902.0	28.92
170	59	44662	10203	-22694	424.0	89.2	902.0	28.86
173	60	45521	-5003	-22847	427.9	-52.8	902.4	29.05
176	61	45778	1792	-22808	432.2	11.7	901.6	29.05
179	62	45110	8367	-22769	427.1	76.1	901.3	29.17
182	63	45879	-976	-22781	434.2	-11.7	901.2	29.23
185	64	44964	9253	-22788	427.3	87.1	900.7	29.29
188	65	45814	-3295	-22884	433.4	-31.9	901.2	29.29
191	66	44872	9947	-22863	426.1	96.3	900.1	29.35
194	67	45841	-3259	-22969	434.3	-26.9	900.7	29.23
197	68	45851	4696	-22882	436.3	46.8	898.9	29.35
200	69	46025	2522	-22948	437.4	30.7	899.0	29.53
203	70	39464	-23894	-23095	376.6	-220.0	900.1	29.53
206	71	45548	8495	-23060	430.1	88.8	899.0	29.53
209	72	42960	17426	-22974	404.9	175.2	898.1	29.72
212	73	45723	8303	-23032	431.8	89.2	898.2	29.78
215	74	35184	30684	-22812	330.1	299.8	895.8	29.84

DOWNHOLE MAGNETOMETER SURVEY

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA LTD
HOLE NO: BPP 1
LEASE: BULLS EYE
LOCATION: TENANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP1A.NMT

NORTHING: .00 EASTING: .00 RL: .00

SHOT	DEPTH	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
218	75	32669	33587	-22690	304.1	330.5	893.9	29.96
221	76	38284	-26964	-23227	364.3	-238.6	900.3	29.84
224	77	44543	-14859	-23064	420.3	-120.3	899.5	30.02
227	78	30272	36216	-22699	272.0	352.1	896.7	30.14
230	79	35516	31451	-22409	323.0	310.4	894.5	30.08
233	80	31875	35404	-22231	287.2	346.9	894.0	30.08
236	81	47677	-4017	-22068	450.6	-18.6	893.2	30.33
239	82	47842	-3771	-22058	449.1	-12.7	893.2	30.51
242	83	46891	-11069	-21844	442.2	-83.7	893.7	30.33
245	84	48091	4860	-21597	447.0	65.8	892.8	30.57
248	85	48266	4476	-21344	448.7	63.5	891.5	30.63
251	86	47179	11417	-20987	436.1	128.4	891.7	30.57
254	87	48177	-5699	-20756	453.3	-30.5	891.3	30.76
257	88	44483	19234	-20414	409.7	202.3	889.6	30.57
260	89	48308	2832	-20126	455.3	50.2	889.3	30.57
263	90	47870	6110	-19891	452.2	81.7	888.9	30.63
266	91	47634	-6613	-19668	457.0	-38.6	889.1	30.88

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA LTD
HOLE NO: BPP 1
LEASE: BULLS EYE
LOCATION: TENANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP1B.NMT

NORTHING: .00 EASTING: .00 RL: .00

DEPTH	INC	AZ	H total	DIP
3	66.25	355.36	50715	-51.27
4	66.01	355.83	50771	-51.26
5	66.07	356.03	50838	-51.13
6	66.04	355.89	50850	-51.08
7	65.92	355.96	50882	-51.06
8	65.88	355.85	50859	-51.10
9	65.86	355.85	50878	-51.04
10	65.85	355.97	50860	-51.03
11	65.77	355.79	50900	-51.06
12	65.73	355.84	50877	-51.05
13	65.70	355.85	50882	-51.08
14	65.75	356.05	50901	-51.04
15	65.69	356.17	50880	-51.07
16	65.64	356.40	50883	-51.07
17	65.59	356.00	50882	-51.06
18	65.55	356.22	50906	-51.12
19	65.54	356.00	50910	-51.13
20	65.53	356.10	50903	-51.09
21	65.46	356.35	50898	-51.13
22	65.43	356.54	50874	-51.13
23	65.37	356.40	50896	-51.14
24	65.31	356.24	50882	-51.16
25	65.18	356.47	50887	-51.18
26	65.14	356.30	50885	-51.17
27	65.05	356.28	50880	-51.19
28	65.01	356.48	50862	-51.22
29	64.98	356.45	50894	-51.20
30	64.98	356.51	50912	-51.20
31	64.96	356.49	50895	-51.22
32	64.91	356.63	50884	-51.24
33	64.82	356.43	50908	-51.31
34	64.75	356.57	50929	-51.32
35	64.79	356.67	50985	-51.38
36	64.79	356.78	50894	-51.40
37	64.79	356.72	50845	-51.40
38	64.80	356.85	50801	-51.39

DOWNHOLE MAGNETOMETER SURVEY

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA LTD
HOLE NO: BPP 1
LEASE: BULLS EYE
LOCATION: TENANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP1B.NMT

NORTHING: .00
EASTING: .00
RL: .00

DEPTH	INC	AZ	H total	DIP
39	64.70	356.69	50811	-51.46
40	64.59	356.62	50882	-51.51
41	64.58	356.64	50987	-51.57
42	64.51	356.81	51066	-51.47
43	64.45	356.72	50998	-51.49
44	64.43	356.92	51004	-51.50
45	64.29	356.84	50978	-51.56
46	64.31	356.89	50983	-51.58
47	64.31	356.91	50999	-51.58
48	64.32	357.21	50981	-51.59
49	64.32	356.96	51006	-51.63
50	64.38	357.26	51009	-51.65
51	64.26	357.49	51022	-51.71
52	64.23	357.91	51035	-51.71
53	64.29	357.59	51050	-51.73
54	64.26	357.67	51052	-51.76
55	64.37	357.82	51079	-51.80
56	64.45	358.46	51074	-51.84
57	64.44	358.98	51089	-51.89
58	64.44	358.88	51112	-51.88
59	64.34	358.56	51125	-52.01
60	64.46	358.89	51177	-52.05
61	64.38	359.00	51176	-52.09
62	64.30	359.40	51218	-52.09
63	64.26	359.53	51232	-52.14
64	64.17	359.85	51251	-52.23
65	64.26	359.85	51317	-52.23
66	64.11	.34	51333	-52.34
67	64.22	.76	51376	-52.34
68	63.98	.41	51458	-52.42
69	64.00	1.30	51490	-52.46
70	64.15	1.32	51591	-52.44
71	63.96	1.62	51754	-52.49
72	63.84	1.94	51740	-52.51
73	63.85	2.03	51865	-52.50
74	63.54	1.71	51959	-52.50

DOWNHOLE MAGNETOMETER SURVEY

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA LTD
HOLE NO: BPP 1
LEASE: BULLS EYE
LOCATION: TENANT CREEK
STATE: NORTHERN TERRITORY

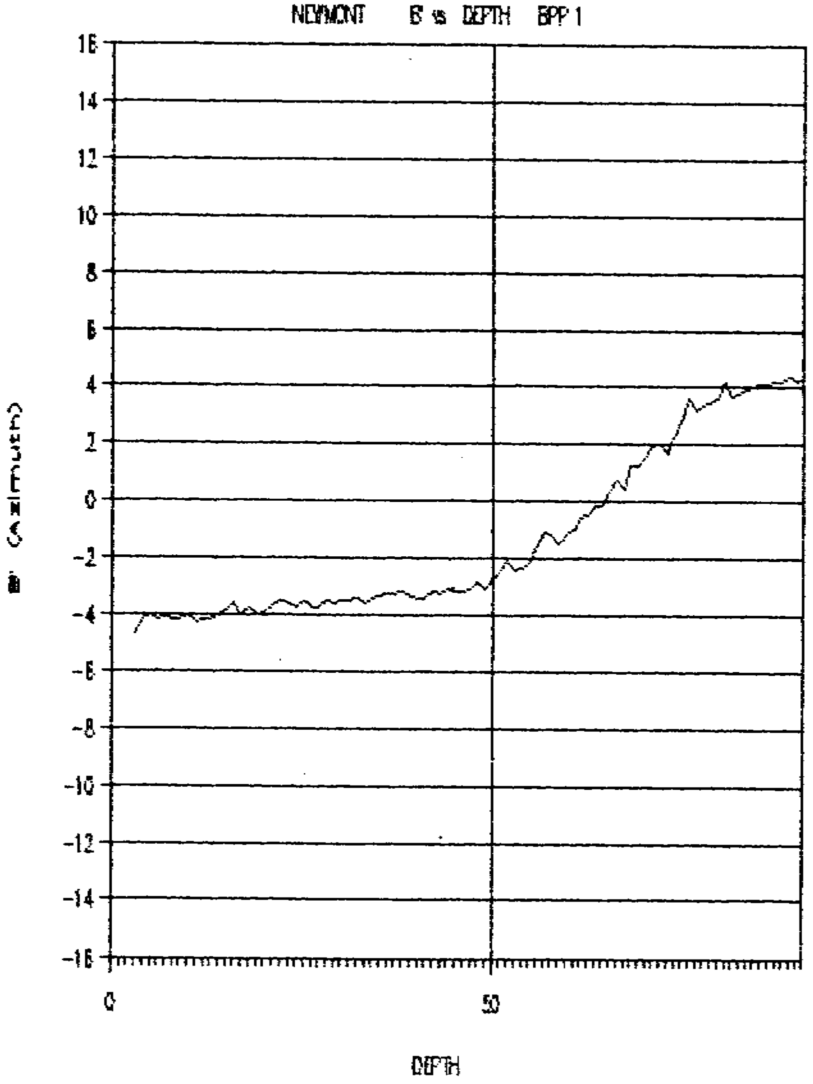
DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/M0/90
SERVICE: MAGPROBE
FILE NO: BPP1B.NMT

NORTHING: .00 EASTING: .00 RL: .00

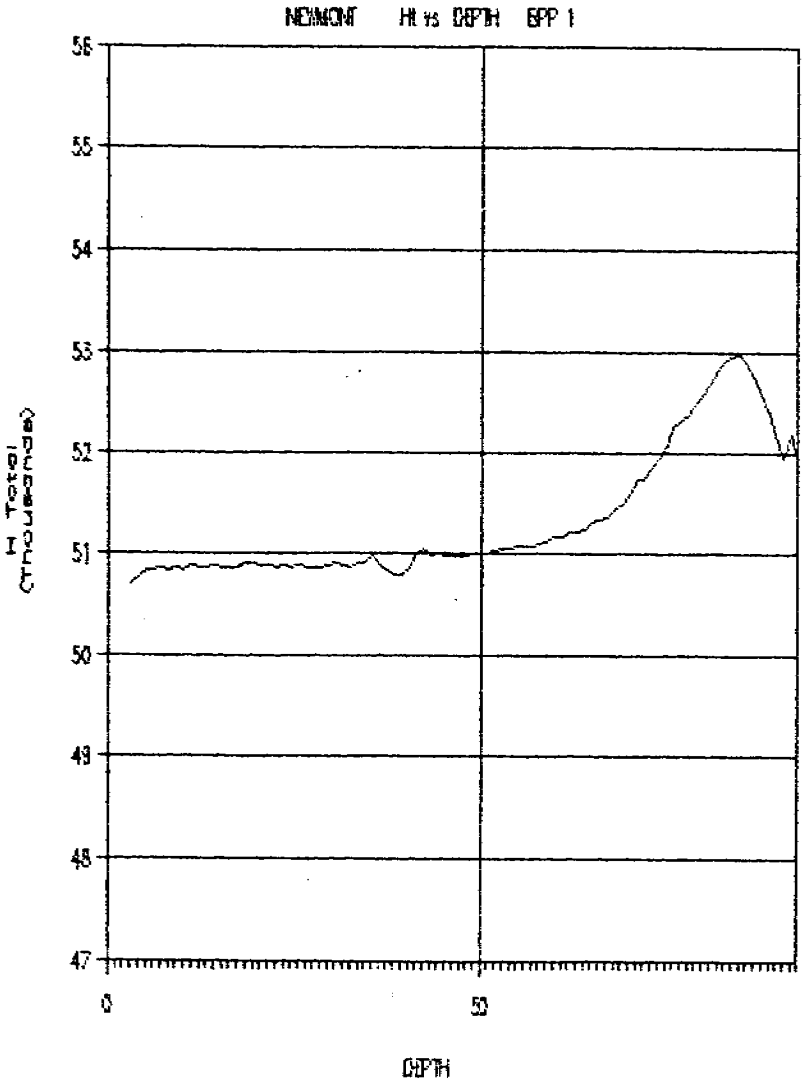
DEPTH	INC	AZ	H total	DIP
75	63.32	2.34	52059	-52.50
76	64.19	2.83	52270	-52.18
77	64.08	3.61	52314	-52.05
78	63.61	3.23	52375	-52.05
79	63.40	3.42	52466	-51.86
80	63.26	3.48	52570	-51.72
81	63.21	3.59	52689	-51.52
82	63.30	4.20	52816	-51.34
83	63.27	3.71	52900	-51.08
84	63.16	3.77	52941	-50.88
85	63.05	3.98	52964	-50.67
86	62.99	4.04	52883	-50.35
87	62.99	4.16	52766	-50.12
88	62.81	4.16	52587	-49.98
89	62.75	4.19	52409	-49.79
90	62.66	4.24	52196	-49.69
91	62.71	4.38	51957	-49.48

DOWNHOLE MAGNETOMETER SURVEY

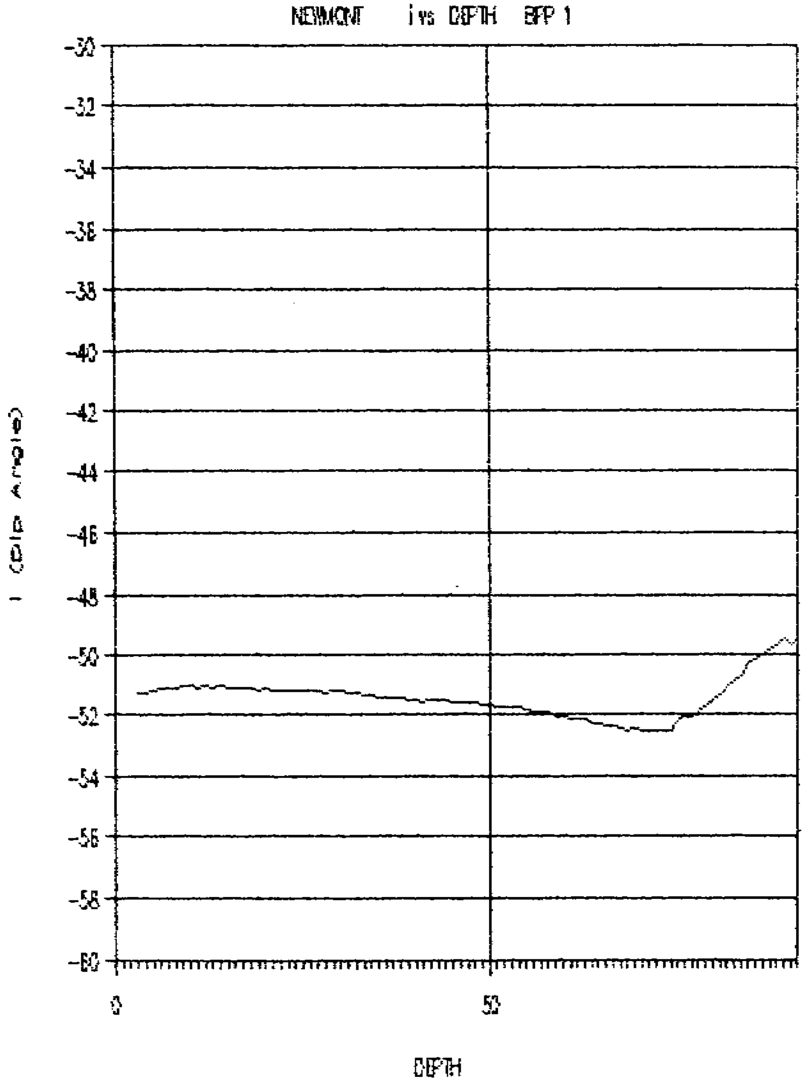
SURTRON TECHNOLOGIES PTY LTD



SURTRON TECHNOLOGIES PTY LTD



SURTRON TECHNOLOGIES PTY LTD



NT27
Bull's eye Anomaly

SURTRON TECHNOLOGIES

The True Direction in Downhole Surveying.

DOWNHOLE MAGNETOMETER SURVEY

NEWMONT AUSTRALIA LIMITED

(BBP 2) CZ RC2

JUNE 1990

REF:N006/04/MG/90

SURTRON TECHNOLOGIES PTY LTD

PERTH
3/1 High Street, Fremantle. 6160.
Telephone (09) 430 5116
Fax (09) 430 5367

KALGOORLIE
270 Egan Street, Kalgoorlie. 6430.
Telephone (090) 217 562
Fax (090) 217 799

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: BPP 2
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP2A.NMT

EASTING 12024 NORTHING 9916 RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
2	3	34346	-21582	-30633	191.7	-161.8	967.6	15.37
5	4	38052	14598	-30447	249.5	57.4	966.5	15.62
8	5	40769	-2951	-30412	249.5	-50.5	966.8	15.80
11	6	34539	-21765	-30501	192.3	-162.4	967.4	15.86
14	7	40787	-1435	-30515	247.7	-44.4	967.4	16.05
17	8	40174	7084	-30513	252.0	8.5	967.3	16.17
20	9	40733	-2723	-30533	245.9	-51.1	968.0	16.41
23	10	40605	3952	-30513	251.1	-9.7	967.7	16.84
26	11	40394	-5572	-30627	239.8	-68.2	968.5	17.08
29	12	40623	3076	-30616	248.7	-15.6	968.3	17.14
32	13	40321	-5928	-30627	238.1	-70.3	968.7	17.39
35	14	40569	3815	-30615	248.9	-10.3	968.5	17.94
38	15	39828	8993	-30623	249.1	22.7	968.2	18.18
41	16	40706	784	-30700	246.5	-34.2	968.0	18.43
44	17	40579	3140	-30699	248.3	-20.8	968.4	18.79
47	18	38566	13129	-30659	246.6	43.4	968.2	19.04
50	19	40497	4235	-30680	249.6	-12.6	968.4	19.22
53	20	39802	8417	-30707	248.4	13.9	967.9	19.46
56	21	40671	1587	-30736	246.7	-27.7	968.5	19.83
59	22	40287	5632	-30744	249.1	-1.3	968.3	20.07
62	23	40616	-2011	-30802	243.2	-49.4	968.3	20.32
65	24	40424	4363	-30810	247.6	-7.8	968.7	20.62
68	25	38951	-11381	-30916	222.9	-103.3	969.1	20.87
71	26	40470	3441	-30913	246.9	-14.5	969.1	21.17
74	27	39967	7870	-30921	248.2	12.5	969.0	21.29
77	28	40617	-3253	-30979	241.5	-50.9	969.2	21.48
80	29	40654	2966	-30922	248.2	-18.5	968.8	21.78
83	30	33719	22971	-30918	226.9	110.0	967.7	21.84
86	31	39025	-11975	-31112	224.6	-105.4	968.8	22.15
89	32	40754	1322	-31128	246.7	-28.1	968.5	22.45
92	33	40708	-1956	-31250	242.5	-46.3	968.9	22.58
95	34	11699	39142	-31057	106.1	230.1	967.5	22.76
98	35	-39980	-9166	-30847	-255.8	-18.5	966.0	22.94
101	36	-35607	-20324	-30933	-239.5	-88.3	966.8	23.19
104	37	24013	-33125	-31042	120.2	-223.4	966.8	23.31
107	38	38349	-13985	-31130	223.7	-117.3	967.2	23.13
110	39	40032	7541	-31210	252.7	12.9	967.8	23.49
113	40	40371	5385	-31257	252.7	-1.1	967.8	23.80
116	41	39821	8161	-31313	250.9	16.4	967.6	23.86

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: BPP 2
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP2A.NMT

EASTING 12024 NORTHING 9916 RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
119	42	40361	-3692	-31493	242.5	-56.5	969.0	24.16
122	43	40497	-715	-31586	245.3	-38.9	969.0	24.22
125	44	39253	9969	-31593	248.5	27.7	968.4	24.47
128	45	40214	4189	-31670	249.9	-7.0	968.6	24.47
131	46	40323	2161	-31773	247.5	-21.0	969.0	24.71
134	47	39938	5303	-31922	247.7	0.2	969.0	24.71
137	48	40139	-2067	-32045	242.2	-43.5	969.4	25.02
140	49	39992	-2350	-32224	239.8	-48.5	969.8	25.14
143	50	39031	8782	-32343	245.2	20.4	969.7	25.26
146	51	38006	12252	-32371	244.7	42.3	968.9	25.26
149	52	37932	11640	-32605	244.9	41.1	968.9	25.45
152	53	36666	-13192	-33388	208.1	-116.9	970.7	25.75
155	54	36041	13238	-33973	238.5	46.7	969.9	25.81
158	55	-30234	46464	-30646	-117.2	218.2	968.9	25.81
161	56	-37033	4897	-28901	-232.1	89.9	968.4	26.12
164	57	-17188	-37470	-26789	-148.7	-191.8	970.0	26.12
167	58	33513	-20710	-34749	170.4	-171.3	970.2	26.30
170	59	38729	4799	-30647	243.7	-10.9	969.8	26.36
173	60	-489	40572	-33887	38.2	247.4	968.9	26.48
176	61	-38082	-15696	-34080	-242.9	-52.1	968.8	26.60
179	62	-37974	-16070	-34605	-242.6	-53.4	968.3	26.79
182	63	19850	-36242	-35662	85.0	-227.6	969.9	26.85
185	64	41965	5022	-35258	248.0	-9.1	969.2	26.91
188	65	10730	41163	-35376	104.0	232.0	967.7	27.03

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: BPP 2
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP2B.NMT

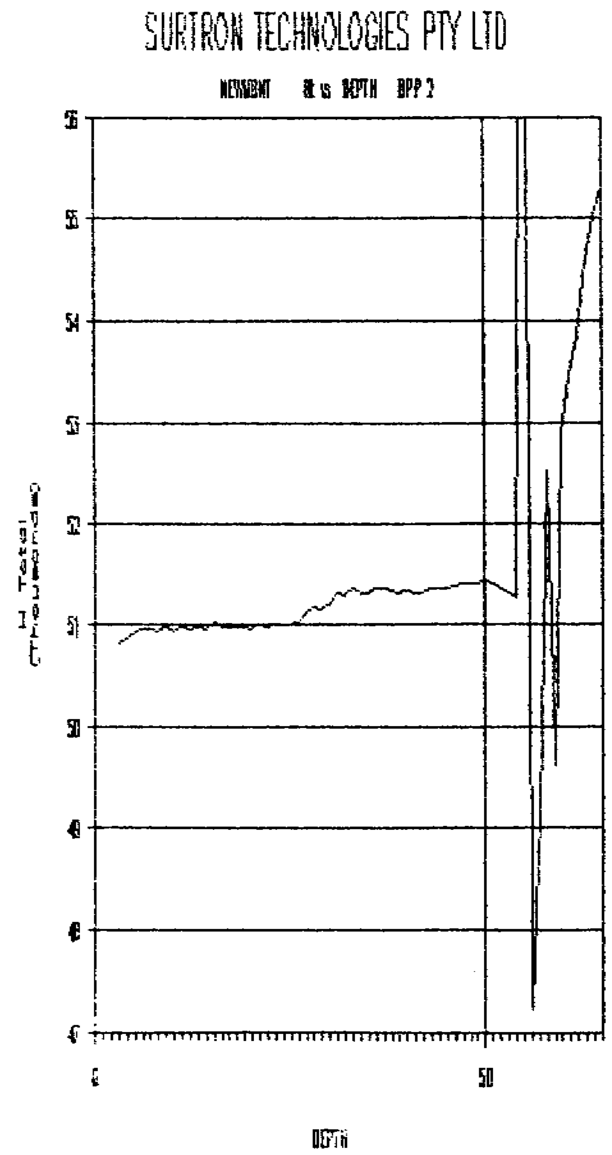
d	I	B'	Ht	i
3	14.534	-10.285	50831	-51.413
4	14.836	-10.340	50873	-51.413
5	14.751	-9.376	50948	-51.249
6	14.584	-10.196	50960	-51.170
7	14.581	-10.431	50959	-51.180
8	14.610	-10.338	50943	-51.223
9	14.545	-10.128	50979	-51.163
10	14.557	-9.947	50945	-51.181
11	14.436	-10.250	50997	-51.167
12	14.432	-10.120	50961	-51.183
13	14.375	-10.319	50980	-51.119
14	14.425	-9.892	50967	-51.177
15	14.486	-9.614	51038	-51.198
16	14.418	-11.504	50991	-51.211
17	14.429	-11.776	50980	-51.220
18	14.500	-11.285	50987	-51.247
19	14.471	-11.334	50982	-51.249
20	14.415	-11.169	50970	-51.249
21	14.377	-11.038	51003	-51.229
22	14.427	-10.563	50990	-51.319
23	14.375	-11.054	51014	-51.310
24	14.345	-10.179	51014	-51.323
25	14.225	-10.944	51015	-51.327
26	14.317	-10.510	51042	-51.406
27	14.384	-10.564	51141	-51.397
28	14.287	-9.357	51186	-51.384
29	14.408	-10.796	51164	-51.394
30	14.605	-10.795	51191	-51.561
31	14.364	-10.345	51326	-51.497
32	14.379	-10.704	51299	-51.544
33	14.295	-10.316	51357	-51.596
34	14.691	-10.419	51318	-51.747
35	14.869	-11.319	51322	-51.592
36	14.790	-12.210	51359	-51.567
37	14.703	-9.866	51357	-51.721
38	14.636	-9.837	51335	-51.801
39	14.652	-9.994	51318	-51.939
40	14.634	-10.124	51340	-51.963
41	14.566	-10.112	51311	-52.001

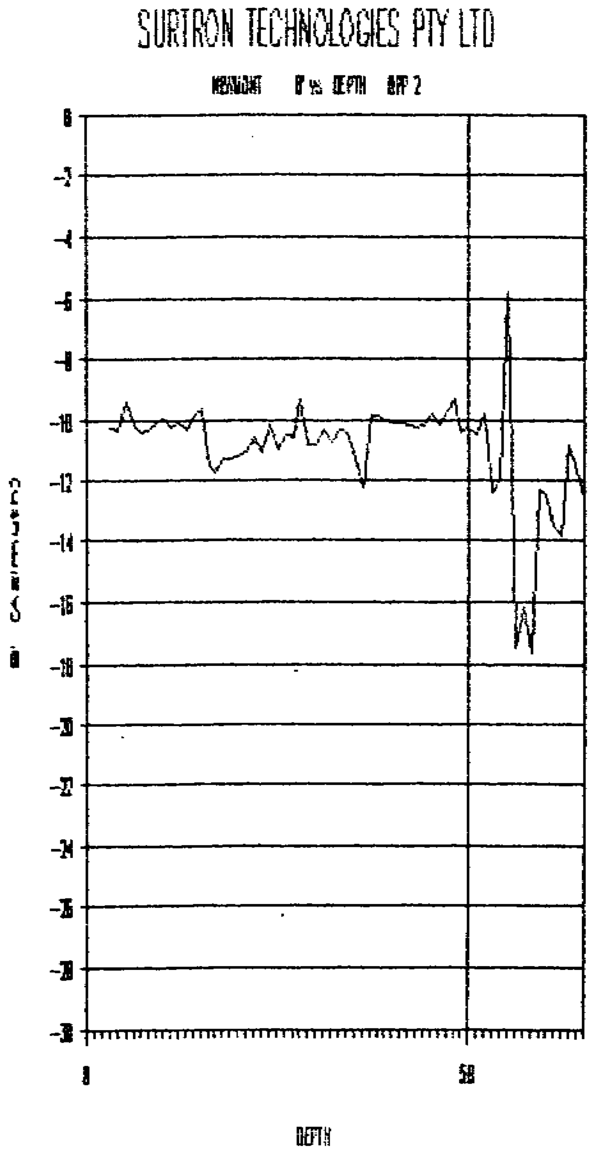
SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

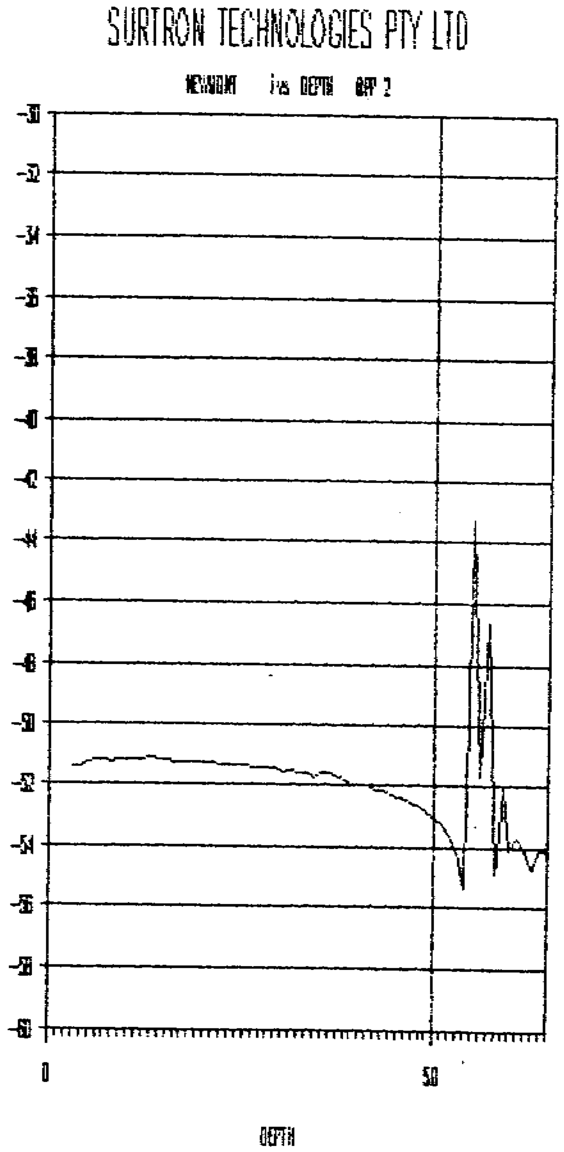
COMPANY: NEWMONT AUSTRALIA
HOLE NO: BPP 2
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: BPP2B.NMT

d	I	B'	Ht	i
42	14.411	-10.159	51327	-52.086
43	14.376	-10.302	51363	-52.146
44	14.477	-10.185	51364	-52.260
45	14.472	-9.759	51359	-52.383
46	14.377	-10.220	51382	-52.399
47	14.339	-9.713	51402	-52.573
48	14.243	-9.343	51403	-52.664
49	14.159	-10.423	51413	-52.792
50	14.237	-10.266	51445	-53.017
51	14.375	-10.482	51405	-53.223
52	14.375	-9.833	51356	-53.626
53	13.814	-12.408	51315	-54.159
54	14.067	-12.007	51268	-55.339
55	14.340	-5.780	63342	-43.215
56	14.414	-17.485	47230	-51.627
57	14.047	-16.118	49164	-46.618
58	13.984	-17.642	52531	-54.901
59	14.119	-12.335	49621	-52.010
60	14.487	-12.433	52864	-54.098
61	14.382	-13.443	53461	-53.687
62	14.388	-13.796	53831	-54.079
63	14.063	-10.802	54583	-54.670
64	14.362	-11.687	55040	-53.973
65	14.721	-12.577	55326	-54.203


SURTRON TECHNOLOGIES PTY LTD
NEWMONT H vs DEPTH BPP 2
H Total (Thousands)
56
55
54
53
52
51
50
49
48
47
0
50
DEPTH


SURTRON TECHNOLOGIES PTY LTD
NEWMONT D vs DEPTH BPP 2
D (Azimuth)
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
0
50
DEPTH


SURTRON TECHNOLOGIES PTY LTD
NEWMONT I/s DEPTH GRP 2
I (DIP ANGLE)
-30
-32
-34
-36
-38
-40
-42
-44
-46
-48
-50
-52
-54
-56
-58
-60
0
50
DEPTH

NT27
Bullseye Anomaly.

SURTRON TECHNOLOGIES

The True Direction in Downhole Surveying.

DOWNHOLE MAGNETOMETER SURVEY

NEWMONT AUSTRALIA LIMITED

ASARCO HOLE.

JUNE 1990

REF:N006/04/MG/90

SURTRON TECHNOLOGIES PTY LTD

PERTH
3/1 High Street, Fremantle. 6160.
Telephone (09) 430 5116
Fax (09) 430 5367

KALGOORLIE
270 Egan Street, Kalgoorlie. 6430.
Telephone (090) 217 562
Fax (090) 217 799

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: ASARCO
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: ASARCOA.NMT

EASTING 12062 NORTHING 9909 RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
260	3	24792	-33093	-29615	161.8	-216.4	962.7	27.34
263	4	41253	-5375	-29176	277.9	-34.3	960.5	27.22
266	5	41419	5338	-29005	280.2	39.9	959.5	27.28
269	6	5288	-41295	-29337	40.9	-269.7	962.0	27.15
272	7	34866	-22676	-29377	235.3	-139.2	961.5	27.28
275	8	39405	-13477	-29309	263.5	-77.8	961.8	27.22
278	9	39752	-12381	-29309	266.8	-68.0	961.5	27.34
281	10	36989	-19113	-29320	250.8	-113.5	962.0	27.15
284	11	39267	-13916	-29291	265.0	-75.3	961.3	27.34
287	12	37913	-17195	-29320	256.5	-95.5	961.8	27.22
290	13	36605	-19753	-29358	248.6	-112.3	961.5	27.34
293	14	36385	-20118	-29414	247.3	-113.7	962.2	27.22
296	15	35433	-21653	-29499	242.5	-122.1	962.6	27.46
299	16	35076	-22147	-29555	239.2	-124.0	963.0	27.46
302	17	35350	-21626	-29649	240.5	-118.5	963.2	27.52
305	18	32157	-26048	-29725	221.9	-147.8	964.2	27.64
308	19	36420	-19589	-29789	244.9	-102.9	964.0	27.70
311	20	35002	-21900	-29874	236.8	-117.9	964.6	27.64
314	21	35340	-21352	-29902	238.5	-112.3	964.6	27.76
317	22	34690	-22284	-29986	235.9	-115.6	965.0	27.89
320	23	32933	-24678	-30071	224.0	-132.3	965.8	27.95
323	24	32869	-24596	-30212	224.2	-128.8	965.6	28.07
326	25	40867	-6134	-29907	268.2	-4.0	963.5	28.25
329	26	14272	39052	-29526	65.1	271.0	961.0	28.13
332	27	41006	-7486	-29457	279.2	-15.3	960.2	28.19
335	28	30621	-28141	-29613	223.8	-162.9	960.6	28.31
338	29	34281	-23637	-29602	244.6	-130.4	960.6	28.44
341	30	37575	-17991	-29497	265.4	-89.7	960.2	28.37
344	31	41482	4634	-29342	276.0	64.7	959.3	28.44
347	32	38637	-16200	-29412	271.3	-77.1	959.6	28.56
350	33	36853	-19982	-29423	262.0	-102.4	959.8	28.37
353	34	34748	-22805	-29639	251.0	-121.2	960.4	28.56
356	35	39925	-12199	-29833	276.1	-48.7	960.2	28.62
359	36	24338	33970	-29301	135.8	254.4	958.1	28.62
362	37	-15175	39101	-28994	-135.4	260.5	956.4	28.68
365	38	-41634	-4587	-29127	-282.4	-55.2	957.4	28.62
368	39	10934	-40308	-29345	104.6	-263.9	958.4	28.80
371	40	35573	-21837	-29273	259.1	-120.6	958.3	28.86
374	41	38126	17272	-29162	247.5	157.2	956.6	28.92

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: ASARCO
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: ASARCOA.NMT

EASTING 12062 NORTHING 9909 RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
377	42	30385	-28462	-29303	234.4	-166.0	957.7	28.92
380	43	28646	-30179	-29491	221.7	-177.3	958.9	28.86
383	44	38207	-16292	-29553	272.6	-76.5	959.5	28.92
386	45	32433	-25720	-29743	240.7	-142.4	960.4	28.92
389	46	34738	-22066	-29751	252.7	-116.4	960.8	28.92
392	47	37930	-16109	-29909	267.8	-73.4	960.6	28.92
395	48	34362	-22560	-29995	247.9	-118.3	961.4	29.23
398	49	35141	-21418	-29798	249.9	-110.4	961.8	29.17
401	50	37288	-16229	-30312	263.2	-73.2	962.4	29.29
404	51	35029	-21107	-30173	249.0	-108.5	962.2	29.29
407	52	33520	-22688	-30079	243.1	-119.6	962.8	29.23
410	53	37088	-16950	-30218	258.8	-78.8	963.0	29.29
413	54	37792	-15151	-30209	261.9	-67.3	963.0	29.23
416	55	37337	-16832	-29825	257.1	-79.9	963.6	29.35
419	56	36458	-17399	-29872	255.3	-81.3	963.6	29.53
422	57	39833	-7049	-30019	269.9	-12.6	963.4	29.53
425	58	40053	-5788	-29991	270.1	-4.5	963.2	29.53
428	59	40150	-3833	-30806	268.8	8.1	963.6	29.53
431	60	37884	-14448	-30096	261.4	-62.7	963.6	29.47
434	61	26550	30784	-29835	152.7	228.9	962.0	29.66
437	62	-18762	36944	-29154	-149.4	239.3	959.8	29.60
440	63	-15554	-38130	-29890	-76.6	-262.9	961.3	29.78
443	64	21052	-35162	-29774	165.9	-218.3	961.5	29.78
446	65	31664	-25612	-30014	231.7	-143.2	962.1	29.78
449	66	36009	-18778	-30134	257.7	-91.4	962.1	29.66
452	67	38761	-6209	-30544	274.3	-0.5	961.9	29.72
455	68	38973	12697	-30240	252.5	118.3	961.0	29.78
458	69	24172	32764	-29703	138.6	245.2	960.1	29.90
461	70	-41046	399	-28666	-284.5	-27.2	957.9	29.84
464	71	7616	-39908	-30938	83.0	-266.2	959.8	29.84
467	72	22177	-39426	-31743	156.9	-220.8	962.3	30.08
470	73	38605	12843	-30728	255.0	111.7	961.0	30.08
473	74	37127	16833	-29761	241.7	146.1	960.1	30.27
476	75	38184	-14293	-30677	271.5	-65.2	960.8	30.45
479	76	29438	28429	-30678	183.6	220.6	958.6	30.51
482	77	-14963	37887	-30747	-129.5	259.8	956.9	30.33
485	78	19372	-35227	-30992	165.5	-225.0	960.4	30.45
488	79	37516	-14083	-30808	272.3	-67.1	960.2	30.63
491	80	24990	-30840	-30962	198.1	-190.9	961.2	30.76

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: ASARCO
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: ASARCOA.NMT

EASTING 12062 NORTHING 9909 RL 0

SHOT	d	Hx	Hy	Hz	Gx	Gy	Gz	TEMP
494	81	38661	-8292	-30600	276.9	-27.8	961.0	30.69
497	82	39341	129	-29952	277.0	31.7	960.2	30.63
500	83	36133	-14907	-29318	268.2	-78.0	960.8	30.94
503	84	28947	-25360	-28289	221.6	-158.0	962.0	30.82
506	85	33721	-17732	-26665	258.5	-91.4	961.6	30.82
509	86	34341	-17166	-25147	262.9	-75.3	962.2	30.82
512	87	36819	-13622	-23533	271.8	-30.2	962.0	31.00
515	88	30223	-28759	-23424	242.8	-122.1	962.6	30.94
518	89	33976	-24154	-25129	258.5	-82.2	962.8	31.06
521	90	42194	-14221	-26551	274.2	-0.7	962.2	31.06
524	91	27667	-33891	-30016	224.6	-147.2	963.4	31.18
527	92	40706	-1302	-35445	262.9	82.4	961.5	31.24
530	93	41189	3254	-32004	258.7	98.7	961.1	31.12
533	94	30449	-24699	-33754	249.6	-113.7	961.2	31.24
536	95	38124	-9348	-20570	277.7	24.2	960.9	31.12
539	96	-27065	23530	-26644	-262.5	104.4	959.6	31.12
542	97	7853	-31165	-21833	167.4	-217.8	961.5	31.30
545	98	4728	-41120	-26645	132.1	-236.9	961.9	31.30
548	99	20193	-52348	-24245	206.2	-175.4	963.0	31.49
551	100	26105	-28011	-27633	224.6	-146.8	963.2	31.49
554	101	38680	-16576	-32439	266.6	-45.2	962.8	31.43
557	102	48032	-1171	-16883	254.3	105.8	962.1	31.30
560	103	35678	-7163	-28894	274.1	34.8	961.7	31.49
563	104	25188	-28606	-26162	234.4	-134.8	962.8	31.55

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: ASARCO
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: ASARCOB.NMT

d	I	B'	Ht	i
3	15.678	-0.070	50861	-51.288
4	16.253	0.507	50813	-51.295
5	16.435	0.997	50846	-51.214
6	15.831	1.722	50930	-50.997
7	15.872	3.162	50920	-51.089
8	15.942	3.165	50925	-51.061
9	15.979	3.908	50917	-51.094
10	15.969	3.877	50923	-51.095
11	15.991	4.755	50927	-51.061
12	15.885	5.166	50919	-50.993
13	15.839	5.251	50912	-51.004
14	15.795	5.516	50929	-51.018
15	15.751	6.107	50937	-51.073
16	15.631	6.307	50934	-51.027
17	15.555	6.768	50955	-51.054
18	15.457	6.910	50952	-51.060
19	15.406	7.090	50966	-51.083
20	15.336	7.192	50963	-51.130
21	15.285	7.651	50980	-51.093
22	15.229	8.529	50982	-51.127
23	15.076	8.086	50969	-51.116
24	14.991	8.923	50972	-51.202
25	15.557	9.967	51011	-51.271
26	16.173	8.600	50995	-51.416
27	16.236	9.438	51042	-51.318
28	16.075	8.542	51054	-51.393
29	16.096	8.530	51090	-51.370
30	16.265	9.059	51045	-51.412
31	16.463	8.961	51021	-51.418
32	16.379	9.025	51189	-51.296
33	16.335	9.324	51217	-51.236
34	16.184	9.832	51049	-51.498
35	16.277	9.183	51311	-51.670
36	16.751	9.942	51038	-51.600
37	17.065	8.291	50988	-51.588
38	16.728	6.296	51018	-51.467
39	16.499	8.476	51043	-51.457
40	16.606	8.675	50982	-51.506
41	17.041	10.681	51013	-51.687

DOWNHOLE MAGNETOMETER SURVEY

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

COMPANY: NEWMONT AUSTRALIA
HOLE NO: ASARCO
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: ASARCOB.NMT

d	I	B'	Ht	i
42	16.695	10.330	50912	-51.632
43	16.491	10.329	51001	-51.618
44	16.440	9.771	50976	-51.694
45	16.236	10.260	50971	-51.739
46	16.149	10.108	50781	-51.825
47	16.123	10.101	50919	-51.907
48	15.945	10.196	50886	-51.874
49	15.857	9.833	50809	-51.588
50	15.847	10.496	50721	-52.348
51	15.763	9.859	50823	-52.007
52	15.716	10.350	50429	-52.140
53	15.691	9.986	50754	-52.052
54	15.685	9.737	50699	-52.088
55	15.610	9.114	50665	-51.524
56	15.539	10.234	50242	-51.833
57	15.667	9.639	50374	-52.078
58	15.667	9.513	50371	-52.045
59	15.593	9.456	50752	-52.807
60	15.587	9.655	50495	-52.006
61	15.962	9.290	50425	-52.080
62	16.379	6.635	50664	-51.427
63	15.900	7.787	50885	-51.763
64	15.916	8.283	50656	-51.790
65	15.807	9.506	50591	-52.033
66	15.865	10.533	50570	-52.240
67	15.916	11.987	49738	-53.545
68	16.180	9.335	50937	-52.439
69	16.350	9.188	50399	-52.305
70	16.613	7.923	50067	-51.423
71	16.200	8.695	51067	-53.351
72	15.721	7.810	55262	-50.668
73	16.156	6.995	50985	-53.129
74	16.392	8.962	50473	-52.375
75	16.204	9.337	51023	-53.003
76	16.668	8.372	51146	-53.394
77	16.876	6.694	51036	-53.838
78	16.216	10.086	50761	-53.660
79	16.281	9.029	50546	-53.686
80	15.972	9.413	50341	-53.768

SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

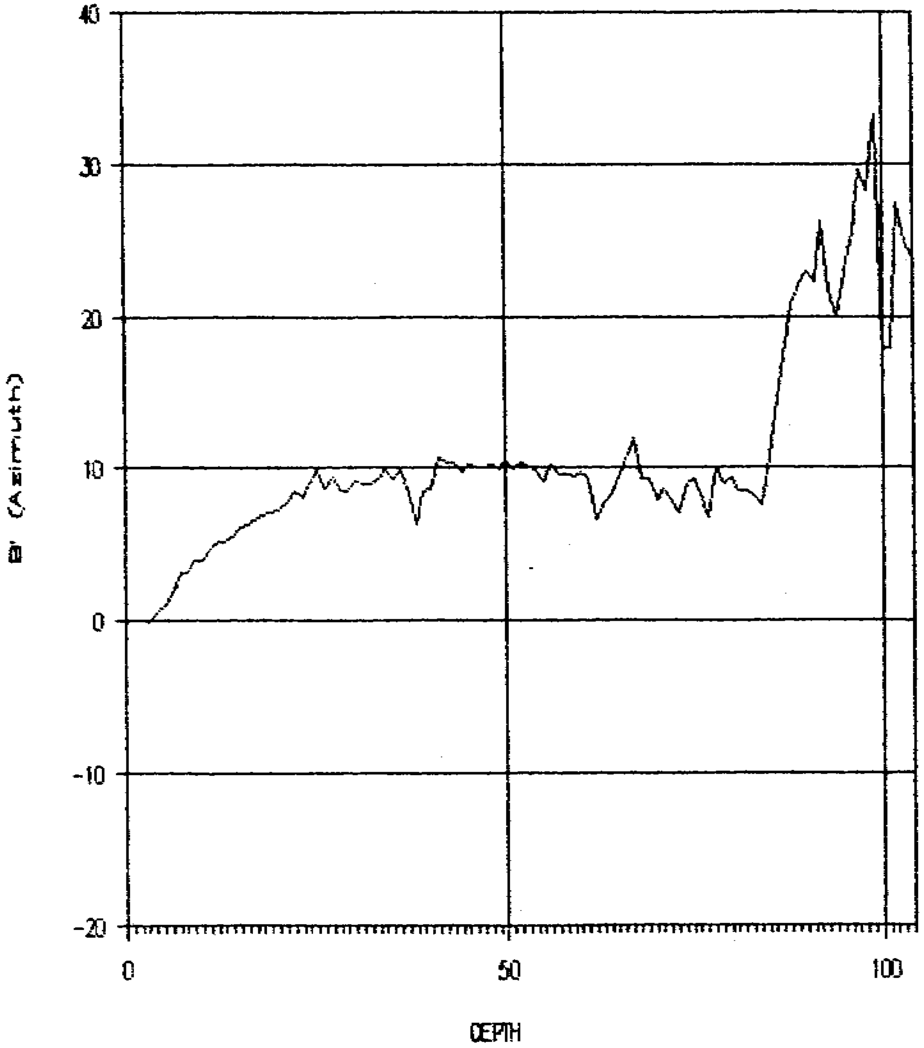
COMPANY: NEWMONT AUSTRALIA
HOLE NO: ASARCO
LEASE: BULLS EYE
LOCATION: TENNANT CREEK
STATE: NORTHERN TERRITORY

DATE: 29-06-90
ENGINEER: HUETT
JOB NO: N006/04/MG/90
SERVICE: MAGPROBE
FILE NO: ASARCOB.MMT

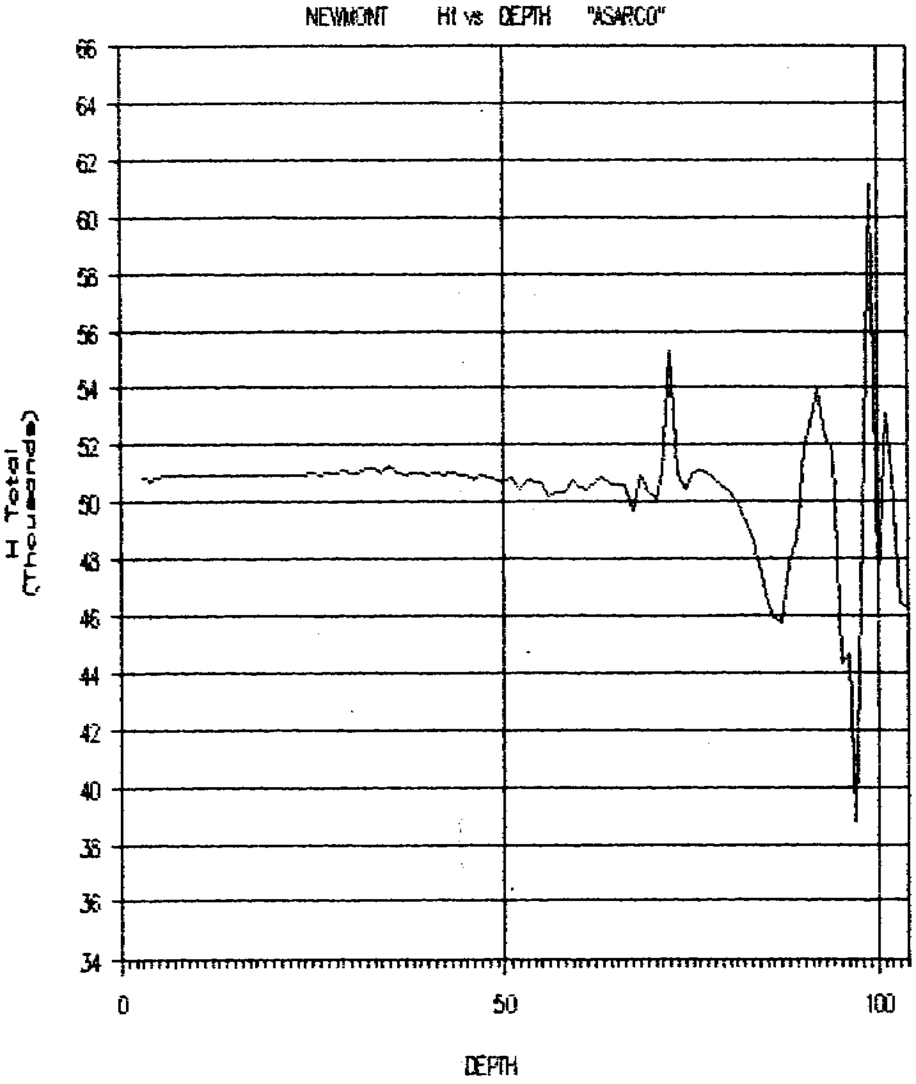
d	I	B'	Ht	i
81	16.150	8.537	49998	-53.754
82	16.191	8.464	49445	-53.344
83	16.210	8.250	48861	-52.957
84	15.797	7.513	47763	-52.013
85	15.915	10.714	46503	-50.691
86	15.866	13.466	45895	-48.752
87	15.869	17.409	45771	-46.232
88	15.766	20.703	47846	-44.256
89	15.734	22.059	48675	-45.896
90	15.906	22.946	51841	-45.709
91	15.575	22.306	53057	-49.120
92	15.989	26.254	53991	-55.821
93	16.071	21.714	52263	-52.980
94	15.926	19.895	51735	-55.962
95	16.177	22.842	44316	-42.801
96	16.404	25.435	44677	-51.815
97	15.945	29.719	38854	-48.491
98	15.748	28.278	49226	-47.027
99	15.701	33.227	61122	-36.880
100	15.566	17.886	47219	-50.807
101	15.688	17.883	53134	-52.744
102	15.975	27.478	50926	-33.776
103	16.030	24.741	46466	-53.382
104	15.687	23.858	46230	-49.108

SURTRON TECHNOLOGIES PTY LTD

NEWMONT B' vs DEPTH "ASARCO"

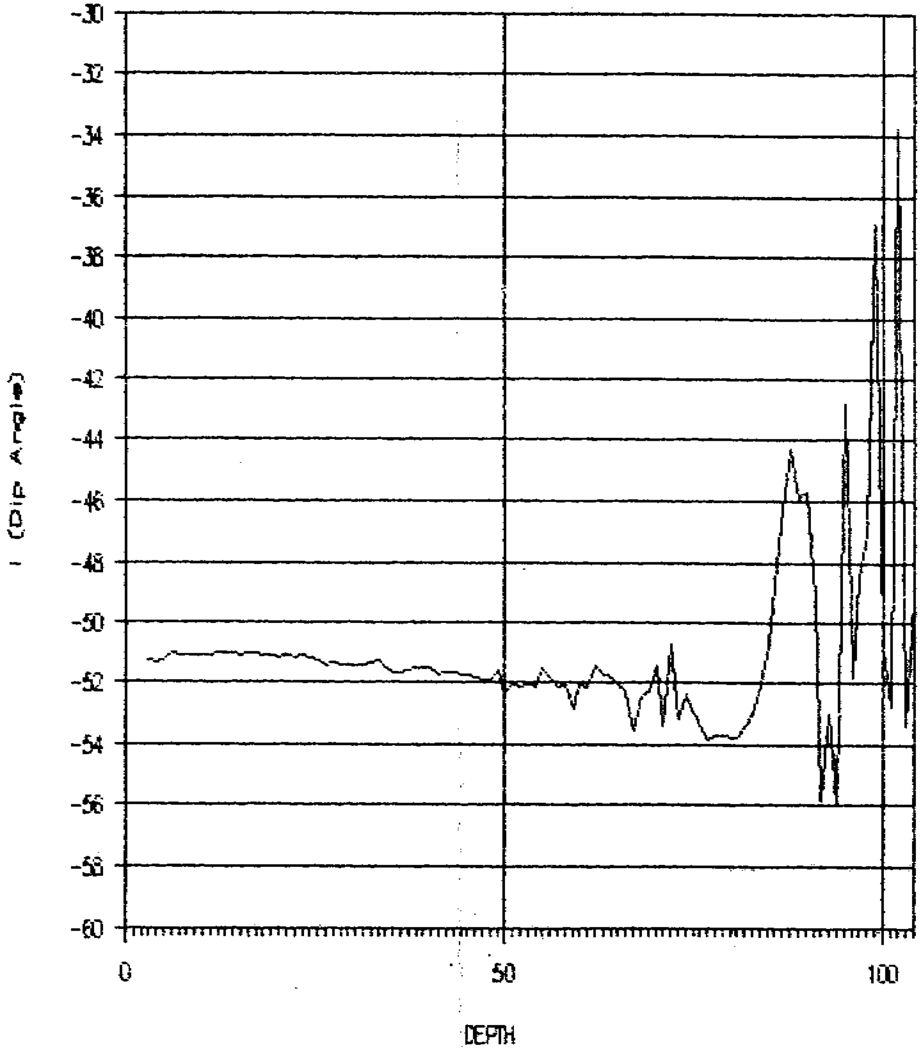


SURTRON TECHNOLOGIES PTY LTD



SURTRON TECHNOLOGIES PTY LTD

NEWMONT i vs DEPTH "ASARCO"

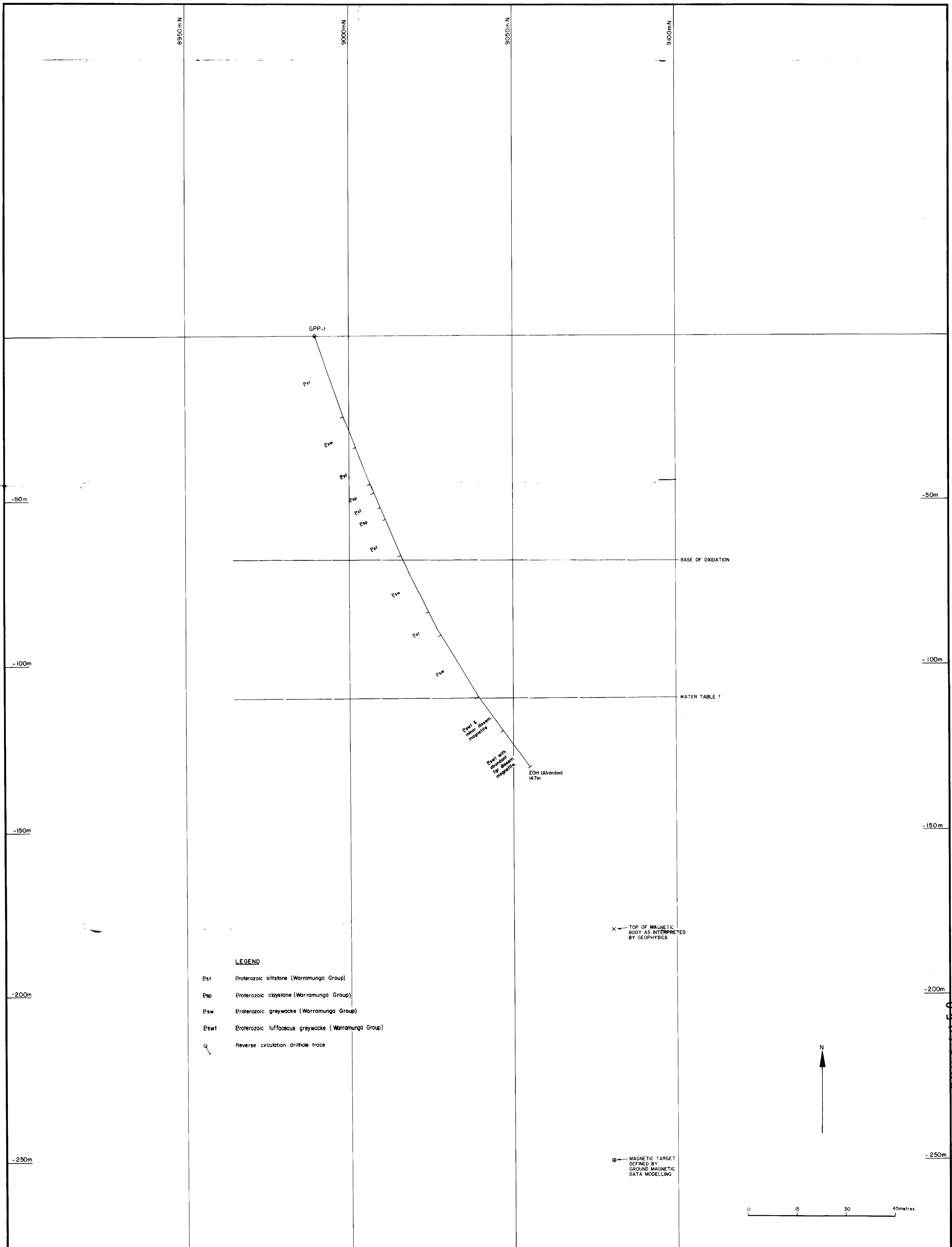


Newmont Australia Limited

PROJECT
McDOUALL RANGE NT27

TITLE
GATEWAY PROSPECT
FACT GEOLOGY

SURVEY	SCALE	PLAN No.	PLATE
S.M	1:2500	NT27-27	1
DRAWN	DATE		
C S D S	JUNE 1990		



LEGEND

Ꝑst	Proterozoic siltstone (Warramunga Group)
Ꝑsp	Proterozoic claystone (Warramunga Group)
Ꝑsw	Proterozoic greywacke (Warramunga Group)
Ꝑswt	Proterozoic tuffaceous greywacke (Warramunga Group)
⚲	Reverse circulation drillhole trace

CR91/050

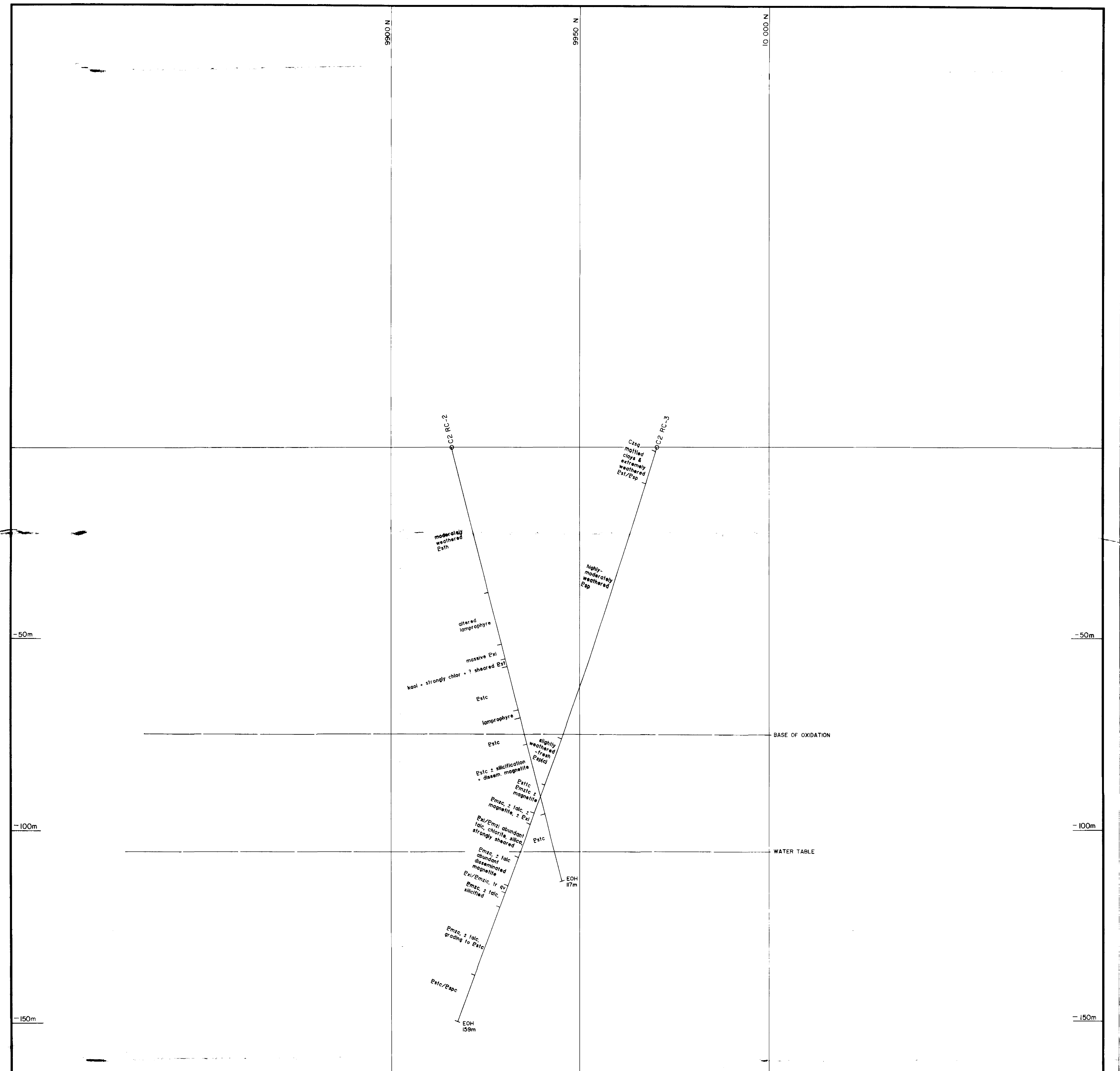
Newmont Australia Limited

PROJECT McDOUALL RANGE NT27

TITLE "GATEWAY PROSPECT"

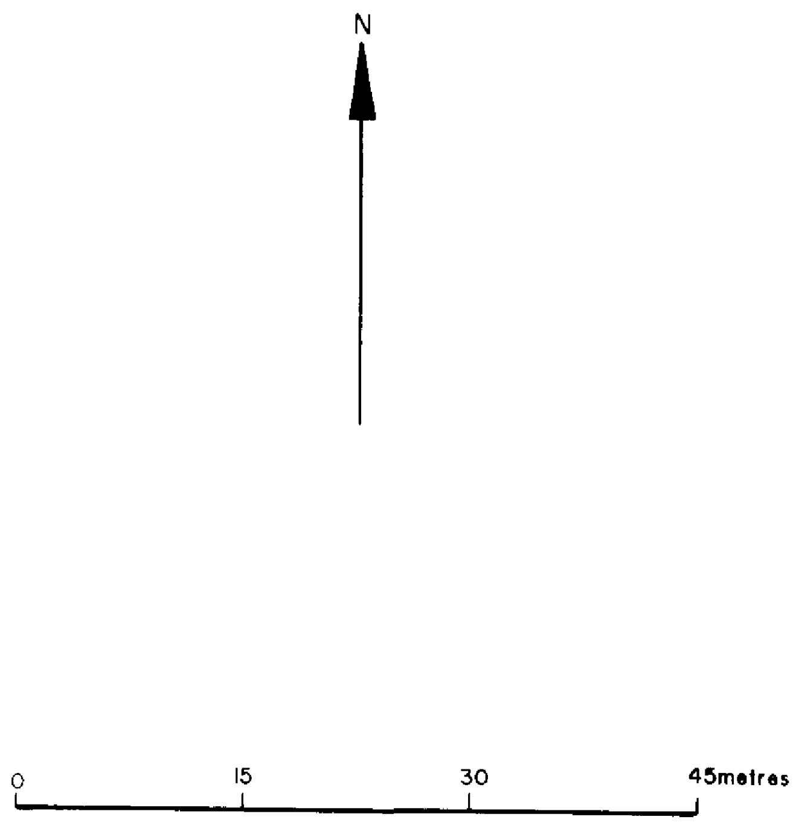
SECTION II, 164mE

SURVEY S.P.K.	SCALE 1 : 500	PLAN No.	PLATE
DRAWN C.S.D.S.	DATE NOV. 90	NT27-29	2



LEGEND

Czsg	Surface soil and transported cover	
Ꝑst(h)(c)	Proterozoic siltstone (hematite)(chloritic)	Warramunga Group
Ꝑsp(h)(c)	Proterozoic claystone (hematite)(chloritic)	
Ꝑmzc	Chlorite schist	
Ꝑmzi	Sheared/schistose ironstone (hydrothermal)	
Ꝑxi	Hydrothermal ironstone	
qv	Quartz veining	
⚲	Reverse circulation drillhole trace	



Newmont Australia Limited

PROJECT McDOUALL RANGE NT27

TITLE
BULL'S EYE ANOMALY
SECTION 12024E

SURVEY S.M.	SCALE 1 : 500	PLAN No. NT27-28	PLATE 3
DRAWN C.S.D.S	DATE NOV. 90		

A1