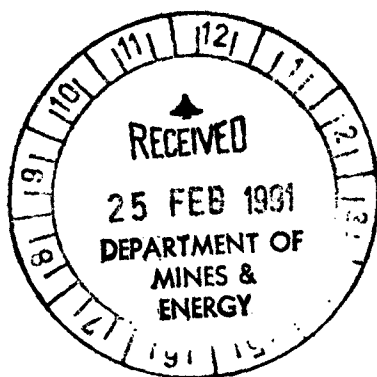


ANNUAL REPORT FOR
EXPLORATION RETENTION LICENCE 74

24 December 1989 - 23 December 1990

1:250000 - TENNANT CREEK (SE 53/14)
1:100000 - SHORT RANGE (5659)

Compiled: R.J. Love
February 1991



CR 1/15

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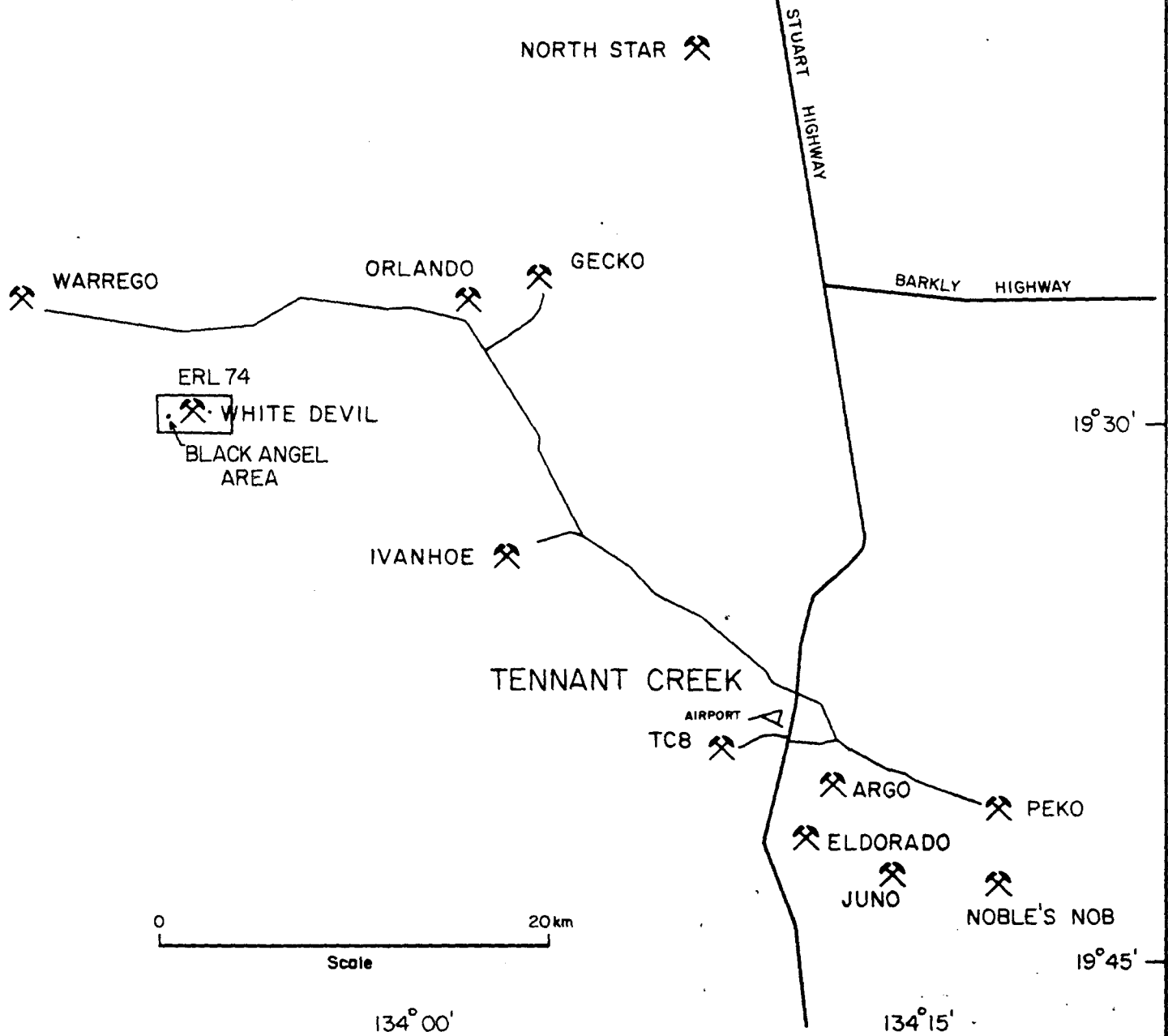
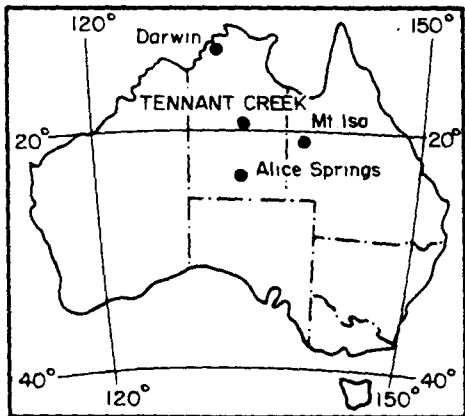
1. INTRODUCTION

This report covers exploration activities undertaken by Geopeko within Exploration Retention Licence No.74 during the third year of tenure, from 24-12-89 to 23-12-90.

The licence area covers a total of 532 hectares in the White Devil Mine locality (see diagrams TF4432 and TF3812) and is contained within the 1:50000 sheet Short Range II. Access to the area may be gained via well formed dirt road leading to the White Devil/Black Angel Mine from the Warrego Mine road.

Exploration has been directed at following up extensions to the White Devil and Black Angel lode system which is characterised by economic grade Au/Bi/Cu mineralisation contained within massive and veined magnetite/hematite. The hosting structure for this mineralisation is an east west trending shear structure which is thought to extend into ERL 74 and therefore represents a high priority target for further exploration.

Work during the year included bedrock geochemistry using a vacuum drill rig, percussion/diamond drilling and downhole magnetics.



TENNANT
CREEK

GEOLOGIST R.J.L.

DATE 15-4-88

DRAWN R.M.N.

CHECKED

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

Tennant Creek SE 53-14

SCALE
AS SHOWN

GENERAL LOCATION

PROJECT CENTRAL FIELD

DWG NO. TF 4432

2. WORK DURING THE THIRD LICENCE YEAR

2.1 VACUUM DRILLING

Early exploration work by Geopeko in the area, which is now contained within ERL74, led to the observation that outcropping zones of hematized and altered sediments passing to the west of the Black Angel deposit were likely to represent the oxidised equivalents of the shear or fault structures known to host nearby mineralised ironstone orebodies.

Work during the 1990 field program, based on bedrock geochemistry, was initiated in the hope of supporting the concept that these shear structures represented mineral fluid channelways which might also host economic Au/Bi/Cu mineralisation, possibly in late stage fractures associated with hematite. Four traverse lines of shallow vacuum drilling was undertaken in order to obtain approximately 2kg of soil towards the base of the B horizon and generally collected over the drill interval between 2-3m below surface. Samples were submitted for analysis of Au (BLEG1 and BLEG1B analytical scheme), Cu, Bi and Pb (AAS1) at Classic Laboratories in Darwin (refer to Appendix 1 for analytical results).

A total of 129 vacuum holes were drilled at between 10m and 25m spacing between the following coordinates (Black Angel grid):

Easting	Northings
300	1150 - 200
490	1200 - 300
700	900 - 400
900	900 - 500

Results from this drilling program identified several zones of Cu and Au anomalism above background values of 16ppm and 0.8ppb respectively. These occurred along lines 300E and 490E which are in similar locations to the projected extensions of shear structures passing to the west of the Black Angel deposit, at 270 degrees and 245 degrees grid. Peak values within these zones reached 165ppm Cu and 1.12ppb Au with the most significant interval of results returned from the 300E line between 1007N - 1002N. No significant anomalism was detected in either the bismuth or lead results.

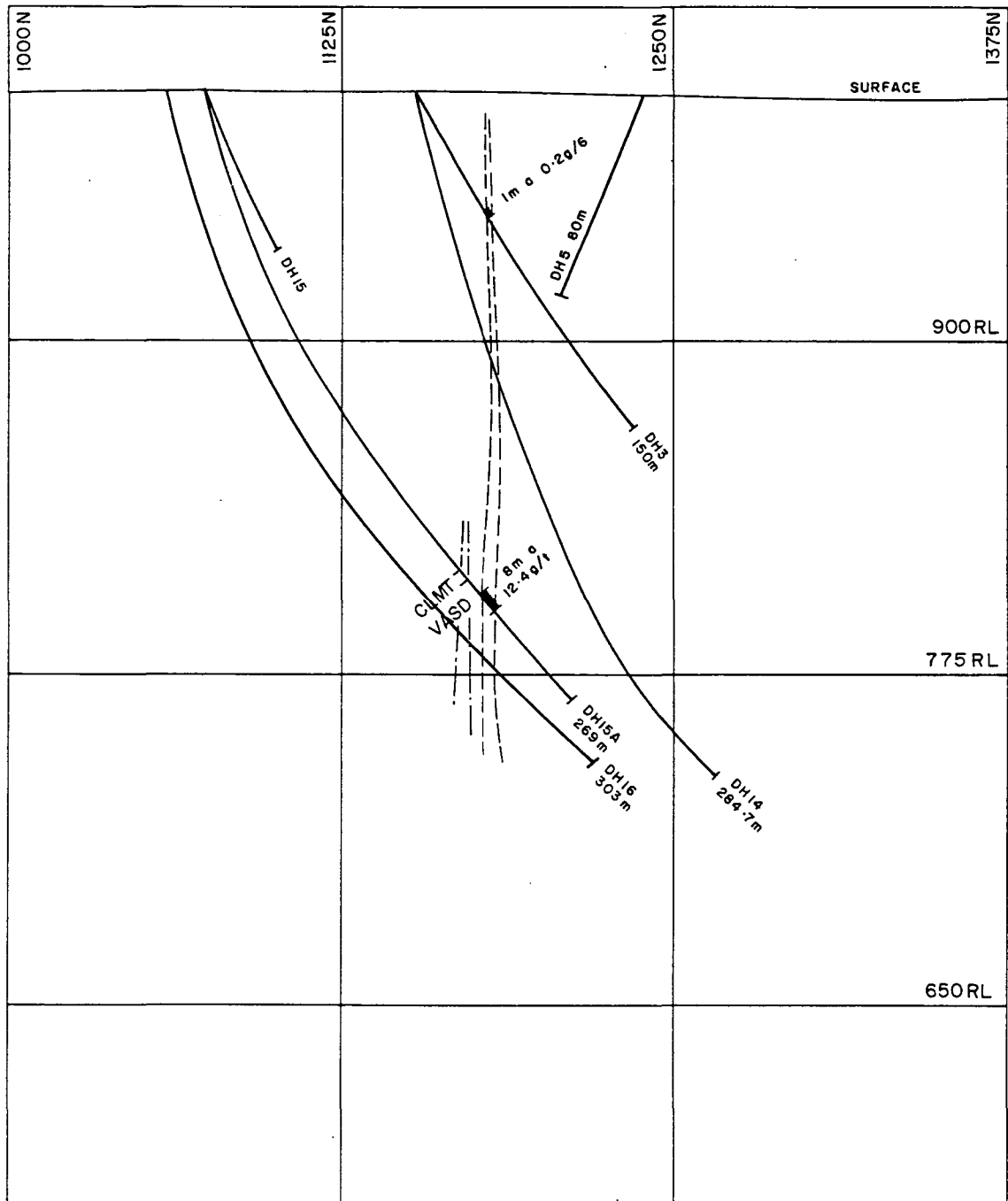
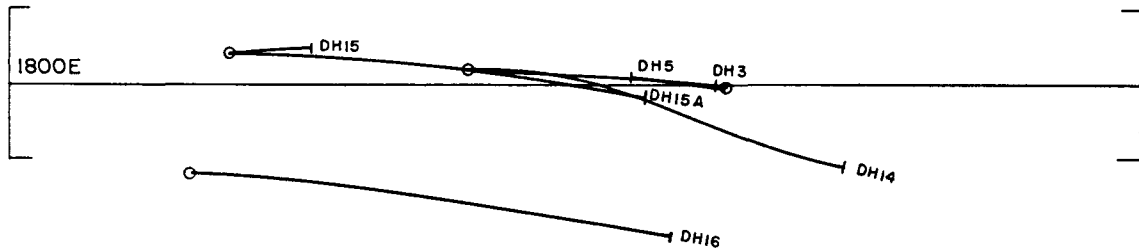
Initially, Au analyses had been undertaken using the BLEG1 scheme with a detection limit of 10ppb however this was found to be too high and subsequent work using the BLEG1B scheme with a detection limit of 0.05ppb was found to correlate well with anomalous Cu values (refer to Appendix 1 for analytical results and location diagram).

Further work is proposed to be directed at following up these target areas with reverse circulation drilling directed at depths of between 40m - 80m below surface.

2.2 NAVIGATOR 6 - DRILLING

The Navigator 6 prospect is located immediately to the east of the White Devil deposit (see diagram TF4458) and encompasses all ground between tenure held by Poseidon Gold (MLC554) and the eastern boundary of ERL74. Several drilling programs have been initiated in the vicinity of MLC554 in order to follow up the possibility of extensions to the White Devil lode system, the most recent attempt being during the second tenure year for ERL74 when DH14 intersected a zone of poorly mineralised Veined and Altered Sediments approximately 100m below surface. Evaluation of the geological and downhole magnetic data from this hole indicated that a more substantial development of the lode system, which would take the form of an ironstone pod together with veined and altered sediments, might be present below and slightly to the south of DH14 (refer to Appendix 2 for downhole data).

Drillhole DH15 was commenced on 22/7/90 and directed at a target located 200m vertically below grid point 1815E/1190N (see diagram TF4457). The hole was abandoned at a depth of 66m after experiencing excessive early deviation. A second attempt directed at the same target (DH15A) was collared on 24/7/90 and was terminated on 4/8/90 at a downhole depth of 269m. Approximately 55m of massive and veined ironstone was intersected between 204.9m and 260.05m with the most significant analytical result being 8m @ 20.7ppm Au (log average) for the interval 216m - 224m and contained within Veined and Brecciated Sediments (see Appendix 3 for Drillhole Logs). Corresponding copper and bismuth results were only slightly above background levels and reflected generally low to trace amounts of sulphides observed in the core.



-  Ironstone
-  Mineralisation
-  Significant Result Analytical (log average)



DARWIN

GEOLOGIST RJL

DATE 30/8/90

DRAWN KAB

CHECKED

GEOPEKO

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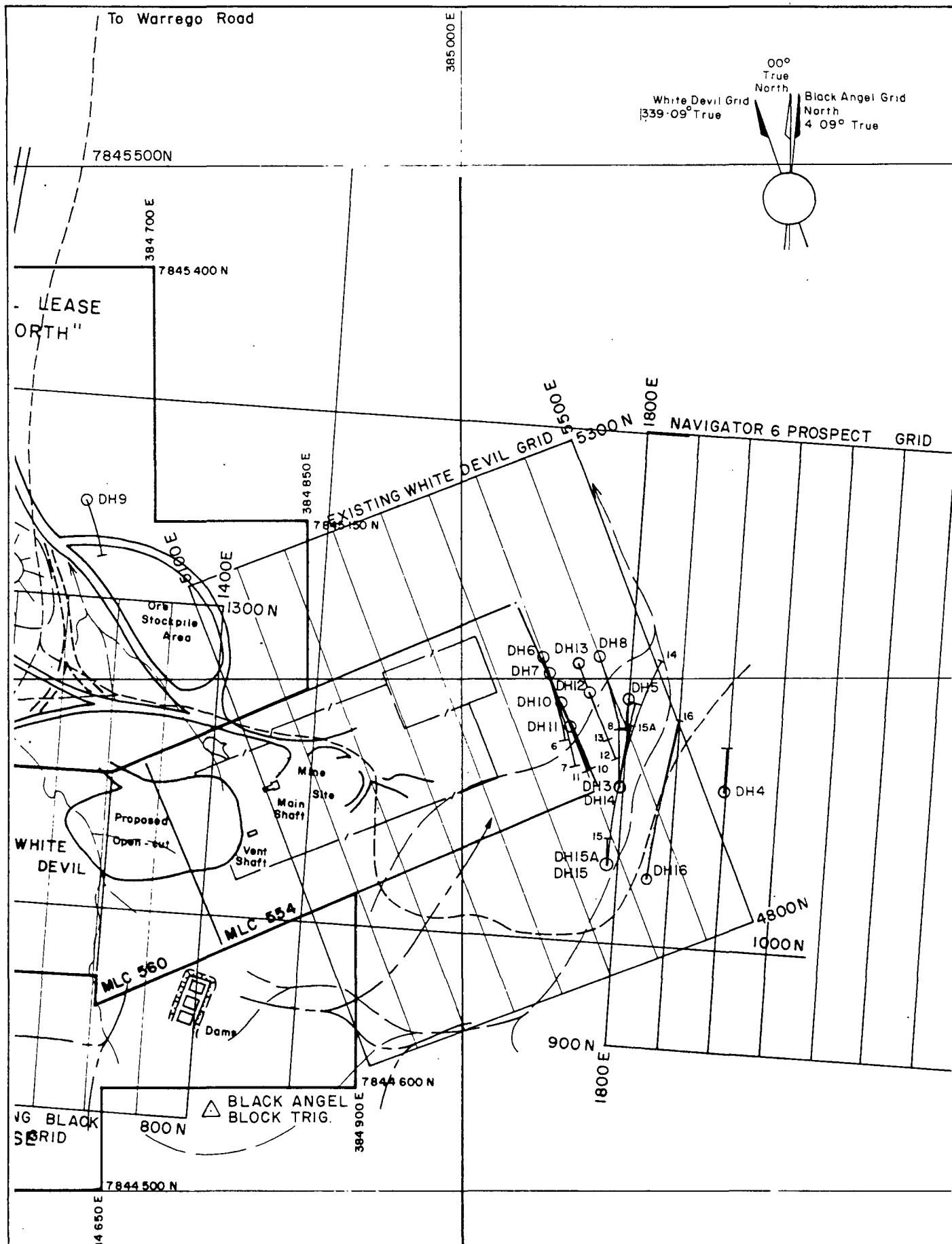
SCALE 1:2500

MAP REF. TENNANT CREEK SE53-14

NAVIGATOR 6 / WHITE DEVIL
1800E CROSS SECTION

PROJECT

DWG NO. TF4457



- Vehicle Track
- - - Watercourse
- Prospect grid line
- Plan view of Drillhole



DARWIN

GEOLOGIST RJL

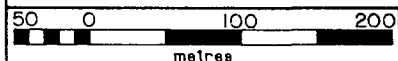
DATE 31/8/90

DRAWN KAB

CHECKED

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SCALE
1:5000

MAP REF. SE53-14 TENNANT CREEK 5659-11-SE

**WHITE DEVIL - NAVIGATOR 6
DRILLHOLE LOCATIONS**

PROJECT NAVIGATOR 6

DWG NO. TF 4458

Geophysical modelling of downhole magnetic data from this hole was inconclusive in directing further drilling since mineralisation was principally contained within a veined magnetite system which did not produce a magnetic field capable of simple resolution. As available ground to the west was limited by MLC554, a new target zone was selected approximately 50m to the east, and at a similar depth below surface, to the intersection made by DH15A.

Drilling of a percussion/diamond hole (DH16) was commenced in October and passed through Veined and Brecciated Sediments, similar to those found in DH15A, prior to being terminated in relatively unaltered sediments at a downhole depth of 303m (see Appendix 3 for Drillhole Logs).

As with DH15A, the most significant mineralisation was contained within fine (0.1 - 1cm) late stage veins composed of varying abundances of quartz, chlorite, and magnetite. Within these veins sericite was occasionally observed as an accessory while sulphides appeared in only trace amounts.

The most significant analytical result occurred in the interval 244 - 247m which returned 3m @ 1.7ppm Au, 36ppm Cu, and 25ppm Bi

General vein orientation obtained through oriented core measurements was 70 - 80 degrees toward approximately 170 degrees grid and may represent local strain fracturing from thrusting movements along the more regional White Devil Shear structure.

Data collected from a downhole magnetic survey conducted along DH16 reflected the abundance and erratic distribution of magnetite within the system and has not yet been useful in providing any meaningful model of the potential extensions to the lode. Due to the nature of the hosting system it therefore appears unlikely that downhole magnetics will be able to provide anything other than broad targetting information.

Further evaluation of this prospect area will be directed at integrating both geophysical and geological data in an attempt to establish the size parameters of the mineralised system.

Refer to Appendix 4 for drillhole plan and cross section.

2.3 EXPENDITURE

Expenditure on exploration within ERL74 for the 12 month period to the 31 December 1990, being the closest statement period for which Geopeko have collated costs, is \$115108 the breakdown of which is as follows:

Category	Expenditure(\$)
Salaries - Geologists	12593
Geophysicists	3960
Technicians	9391
Field Asst.	2252
Other	1244
Tenement Expenses	2660
Vehicles	2979
Travel and Accommodation	2100
Freight and Supplies	545
Sustenance	550
Premises	2869
Drilling - Vacuum	2070
Percussion	8256
Diamond	32009
Consultants and Maps	347
Analytical Costs	7931
Geophysical Instrument Hire	713
Survey and Gridding	97
Base Support Costs	13711
Management Charge	8831
Total	\$115108

The corresponding covenant for the third year of exploration was \$46000.

2.4 CONCLUSIONS

- (a) shearing, thrusting and the associated development of fracture zones plays a significant role in the localisation of mineralisation in the White Devil and Black Angel areas
- (b) coherent zones of shallow anomalous mineralisation can be detected using bedrock geochemistry and threshold analytical values of approximately 30ppm Cu and 1ppb Au
- (c) the White Devil lode system of Au mineralisation contained within veined and brecciated sediments extends at least 100m into the Navigator 6 prospect area and is yet to be completely defined
- (d) gold, occurring as fine (up to 1mm) disseminated particles, is hosted within narrow, steeply south dipping quartz / chlorite / magnetite veins located immediately to the north of a lens of ironstone at the Navigator 6 prospect
- (e) due to the abundance and wide spread distribution of magnetite in the Navigator 6 lode system the application of downhole magnetics to the interpretation of lode parameters may be limited

2.5 RECOMMENDATIONS

- (a) undertake detailed mapping in the licence area with particular regard to those features which would contribute to the understanding its structural setting
- (b) extend the program of vacuum drilling to the south and west of the Black Angel Mine to define areas of Au/Cu anomalism which might be followed up by shallow reverse circulation drilling
- (c) drill at least two further percussion/diamond drillholes directed at target zones approximately 50m below DH15A and 50m above DH16 in order to define grade continuity

3. PROPOSED PROGRAM FOR THE FOURTH LICENCE YEAR

3.1 PROPOSED EXPLORATION PROGRAM

The proposed exploration work program for the period 24/12/90 to 23/12/91 will be as follows:

- (a) undertake detailed mapping in order to develop a better stratigraphic and structural model for the area
- (b) complete the development of a comprehensive set of map base sheets at both 1:2500 and 1:5000 scale for presentation of geological and geochemical data
- (c) extend surface chip sampling to cover remaining ironstone outcrops and shear structures
- (d) undertake vacuum drill bedrock sampling traverses in the Black Angel area
- (e) drill 2-3 shallow reverse circulation drillholes at geochemically anomalous target zones in the Black Angel area
- (f) drill 2 percussion/diamond holes at the Navigator 6 prospect in the vicinity of DH's 15A and 16

3.2 PROPOSED BUDGET - 4TH YEAR

In order to complete the program outlined above a budget of \$62000 would be made available, the breakdown of which is as follows:

Category	Expenditure (\$)
Salaries and Wages	13000
Vehicles	2000
Field Supplies	1000
Drilling - Vacuum	2000
- Reverse Circulation	5000
- Percussion	8000
- Diamond	22000
Analytical Costs	4000
Geophysical Inst. Hire	1000
Administration	4000
TOTAL	\$62000

REPORT TITLE ANNUAL REPORT FOR EXPLORATION
RETENTION LICENCE NO. 74

AUTHOR(S) LOVE, R.J.

PUBLISHER GEOPEKO - (A DIVISION OF PEKO EXPLORATION LTD)

PLACE OF PUB'N DARWIN NT DATE OF PUB'N FEB91

PAGES OF TEXT 11 NO. AND PAGES OF APPENDICES 4 /

NO.'S OF (1)PHOTOS _____ (2)DIAGRAMS 4 (3)TABLES _____

ACCOMPANIMENTS (4)PLANS 3 (5)GRAPHS _____ (6)LOGS 3

LICENCE NO.(S) ERL 74 PROJECT YEARS(S) 1989 - 1990

LICENCEE(S) PEKO WALLSEND OPERATIONS LTD

JOINT VENTURE(S) _____

OPERATOR(S) GEOPEKO

1:1 000 000 map name(s) and No.(s) _____

1: 250 000 map name(s) and No.(s) TENNANT CREEK SE53-14

1: 100 000 map name(s) and No.(s) TENNANT CREEK 5758

1: 50 000 map name(s) and No.(s) SHORT RANGE 2

PROSPECT NAME NAVIGATOR 6 / WHITE DEVIL

SITE LOCATION LAT: _____ LONG: _____

EAST: _____ NORTH: _____

TECTONIC UNIT TENNANT CREEK BLOCK

MAJOR TERM ☒ METALS ☐ NONMETALS ☐ PETROLEUM ☐ OTHER

MINOR TERMS

<u>DRILLING</u>	<u>AERIAL/GRND GEOPHYSICS</u>	<u>GEOCHEMISTRY</u>	<u>GENERAL</u>
☒ DIAMOND	☒ MAGNETIC	☐ DRAINAGE TESTING	☐ GEOL MAPPING
☒ PERCUSSION	☐ RADIOACTIVITY	☒ DRILLCORE ANALYSIS	☐ PHOTOGEOLOGY
☒ AUGER	☐ EM SURVEY	☒ ASSAYING	☐ GRIDGING
☐ ROTARY	☐ IP SURVEY	☒ GEOCHEMICAL ANOM	☐ METHODS
<u>COMMODITIES</u>	☐ SEISMIC	<u>SAMPLING</u>	☐ REGIONAL GEOL
☐ U ☒ Au ☐ Ag	☐ REISTIVITY	☐ STREAM SEDIMENT	☒ LOCAL GEOLOGY
☒ Cu ☐ Pb ☐ Zn	☐ GRAVITY	☒ SOIL	☐ STRATIGRAPHY
☐ Sn ☐ W ☐ Dmd	☒ GEOPHYSICAL ANOM	☐ ROCK CHIP	☒ RECONNAISSANCE
☐ BI Other		☐ WATER	☒ LOGGING

OTHER TERMS : LOWER PROTEROZOIC/WARRAMUNGA GROUP/IRONSTONES/DOWNHOLE MAGNETICS

NOTES

ABSTRACT

DEPARTMENT USE ONLY

REPORT _____ SECURITY _____ TEXT

LOCATION _____ ENTRY NO. _____

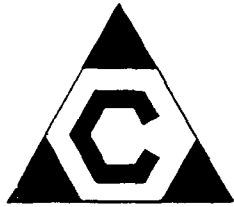
INDEXED BY/DATE _____ CHECKED BY/DATE _____

APPENDIX 1

Black Angel Vacuum Drilling

(a) Analytical Results

(b) Surface Geology and Sample Location
Diagram (Plan No. TF4429a)



CLASSIC LABORATORIES LTD

Incorporated in WA; a wholly owned subsidiary of Amdel Ltd

Postal Address: P.O. Box 58, Berrimah, Northern Territory 0828
Marjorie Street., P.O. Box 58, Berrimah, Northern Territory 0828
Telephone: (089) 32 2637 Facsimile: (089) 32 3531

2nd August 1990

Geopeko
PO Box 39443
WINNELLIE NT 0821

Attention: R Love

FINAL ANALYSIS REPORT

YOUR ORDER NO. 36874

OUR REPORT NO. ODN0923

Samples received: 9/7/90

Results reported: 30/7/90

No. of Samples : 288

Report pages : 1 to 1

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

Alan Ciply
Manager

Report Analyte Codes:

N.A. - Not Analysed.
N.D. - Not Determined
L.N.R. - Listed But Not Received..
I.S. - Insufficient Sample for
Analysis

Distribution Codes:

CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

"RELIABLE ANALYSES AT COMPETITIVE COST"



CLASSIC LABORATORIES LTD

Job: ODN0923

O/N: 36874

Final

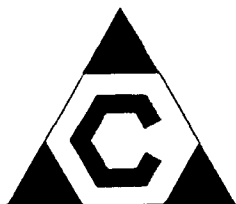
ANALYTICAL REPORT

BLACK ANGEL

Vacuum Drilling

SAMPLE	Cu	Bi	Au	Coordinate	
				E	N
F54514	13	<10	0.76	300	900
F54515	12	<10	0.28		910
F54516	11	<10	0.44		920
F54517	13	<10	0.84		930
F54518	6	<10	0.28		940
F54519	9	<10	0.40		950
F54520	12	<10	0.52		960
F54521	12	<10	0.36		970
F54522	15	<10	0.64		980
F54523	13	<10	0.52		990
F54524	15	<10	0.16		1000
F54525	16	<10	0.36		1010
F54526	30	<10	1.12		1020
F54527	23	<10	1.11		1030
F54528	50	<10	1.12		1040
F54529	19	<10	0.84		1050
F54530	22	<10	0.84		1060
F54531	49	<10	0.28		1070
F54532	19	<10	0.68		1080
F54533	16	<10	0.64		1090
F54534	21	<10	0.60		1100
F54535	21	<10	1.04		1110
F54536	22	<10	0.72		1120
F54537	26	<10	0.88		1130
F54538	20	<10	0.52		1140
F54539	20	<10	1.08		1150

UNITS	ppm	ppm	ppb
DET.LIM	2	10	0.05
SCHEME	AAS1	AAS1	BLEG1B



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Postal Address: P.O. Box 58, Berrimah, Northern Territory 0828
Marjorie Street, Berrimah, Northern Territory 0828
Telephone: (089) 32 2637 Facsimile: (089) 32 3531

Geopeko
PO Box 396
TENNANT CREEK NT 0861

FINAL ANALYSIS REPORT

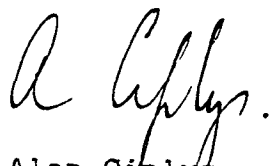
YOUR ORDER NO: 36845

OUR REPORT NO: ODN0382

Samples received: 4.4.90
No. of Samples : 104

Results reported: 18.4.90
Report pages : 1 to 5

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.


Alan Ciplys
Manager

Report Analyte Codes:

N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample for
Analysis

Distribution Codes:

CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

"RELIABLE ANALYSES AT COMPETITIVE COST"



ANALYTICAL REPORT

SAMPLE	Au	Cu	Bi	Pb	Zn	BLACK	ANGEL	
F 53863	<10	28	<10	<5	3	900E	900N	2-3
F 53864	<10	13	<10	<5	<2	900E	875N	2-3
F 53865	<10	39	<10	<5	<2	900E	850N	2-3
F 53866	<10	12	<10	<5	<2	900E	825N	2-3
F 53867	<10	11	<10	<5	6	900E	800N	2-3
F 53868	<10	17	<10	<5	7	900E	775N	2-3
F 53869	<10	5	<10	<5	3	900E	750N	2-3
F 53870	<10	4	<10	<5	2	900E	725N	2-3
F 53871	<10	5	<10	<5	<2	900E	700N	2-3
F 53872	<10	7	<10	<5	<2	900E	675N	2-3
F 53873	<10	9	<10	<5	<2	900E	650N	2-3
F 53874	<10	8	<10	<5	<2	900E	625N	2-3
F 53875	<10	3	<10	<5	<2	900E	600N	2-3
F 53876	<10	2	<10	<5	<2	900E	575N	2-3
F 53877	<10	7	<10	<5	<2	900E	550N	2-3
F 53878	<10	2	<10	<5	<2	900E	525N	2-3
F 53879	<10	<2	<10	<5	<2	900E	500N	2-3
F 53880	<10	45	<10	5	<2	700E	900N	2-3
F 53881	<10	5	<10	<5	4	700E	875N	2-3
F 53882	<10	6	<10	<5	5	700E	850N	2-3
F 53883	<10	5	<10	<5	6	700E	825N	2-3
F 53884	<10	9	<10	<5	7	700E	800N	2-3
F 53885	<10	5	<10	<5	9	700E	775N	2-3
F 53886	<10	5	<10	<5	7	700E	750N	2-3
F 53887	<10	5	<10	6	9	700E	725N	2-3
UNITS SCHEME	ppb BLEG1	ppm AAS1	ppm AAS1	ppm AAS1	ppm AAS1			



ANALYTICAL REPORT

SAMPLE	Au	Cu	Bi	Pb	Zn	BLACK ANGEL	
F 53888	<10	12	<10	<5	13 700E	700N	2-3m
F 53889	<10	8	<10	<5	12 700E	675N	2-3m
F 53890	<10	13	<10	<5	12 700E	650N	2-3m
F 53891	<10	6	<10	<5	8 700E	625N	2-3m
F 53892	<10	6	<10	<5	9 700E	600N	2-3m
F 53893	<10	48	<10	<5	10 700E	575N	2-3m
F 53894	<10	4	<10	<5	7 700E	550N	2-3m
F 53895	<10	6	<10	<5	13 700E	525N	2-3m
F 53896	<10	12	<10	<5	23 700E	500N	2-3m
F 53897	<10	6	<10	<5	11 700E	475N	2-3m
F 53898	<10	4	<10	<5	13 700E	450N	2-3m
F 53899	<10	5	<10	5	10 700E	425N	2-3m
F 53900	<10	4	<10	<5	3 700E	400N	2-3m
F 53901	<10	17	<10	<5	11 490E	1200N	2-3m
F 53902	<10	34	<10	<5	9 490E	1175N	2-3m
F 53903	<10	18	<10	<5	4 490E	1150N	2-3m
F 53904	<10	21	<10	5	7 490E	1125N	2-3m
F 53905	<10	21	<10	5	7 490E	1100N	2-3m
F 53906	<10	16	<10	8	3 490E	1075N	2-3m
F 53907	<10	84	<10	6	4 490E	1050N	2-3m
F 53908	<10	25	<10	<5	5 490E	1025N	2-3m
F 53909	<10	10	<10	<5	4 490E	1000N	2-3m
F 53910	<10	8	<10	<5	5 490E	975N	2-3m
F 53911	<10	13	<10	8	13 490E	950N	2-3m
F 53912	<10	16	<10	<5	11 490E	925N	2-3m

UNITS
SCHEMEppb
BLEG1ppm
AAS1ppm
AAS1ppm
AAS1ppm
AAS1



ANALYTICAL REPORT

SAMPLE	Au	Cu	Bi	Pb	Zn	BLACK ANGEL
F 53913	<10	8	<10	9	4	490E 900N 2-3m
F 53914	<10	13	<10	13	15	490E 875N 2-3m
F 53915	<10	6	<10	6	5	490E 850N 2-3m
F 53916	<10	7	<10	<5	2	490E 825N 2-3m
F 53917	<10	32	<10	12	28	490E 800N 2-3m
F 53918	<10	8	<10	10	7	490E 775N 2-3m
F 53919	<10	11	<10	8	9	490E 750N 2-3m
F 53920	<10	11	<10	<5	7	490E 725N 2-3m
F 53921	<10	20	<10	13	15	490E 700N 2-3m
F 53922	<10	155	<10	26	29	490E 675N 2-3m
F 53923	<10	13	<10	18	15	490E 650N 2-3m
F 53924	<10	11	<10	8	8	490E 625N 2-3m
F 53925	<10	13	<10	18	11	490E 600N 2-3m
F 53926	<10	165	<10	16	21	490E 575N 2-3m
F 53927	<10	19	<10	19	8	490E 550N 2-3m
F 53928	<10	10	<10	19	6	490E 525N 2-3m
F 53929	<10	14	<10	15	4	490E 500N 2-3m
F 53930	<10	8	<10	15	5	490E 475N 2-3m
F 53931	<10	7	<10	14	8	490E 450N 2-3m
F 53932	<10	16	<10	12	21	490E 425N 2-3m
F 53933	<10	10	<10	5	8	490E 400N 2-3m
F 53934	<10	17	<10	9	2	490E 375N 2-3m
F 53935	<10	3	<10	<5	3	490E 350N 2-3m
F 53936	<10	10	<10	<5	3	490E 325N 2-3m
F 53937	<10	15	<10	<5	4	490E 300N 2-3m

UNITS
SCHEMEppb
BLEG1ppm
AAS1ppm
AAS1ppm
AAS1ppm
AAS1



ANALYTICAL REPORT

SAMPLE	Au	Cu	Bi	Pb	Zn	BLACK ANGEL	
F 53938	<10	2	<10	<5	3	300E 200N	2-3m
F 53939	<10	4	<10	<5	4	300E 225N	2-3m
F 53940	<10	3	<10	<5	4	300E 350N	2-3m
F 53941	<10	9	<10	16	19	300E 275N	2-3m
F 53942	<10	6	<10	9	7	300E 300N	2-3m
F 53943	<10	5	<10	10	6	300E 325N	2-3m
F 53944	<10	7	<10	9	7	300E 350N	2-3m
F 53945	<10	5	<10	12	5	300E 375N	2-3m
F 53946	<10	2	<10	10	5	300E 400N	2-3m
F 53947	<10	3	<10	9	5	300E 425N	2-3m
F 53948	<10	9	<10	8	6	300E 450N	2-3m
F 53949	<10	38	<10	21	5	300E 475N	2-3m
F 53950	<10	33	<10	14	2	300E 500N	2-3m
F 54004	<10	26	<10	12	2	300E 525N	2-3m
F 54005	<10	23	<10	21	6	300E 550N	2-3m
F 54006	<10	15	<10	15	5	300E 575N	2-3m
F 54007	<10	9	<10	9	6	300E 600N	2-3m
F 54008	<10	8	<10	11	5	300E 625N	2-3m
F 54009	<10	10	<10	13	12	300E 650N	2-3m
F 54010	<10	10	<10	10	6	300E 675N	2-3m
F 54011	<10	33	<10	24	18	300E 725N	2-3m
F 54012	<10	20	<10	14	16	300E 750N	2-3m
F 54013	<10	8	<10	14	10	300E 775N	2-3m
F 54014	<10	9	<10	11	8	300E 800N	2-3m
F 54015	<10	8	<10	14	8	300E 825N	2-3m

UNITS
SCHEMEppb
BLEG1ppm
AAS1ppm
AAS1ppm
AAS1ppm
AAS1



CLASSIC LABORATORIES LTD

Job: ODN0382
O/N: 36845

ANALYTICAL REPORT

SAMPLE	Au	Cu	Bi	Pb	Zn	BLACK ANGEL
F 54016	<10	8	<10	16	6	300E 850N 2-3m
F 54017	<10	9	<10	22	8	300E 875N 2-3m
F 54018	<10	8	<10	15	7	300E 900N 2-3m
F 54019	<10	13	<10	13	7	300E 700N 2-3m

UNITS
SCHEME

ppb
BLEG1

ppm
AAS1

ppm
AAS1

ppm
AAS1

ppm
AAS1

	Sealed Road
	Vehicle Track
	Fence
	Trigonometrical Station (Name A H D in metres)
	Watercourse
	Prospect or Mine
	Open Cut or Quarry

Lease Boundary with unsurveyed corner peg
○ Surveyed Corner Peg
Leasing MCC No Mineral Claim
MLC No Mineral Lease
EMPC No Extractive Mineral Permit
HLDC No Holding
A No Authority

	Lithological Boundary	pos'n known
	Lithological Boundary	pos'n approx
	Lithological Boundary	inferred
	Lode Boundary	
	Base of Deccan	
	Fault	position known
	Fault	position approx
	Fault	inferred
	Relative movement of Fault	horizontal
		up
		down
	Unconformity	
	Trend Line	
	Shear Zone	
	Dike or Vein (q = quartz)	

- Vertical
- Horizontal
- Strike and Dip measured
- Overturned Strata
- Top of Bed with facing

	Vertical
	Horizontal
	Strike and Dip - measured
	Strike indeterminate

 Vertical
 Horizontal
 Strike and Dip - measured

- Vertical
- Horizontal
- Strike and Dip measured
- Direction and Plung of Line

— x — Copper Ore Boundary
— ○ — Gold Ore Boundary (Low)
— ⊙ — Gold Ore Boundary (High)

Entry or Exit into
section of Projected Outline

Hole No.
Ranking | Depth

Order of Assay Results

3L Cross Section of Drive

[illegible]

NOTE: TOPOGRAPHIC INFORMATION
COURTESY OF AUSTRALIAN
DEVELOPMENT LIMITED

A 3x3 grid of squares. The central square is highlighted with a thicker border. The grid is composed of 9 squares in total, arranged in 3 rows and 3 columns.

[illegible]

Geo	RJL
Drawn	TLW
Checked	
Date	AUGUST 19

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

Scale 1: 5000

0 20 40 60 80 100 200 400 600 metres

PROSPECT GRID AUSTRALIAN HEIGHT DATUM	
Map Ref	TENNANT CREEK SE53-14

CR9 1 / 115 ERL 74

POSPECT GRIDS AND SURFACE GEOLOGY

PROJECT	Central Field	Dwg. No.	TF 4429 /abc
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APPENDIX 2

Navigator 6

Downhole Geophysical Data - DH14

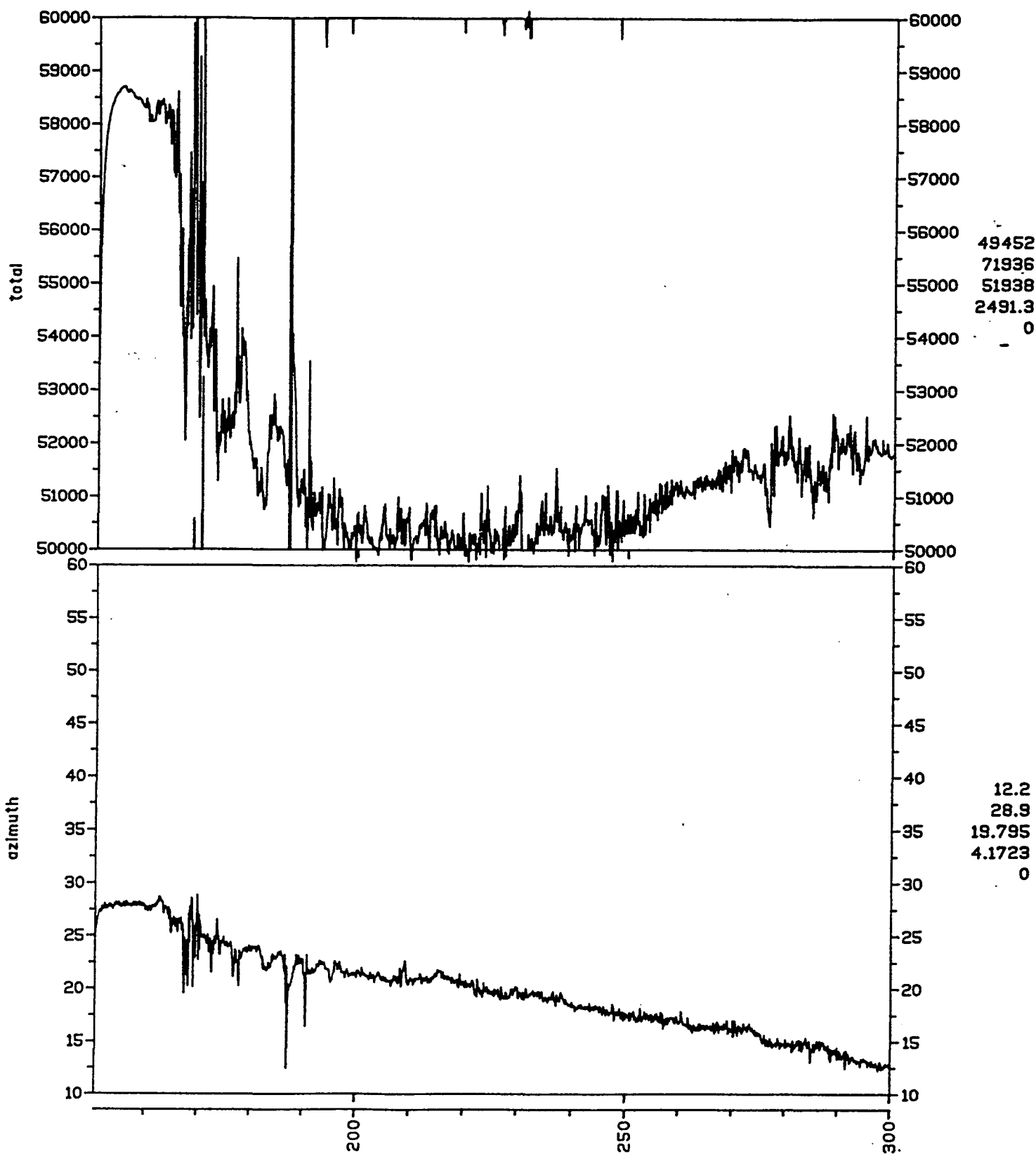


Fig 1

Navigator 6 DDH 14
 Profiles of Total Magnetic Intensity
 and Magnetic Azimuth

950RL

900RL

850RL

800RL

750RL

700RL

650RL

600RL

1100N

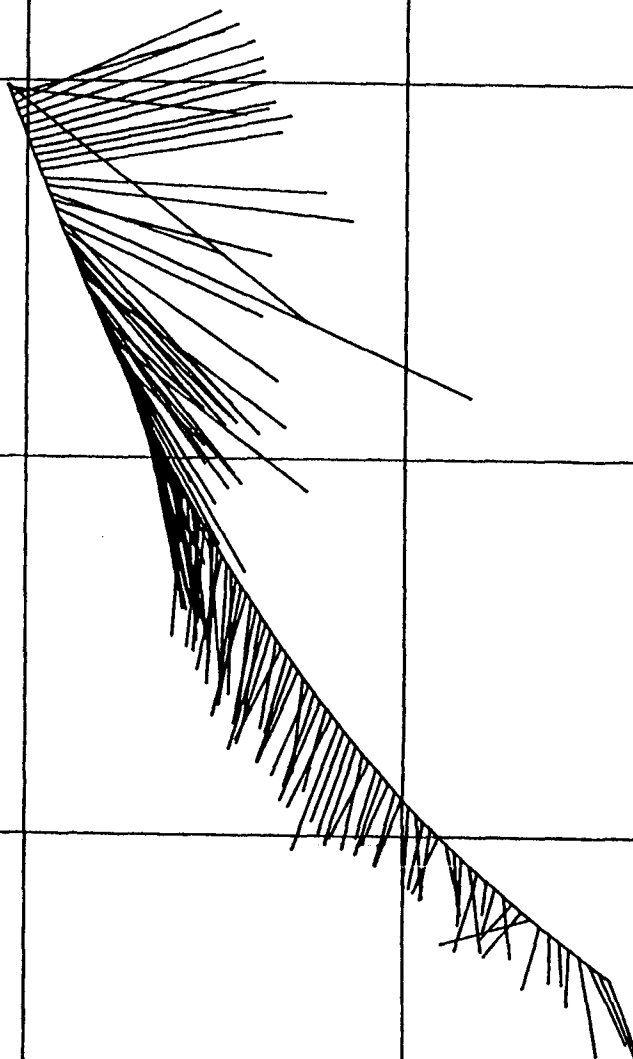
1150N

1200N

1250N

1300N

1350N



1cm : 2000nT

Fig 2

 DARWIN		GEOPEKO A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.	
Geo		Map Ref. TENNANT CREEK SE53-14	
Drawn		Navigator 6 DDH14	
Checked		Measured Anomalous Magnetic Field Vectors	
Date		Dwg. No	

1700E

600RL

650RL

700RL

750RL

800RL

850RL

900RL

950RL

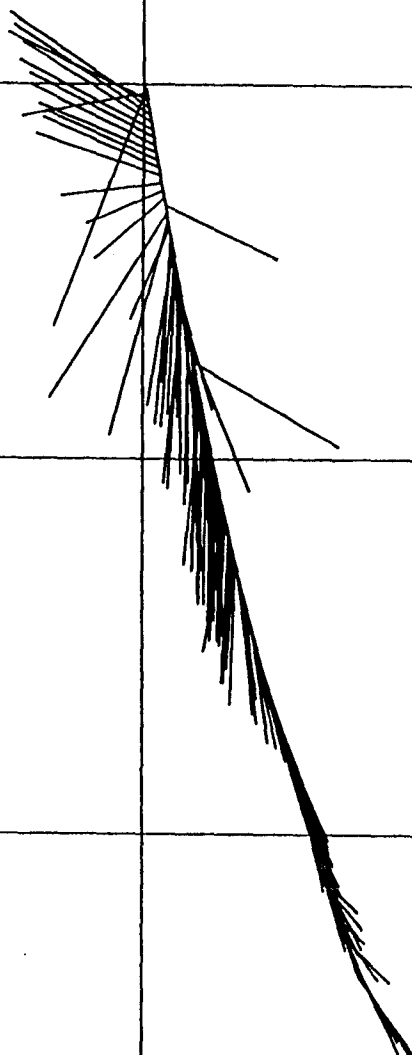
1750E

1800E

1850E

1900E

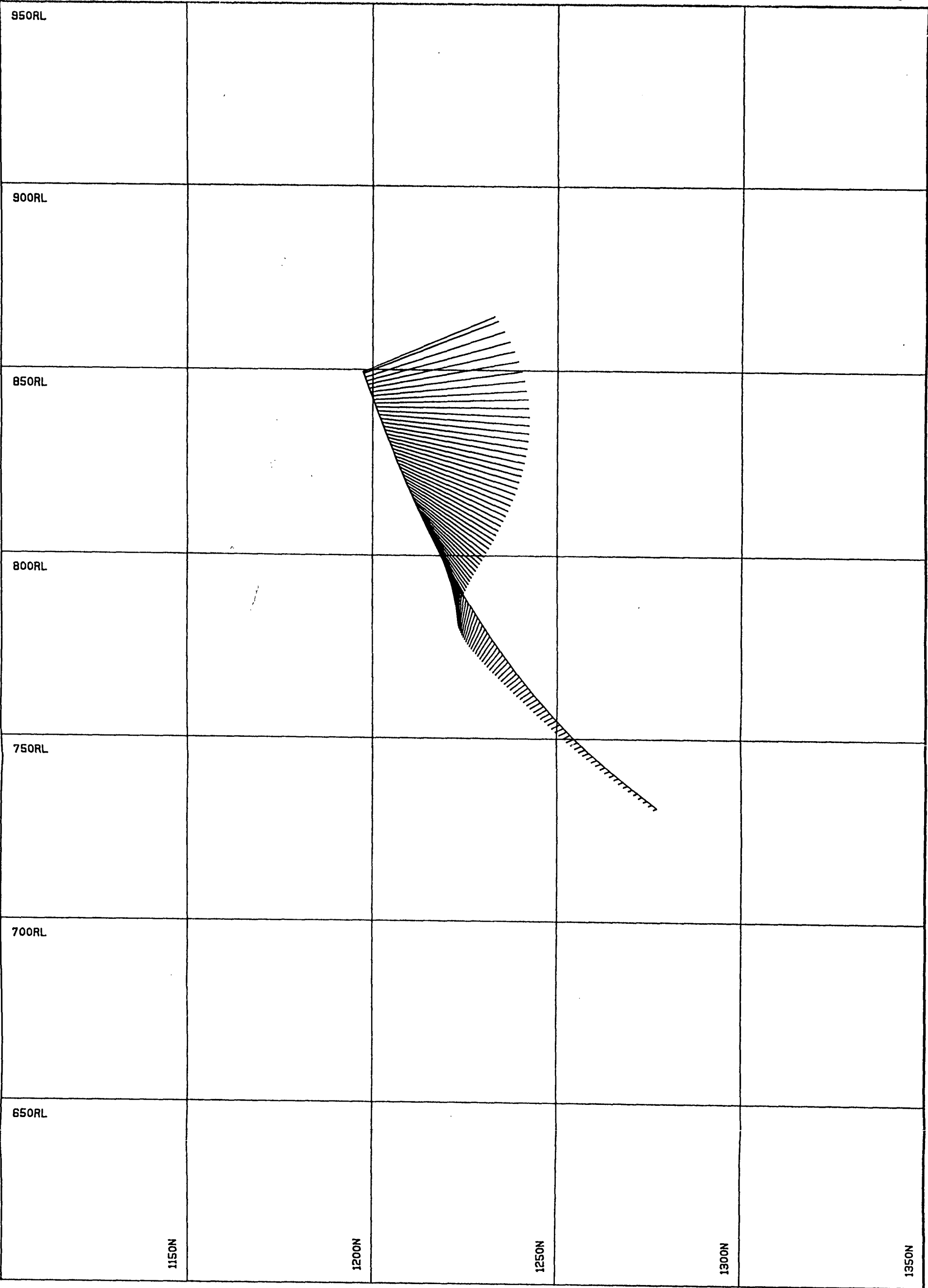
1950E



1cm : 2000nT

Fig 3

 DARWIN	GEOPEKO A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.	
	Scale 1:1000 20 0 20 40 60 metres	
Geo	Map Ref.	TENNANT CREEK SE53-14
Drawn	Navigator 6 DDH 14	
Checked	Measured Anomalous Magnetic Field Vectors	
Date		Dwg. No



600RL

Ellipsoid Parameters

Co-ords of centre : 1185N / 1815E / 810RL

a , b , c : 50 , 20 , 10

90° dip striking E-W

K : .2 cgsu

1cm : 2000nT

Fig 4



DARWIN

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:1000

20 0 20 40 60 metres

Geo	Map Ref.	TENNANT CREEK SE53-14
Drawn	Navigator 6 DDH 14	
Checked	Calculated Magnetic Field Vectors	
Date		Dwg. No

1700E

1750E

1800E

1850E

1900E

1950E

900RL

850RL

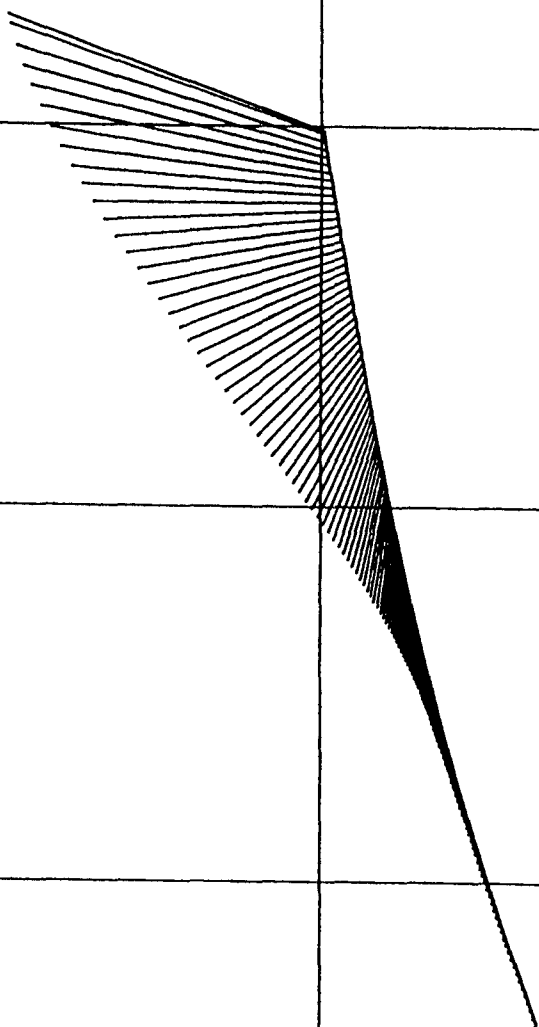
800RL

750RL

700RL

650RL

600RL



Ellipsoid Parameters

Co-ords of centre : 1185N / 1815E / 810RL

a , b , c : 50 , 20 , 10

90° dip striking E-W

K : .2 cgsu

1cm : 2000nT

Fig 5

		GEOPEKO A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.	
Geo		Map Ref.	
Drawn		TENNANT CREEK 9E53-14	
Checked		Navigator 6 DDH 14	
Date		Calculated Magnetic Field Vectors	
		Dwg. No	

Scale 1:1000
20 0 20 40 60 metres

APPENDIX 3

Navigator 6
Geological Logs DH15/DH15A/DH16



GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DRILLHOLE SUMMARY SHEET

PROSPECT/MINE : NAVIGATOR 6/WHITE DEVIL HOLE NO. : DH15

LOCATION : East of White Devil Mine

Purpose of Hole : Test ground beneath DH14

Proposed Collar Parameters

Easting : 1790
Northing : 1075
Azim (grid) : 360
Azim (mag) :
Dip : -70°

Proposed by : T. Hoschke

Surveyed Collar

Easting : 1790
Northing : 1075
R.L. : 993
Azim (grid) : 360
Azim (mag) :
Dip :

Surveyed by : R. Maher

Target Parameters

Easting : 1810
Northing : 1200

Depth below surface : 250m
Hole depth to target :

Drilling Technique

Interval(m)

Hole Size

Percussion

0 - 66

4½"

Actual Final Depth : 66m Date Commenced : 22/7/90 Drilled by : Stadcote

Terminated by : R. Maher Date Completed : 23/7/90 Rig Type : GK850

Logged by :

Reason for Termination : Excessive deviation of hole

Economic Summary :

Lode Type

Interval(m)

Significant Intersections

General Remarks : Hole experienced excessive lift. Terminated to start DH15A.

1Ver3.1

G E O P E K O

2/ 1/1984 11:2

*** PROSPECT : NAVIGATOR 6 ***
*** HOLE : DH15 ACTUAL ***
Collar Coordinates 1790.00 E 1075.00 N 993.0 RL
Azimuth correction = .00
Interpolation inc = 5.0

SURVEYS (Azimuth wrt Grid North)

DEPTH	DIP	AZIMUTH	EASTING	NORTHING	RL
.00	-70.00	355.00	1790.00	1075.00	993.00
25.00	-69.50	355.00	1789.23	1083.37	969.46
66.00	-56.50	360.00	1788.38	1101.28	932.69

INTERSECTIONS along the EASTING plane
Depth Easting Northing R.L

.0	1790.00	1075.00	993.00
----	---------	---------	--------

INTERSECTIONS along the NORTHING plane
Depth Easting Northing R.L

15.0	1789.54	1080.00	978.83
42.4	1788.74	1090.00	953.34
63.6	1788.39	1100.00	934.70

INTERSECTIONS along the RL plane
Depth Easting Northing R.L

3.2	1789.90	1076.07	990.00
13.8	1789.58	1079.59	980.00
24.4	1789.25	1083.18	970.00
35.2	1788.93	1087.09	960.00
46.1	1788.65	1091.56	950.00
57.4	1788.44	1096.81	940.00



GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DRILLHOLE SUMMARY SHEET

PROSPECT/MINE : NAVIGATOR 6/ WHITE DEVIL HOLE NO. : DH15A

LOCATION : East of White Devil Mine

Purpose of Hole : Test ground beneath DH14 and pass through centre of magnetic anomaly

Proposed Collar Parameters

Easting : 1790
Northing : 1075
Azim (grid) : 355
Azim (mag) :
Dip : -76.5

Proposed by : R. Love/T. Hoschke

Surveyed Collar

Easting : 1790
Northing : 1075
R.L. : 933
Azim (grid) : 355
Azim (mag) :
Dip : -76.5

Surveyed by : R. Maher

Target Parameters

Easting : 1810
Northing : 1200

Depth below surface : 250m

Hole depth to target :

Drilling Technique

Interval(m)

Hole Size

Percussion
Diamond

0 - 102
102 - 269

4 1/2"
NQ

Actual Final Depth : 269 Date Commenced : 24/7/90 Drilled by : Stadcote

Terminated by : R. Love Date Completed : 4/8/90 Rig Type : GK850

Logged by : R. Love

Reason for Termination : Passed through lode zone and hole lifting toward DH14

Economic Summary :

<u>Lode Type</u>	<u>Interval(m)</u>	<u>Significant Intersections</u>
Quartz Chlorite Magnetite	204.9 - 209.1	
Veined and Brecciated Seds.	209.1 - 224.75	216-224, 8m @ 20.7g/t Au
Veined and Altered Seds.	224.75 - 260.05	239 -241, 2m @ 1.7g/t Au

General Remarks : Downhole magnetic survey indicated hole passed through approximate centre of magnetic anomaly.

*** PROSPECT : NAVIGATOR 6

*** HOLE : DH15A ACTUAL ***

Collar Coordinates 1790.00 E 1075.00 N 993.0 RL

Azimuth correction = .00

Interpolation inc = 5.0

SURVEYS (Azimuth wrt Grid North)

DEPTH	DIP	AZIMUTH	EASTING	NORTHING	RL
.00	-76.50	355.00	1790.00	1075.00	993.00
30.00	-74.00	360.00	1789.70	1082.45	963.95
66.00	-67.00	364.00	1790.20	1094.39	930.01
102.00	-59.00	364.00	1791.33	1110.72	897.99
127.00	-56.00	365.50	1792.45	1124.18	876.95
167.00	-53.00	368.00	1795.19	1147.25	844.40
188.00	-51.50	369.00	1797.11	1159.97	827.79
244.00	-48.50	368.00	1802.49	1195.58	784.92
269.00	-47.00	368.00	1804.82	1212.22	766.41

INTERSECTIONS along the EASTING plane

Depth	Easting	Northing	R.L
.0	1790.00	1075.00	993.00
58.0	1790.00	1091.38	937.44
164.7	1795.00	1145.89	846.22
217.4	1800.00	1178.41	805.02

INTERSECTIONS along the NORTHING plane

Depth	Easting	Northing	R.L
20.7	1789.73	1080.00	972.90
54.1	1789.92	1090.00	941.02
79.6	1790.60	1100.00	917.67
100.6	1791.28	1110.00	899.19
119.4	1792.07	1120.00	883.25
137.4	1793.05	1130.00	868.41
154.7	1794.22	1140.00	854.26
171.6	1795.58	1150.00	840.73
188.1	1797.11	1160.00	827.75
204.1	1798.70	1170.00	815.24
219.9	1800.24	1180.00	803.11
235.5	1801.70	1190.00	791.34
250.7	1803.11	1200.00	779.90
265.7	1804.51	1210.00	768.82

INTERSECTIONS along the RL plane

Depth	Easting	Northing	R.L
3.1	1789.94	1075.72	990.00
13.4	1789.79	1078.18	980.00
23.7	1789.71	1080.77	970.00
34.1	1789.71	1083.62	960.00
44.6	1789.78	1086.80	950.00
55.2	1789.94	1090.38	940.00
66.0	1790.20	1094.40	930.00
77.0	1790.52	1098.89	920.00
88.2	1790.87	1103.92	910.00
99.7	1791.25	1109.52	900.00
111.4	1791.70	1115.65	890.00
123.3	1792.26	1122.15	880.00
135.4	1792.93	1128.90	870.00
147.6	1793.72	1135.89	860.00
160.0	1794.62	1143.10	850.00
172.5	1795.67	1150.55	840.00
185.2	1796.83	1158.24	830.00
198.0	1798.09	1166.16	820.00
211.0	1799.37	1174.29	810.00
224.0	1800.63	1182.62	800.00
237.2	1801.86	1191.16	790.00
250.6	1803.10	1199.91	780.00
264.1	1804.36	1208.92	770.00

GEOPEKO - DRILLING LOG SHEET

PROSPECT: NAVIGATOR 6

HOLE No: DH15A

PAGE 1 OF 7

GEOLOGICAL LOG	Mineral Percentages							Sample Number	Interval From To	Au	Cu	Bi
	Hemt	Magt	Qtz									
0 - 102 SILTSTONE Reddish-brown -light brown, oxidised coarse grained siltstone, minor intervals of smokey qtz (veins) and magnetite (possible contamination) 48m commencement of zone of partial oxidation Fragments becoming less oxidised with darker grey material appearing 84m Approx. 90% oxidised 102m END OF PERCUSSIONS 102 - 115.5 SILTSTONE / GREYWACKE Sequence of interbedded c.g. siltstone and fine grained greywacke 104m ; Bedding at 45° to core axis (CA) 107.1 - 107.5 Chlorite zone : dark greensih grey interval of chloritised and slightly magnetic siltstone. Fine fractures (<0.5mm) filled with darker chlorite and aligned at 50°CA, opposite to bedding angle 109.15 Brecciated zone : brecciated siltstone recemented in a chlorite matrix, 5cm wide, most significant brecciation adjacent to lower contact 23°CA. Oriented in same direction as bedding. 113.7 Bedding 50°CA		20	5						0 - 6			
			95						6 - 12			
			15						12 - 18			
			2						18 - 24			
			2						24 - 30			
			2						30 - 36			
									36 - 42			
									42 - 48			
									48 - 54			
									54 - 60			
									60 - 66			
									66 - 69			
									69 - 72			
									72 - 75			
									75 - 78			
									78 - 81			
									81 - 84			
									84 - 87			
									87 - 90			
									90 - 93			
									93 - 96			

GEOPEKO - DRILLING LOG SHEET			PROSPECT :		NAV 6		HOLE No :		DH15A		PAGE 2 OF 7			
GEOLOGICAL LOG			Mineral Percentages							Sample Number	Interval From To	Au	Cu	Bi
115.5 - 130 CHLORITE VEINED SILTSTONE														
Irregularly spaced chorite veins, occasionally containing hematite within a slightly chloritic siltstone/greywacke												115 - 116		
115.6 Chlorite vein, 25mm wide with disseminated hemt. towards centre of vein 55°CA. Some late stage qtz filling tension cracks in hemt.												116 - 117		
												117 - 118		
												118 - 119		
116.15 Chlorite vein, 20mm wide, 30°CA. Oriented at 90° to bedding												119 - 120		
												120 - 121		
												121 - 122		
116.9 - 117.2 Fracture zone: fractures up to 1mm wide at 60°- 65°CA as conjugate set.Slightly vuggy, partly filled with fine grained hematite												122 - 123		
												123 - 124		
117.7 Chlorite vein : 6cm wide with late stage / magnetite and milky quartz. 45°CA												124 - 125		
												125 - 126		
119.35 - 119.55 Chlorite vein, as above, with a 2cm wide hematite rich zone at 119.4 . Disseminated magnetite within lower portion of vein. Oriented at 87°toward 355°(corrected)												126 - 127		
												127 - 128		
Bedding (So) oriented at 64°toward 209°												128 - 129		
												129 - 130		
123.1 Fracture zone ; partially resealed fine (1mm) fractures at 40°CA														
123.9 Chlorite vein, 1cm wide, 25°CA														
124 Chlorite vein, 15mm wide, 28°CA. Lower contact tarnished to yellowish browncolour (oxidised chlorite?)														
125.6 Chlorite vein, 3cm wide, 43°CA. Veins oriented at 90°to bedding														
128.4 - 128.8 Chlorite vein containing disrupted and irregular veins of hematite/magnetite. Thin, 1mm vien of milky qtz on striated surface at 25°CA. Patches and zones of disseminated muscovite towards contacts with enclosing siltstone. Chlorite vein at 40 °CA														
129.1 Chlorite vein, 25mm wide, 35°CA														
131.2 Bedding at 45°CA														
130 - 171.55 SILTSTONE / GREYWACKE														
Interbedded, slightly chloritic, fine-medium grained siltstone and greywacke														
137 Bedding 42°CA														

GEOPEKO - DRILLING LOG SHEET			PROSPECT: NAV 6			HOLE No: DH15A			PAGE 3 OF 7			
GEOLOGICAL LOG	Mineral Percentages							Sample Number	Interval From To	Au ppm	Cu ppm	Bi ppm
138.9 - 140.4 Fractured interval, core broken along joints to form blocks averaging approximately 5cm wide. Surfaces oxidised												
142.6 - 144 Fractured interval, as above												
147 Bedding (So) oriented 45°toward 241°												
150.5 Chlorite veins 1 - 3mm wide at 40°CA												
152 Base of partial oxidation												
156 Bedding 56°CA												
159.6 Bedding (So) oriented 30°toward 246°												
162.4 Quartz vein, 5mm wide, lower contact striated at 90°to long axis of plane cutting core												
Vein orientation 82°toward 144°												
Striated pyrite on adjacent fracture surface												
171.5 Quartz filled fracture; 1-2mm wide; 30°CA												
171.55 - 174.25 VEINED AND ALTERED SILTSTONE												
Slightly chloritised siltstone with irregularly distributed chlorite/quartz filled micro fractures 0.1 - 1mm wide. Conjugate set at 55°and 25°CA												
174.24 - 188.5 SPOTTED QUARTZ CHLORITE												
Rounded clusts of quartz aggregates (quartz and intersitial chlorite) within an olive green chlorite matrix. Porphyritic texture.												
Paragenetic sequence possibly alteration and bleaching of siltstone followed by chlorisation along cleavage. Quartz clasts appear to be a late stage segregation of the chlorite event												
175.3 Bedding (?) 55°CA												
Vein boundary 30°CA												
177.0 Foliation 40°CA												
182.3 Fractures in slst lens 50°CA												
185.1 Foliation 66°toward 134°												
186.6 Ironstone lens at 35°to core axis (CA)												
187.75 Fracturing 35°CA												
								F54651	173 - 174	<0.01	6	<10
								F54652	174 - 175	<0.01	81	<10
								F54653	175 - 176	<0.01	16	<10
								F54654	176 - 177	<0.01	10	<10
								F54655	177 - 178	<0.01	5	<10
								F54656	178 - 179	<0.01	4	<10
								F54657	179 - 180	<0.01	<2	<10
								F54658	180 - 181	<0.01	9	10
								F54659	181 - 182	<0.01	3	<10
								F54660	182 - 183	<0.01	3	<10
								F54661	183 - 184	0.03	3	<10
								F54662	184 - 185	<0.01	3	<10
								F54663	185 - 186	<0.01	<2	<10
								F54664	186 - 187	<0.01	9	<10
								F54665	187 - 188	<0.01	3	<10

GEOLOGICAL LOG	Mineral Percentages							Sample Number	Interval From To	Au ppm	Cu ppm	Bi ppm
	Hemt	Magt	Qtz	Chl	Ser	Py	Cpy					
188.5 - 195 VEINED AND ALTERED SEDIMENT Moderately to strongly chloritised siltstone cut by thin (1-2mm) veins infilled with olive green chlorite, milky qtz and hematite/magnetite. Veins set at irregular intervals of 1-2cm apart and at angles of 50° - 90° to the core axis 188.7 Chlorite filled fine fractures 55°CA 192 Chlorite filled fine fracture 67° toward 151° 192 Bedding So 58° toward 250° 194 Chlorite filled shatter zone 65° toward 254°								F54667 F54668 F54669 F54670 F54671 F54672 F54673	188 - 189 189 - 190 190 - 191 191 - 192 192 - 193 193 - 194 194 - 195	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01	<2 7 2 3 4 3 3	<10 <10 <10 <10 <10 <10 <10
195 - 204.9 VEINED AND BRECCIATED SEDIMENT As above but with the veins up to 10cm wide and incorporating fragment rafts of siltstone. Angular rafts exhibit 1-2mm wide reaction rims of darker grey material. Veins appear to have hydraulically brecciated sediments. Veins incorporate impure milky qtz and fractured clasts of magnetite. Minor sericite as late stage alteration in vein 195.9 Bedding 66° toward 210° 196.8 Fracturing 64° toward 184° 197.3 Needles of hematite developing around margin of qtz 199.8 Vein foliation 45°CA 203 Vein foliation 55°CA 204.85 Sulphide vein 45°CA. Fine, late stage chlorite veins 52°CA (opposite sense to sulphide vein)		3 5 3 5 8 3 4 5 4 10	5 8 5 3 5 3 3 10 5 6	8 12 10 10 15 8 8 10 6 5				F54674 F54675 F54677 F54678 F54679 F54680 F54681 F54682 F54683 F54684	195 - 196 196 - 197 197 - 198 198 - 199 199 - 200 200 - 201 201 - 202 202 - 203 203 - 204 204 - 205	<<0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 0.20	4 5 5 3 4 3 3 6 7 160	<10 20 <10 <10 <10 <10 <10 <10 <10 20
204.9 - 209.1 QUARTZ CHLORITE MAGNETITE Magnetite with finely distributed and irregular qtz, and late stage fracture fill olive green chlorite. Minor disseminated pyrite. Gradational lower contact to intensely veined and brecciated iron rich sediment 206.8 Qtz veined, 8mm wide with Schlickensided contact surface, striae at 25° to long axis of plane 207.2 Chlorite filled micro fractures 32°CA 207.55 Pyrite vein 30°CA cross cut by opposing sense fracture at 20°CA	3 75 74 Tr	68 5 4 72	7 5 4 8	20 18 20 20		2 2 2 Tr	Tr	F54685 F54687 F54688 F54689	205 - 206 206 - 207 207 - 208 208 - 209	<0.01 <0.01 <0.01 <0.01	28 96 75 15	<10 <10 <10 <10

GEOPEKO - DRILLING LOG SHEET			PROSPECT: Nav 6		HOLE No:			PAGE 5 OF 7						
GEOLOGICAL LOG			Mineral Percentages							Sample Number	Interval From To	Au ppm	Cu ppm	Bi ppm
			Hemt	Maqt	Otz	Chl	Ser	Pv	Cpy					
208.6 Band of spotted quartz magnetite, 55°CA														
209.1 - 224.75 VEINED AND BRECCIATED SEDIMENT				40	5	40				F54690	209 - 210	<0.01	18	10
Bleached remnants of siltstone seperated by medium to large veins				15	5	25				1	210 - 211	<0.01	7	<10
(1 - 20cm) of chlorite, quartz and magnetite				15	3	20				2	211 - 212	0.18	4	<10
213 General orientation of magnetite veins 40°CA				10	3	15	Tr			3	212 - 213	<0.01	17	<10
215.4 - 216.4 Altered sediment clasts hosting fine (<0.5mm) chlorite spots.				15	5	50	3	Tr		4	213 - 214	<0.01	23	<10
217.45 Bedding 26° CA - opposite sense to vein orientation				15	5	35	Tr	Tr		5	214 - 215	<0.01	14	<10
221.1 Visible gold, associated with chlorite				10	5	25				54697	215 - 216	<0.01	23	<10
221.4 Vein/Fracture orientation 89°toward 008°				20	10	40		2		8	216 - 217	1.83	190	30
221.5 Bedding (?) orientation 78°toward 170°				15	10	25	1	Tr		9	217 - 218	34.22	59	70
222.3 Visible Gold				15	15	30	2	Tr		700	218 - 219	5.18	54	140
				15	15	40	1	Tr		1	219 - 220	24.27	40	760
				10	20	40	1	1		2	220 - 221	43.2	15	170
				10	10	35	1	Tr		3	221 - 222	52.1	21	40
				15	10	35	1	Tr		4	222 - 223	14.25	11	60
				5	10	30	Tr			5	223 - 224	3.32	20	30
224.75 - 260.05 VEINED AND ALTERED SEDIMENT				10	15	15	1			F54707	224 - 225	0.26	10	30
As above but with the quartz chlorite veins generally narrower			2	7	7	5		Tr		8	225 - 226	0.28	100	40
(up to 3cm) and the sediment host less fractured and altered ie.			1	5	3	3	Tr			9	226 - 227	0.05	28	20
general decrease in fracture intensity. Gradational contact with upper unit.				7	4	2				10	227 - 228	0.90	9	20
225.45 Hematite associated with 2cm wide qtz vein				2	3	3				11	228 - 229	0.02	6	<10
227.5 Finely laminated bedding 35°CA				1	2	1				12	229 - 230	<0.01	5	<10
228 Vein set 58°CA and 28°CA (opposite)				1	4	2				13	230 - 231	<0.01	5	<10
232.2 Wisping of late stage chlorite into earlier cleavage				2	3	2				14	231 - 232	<0.01	6	<10
Vein orientation 83°towards 014°				3	2	4				15	232 - 233	<0.01	7	<10
Cleavage (?) 51°towards 147°				1	2	5				17	233 - 234	<0.01	6	<10
				Tr	1	3				18	234 - 235	<0.01	3	<10
				1	1	3				19	235 - 236	<0.01	<2	<10
237.5 Vein orientation (approx) 45°CA				2	1	4	10			20	236 - 237	<0.01	<2	<10
				2	Tr	2	8			21	237 - 238	<0.01	10	<10
				Tr	3	5	10	1		22	238 - 239	<0.01	4	20
				3	1	5	10		Tr	23	239 - 240	2.41	3	20
241.5 Chlorite vein 50°CA				5	1	8	8	2		24	240 - 241	0.40	7	20

GEOLOGICAL LOG	Mineral Percentages								Sample Number	Interval From To	Au ppm	Cu ppm	Bi ppm
	Hemt	Magt	Qtz	Chl	Ser	Py	Cpy						
246.8 Chlorite magnetite vein orientation 72°towards 207°	1	3	5	7					F54725	241 - 242	<0.01	<2	<10
	2	Tr	3	5		Tr			7	242 - 243	<0.01	6	<10
	Tr		2	4					8	243 - 244	<0.01	5	10
	Tr		2	4					9	244 - 245	<0.01	4	30
	Tr	2	3	5					30	245 - 246	<0.01	3	<10
		1	1	3					1	246 - 247	<0.01	7	<10
	1	1	1	4					2	247 - 248	<0.01	6	20
	Tr	3	1	8					3	248 - 249	<0.01	7	<10
	Tr	4	2	6					4	249 - 250	<0.01	4	<10
		Tr	3	3					5	250 - 251	<0.01	5	20
252.5 Bedding 5-°Ca		Tr	4	4					7	251 - 252	<0.01	4	<10
		Tr	2	2					8	252 - 253	<0.01	3	<10
		6	3	8	2				9	253 - 254	<0.01	5	<10
	1	Tr	4	3		Tr	1	40	254 - 255	<0.01	730	60	
		Tr	2	3					1	255 - 256	<0.01	28	<10
258 Fine grained hematite/magnetite distributed around margin of sediment rafts as reaction halo, replacing sediment	8	2	3	25					2	256 - 257	<0.01	5	<10
	5	5	3	30	2	Tr	Tr		3	257 - 258	<0.01	12	<10
	3	2	3	15					4	258 - 259	<0.01	7	<10
	2	1	3	10					5	259 - 260	<0.01	17	<10
260.6 Bedding 25°CA													
260.5 - 269 CHLORITIC SEDIMENTS													
Moderately chloritised and veined sequence of siltstone/greywacke.													
Gradational upper contact													
Bedding disrupted by icro faults and veins													
260.5 Bedding 20°Ca													
261.3 Micro faulting offsetting bedding 75°CA													
264.3 Chlorite vein 1cm wide with minor fine grained qtz and hemt. 50°CA (opposite direction bedding)													
266.5 - 267 Interval of qtz/chlorite/hematite veins (0.5 -5mm wide). Largest vein located at 266.6m and 5mm wide containing fine grained hematite in chlorite matrix 50°CA													
266.85 Set of thin veins (1mm wide) filled with quartz and calcopyrite (?).Veins have tarnished appearance 56°CA													

GEOPEKO - DRILLING LOG SHEET

PROSPECT: NAV 6

HOLE No: DH15A

PAGE 7 OF 7

GEOLOGICAL LOG	Mineral Percentages								Sample Number	Interval From To	Au	Cu	Bi
268.7 Bedding 35°CA Microfracturing (cleavage) 56°CA													

GEOPEKO
MAGNETIC SUSCEPTIBILITY READINGS

PROSPECT NAVIGATOR

DATE 4-8-90

INSTRUMENT SCINTREX

HOLE NO. 15A

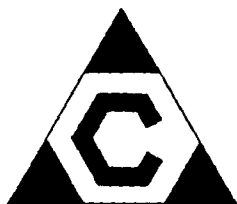
USER A.S.

SERIAL NO.

SPACER (mm)

CORE SIZE

DEPTH (m)	SUSCEPTIBILITY		DEPTH (m)	SUSCEPTIBILITY		DEPTH (m)	SUSCEPTIBILITY	
	MIN	MAX		MIN	MAX		MIN	MAX
102	0.0	0.1	207	0	6	250	1.6	3.3
105	0.0	0.0	208	78	7	251	3.3	6.0
108	0.2	0.3	209	92	0	252	3.4	4.9
111	0.1	0.6	210	5.2	5	253	3.8	5.7
114	0.0	1.2	211	11	64	254	12	53
117	0.1	0.4	212	8,9	14	255	4.0	6.5
120	3.7	5.1	213	40	84	256	2.5	3.7
123	0.0	0.3	214	7.5	12	257	6.9	18
126	4.0	5.7	215	7.4	39	258	8.0	19
129	0.1	0.3	216	21	47	259	5.7	9.2
132	0.2	0.5	217	11	34	260	5.2	11
135	0.2	0.3	218	16	26	261	4.2	5.9
138	0.2	0.5	219	24	60	262	5.0	6.2
141	0.2	0.3	220	29	47	263	5.7	18
144	0.1	0.2	221	2.9	40	264	5.0	9.3
147	0.2	0.3	222	5.5	24	265	3.5	6.9
150	0.1	0.4	223	6.0	14	266	2.5	6.0
153	2.6	3.1	224	13	86	267	3.5	4.1
156	2.1	2.7	225	24	73	268	4.3	4.6
159	2.0	3.4	226	2.2	41	269	1.0	4.2
162	3.2	3.9	227	10	38	EOH		
165	1.9	2.1	228	5.9	20			
168	1.6	3.1	229	4.0	4.7			
171	1.0	3.9	230	2.0	5.5			
174	3.0	4.4	231	0.7	2.8			
177	0.1	0.1	232	0.7	14			
180	0.1	0.1	233	0.9	1.6			
183	0.0	0.1	234	1.5	3.5			
186	0.0	0.1	235	4.7	8.0			
189	0.0	0.0	236	7.5	20			
192	0.0	0.1	237	2.6	6.1			
195	0.8	2.0	238	2.0	7.5			
196	2.3	11	239	1.2	2.0			
197	1.0	2.9	240	3.9	11			
198	2.0	20	241	7.0	13			
199	7.0	33	242	7.1	17			
200	6.9	18	243	9.0	13			
201	1.2	5.9	244	2.5	9.5			
202	7.0	30	245	8.0	9.3			
203	4.5	12	246	6.0	19			
204	0.7	11	247	4.0	7.0			
205	48	7	248	3.2	17			
206	1	9	249	4.0	34			



CLASSIC LABORATORIES LTD

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Postal Address: P.O. Box 58, Berrimah, Northern Territory 0828
Marjorie Street., P.O. Box 58, Berrimah, Northern Territory 0828
Telephone: (089) 32 2637 Facsimile: (089) 32 3531

GEOPEKO
P.O. BOX 39443
WINNELLIE

N.T. 0821

ANALYSIS REPORT :

Your Reference : 36894

Our Reference : ODN1104

* Samples Received : 14/08/90

Results Reported : 03/09/90

Number of Samples : 95

Report Pages : 1 to 3

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

Approved Signature:

for

Alan Cipllys
Manager - Darwin
CLASSIC LABORATORIES LTD

*** RELIABLE ANALYSES AT COMPETITIVE COST ***



CLASSIC LABORATORIES LTD

Job: 0DN1104

O/N: 36894

Final

ANALYTICAL REPORT

NAVIGATOR 6 DH15A

SAMPLE	Cu	Bi	Au	Au	Dp1	AuRsp	AuRsp	Interval
F54651	6	<10	<0.01	<0.01	<0.01	<0.01	--	173-174
F54652	81	<10	<0.01	--	--	--	--	175
F54653	16	<10	<0.01	--	--	--	--	176
F54654	10	<10	<0.01	--	--	--	--	177
F54655	5	<10	<0.01	--	--	--	--	178
F54656	4	<10	<0.01	--	--	--	--	179
F54657	<2	<10	<0.01	--	--	--	--	180
F54658	9	10	<0.01	--	--	--	--	181
F54659	3	<10	<0.01	--	--	--	--	182
F54660	3	<10	<0.01	--	--	--	--	183
F54661	3	<10	<0.01	<0.01	0.07	--	--	184
F54662	3	<10	<0.01	--	--	--	--	185
F54663	<2	<10	<0.01	--	--	--	--	186
F54664	9	<10	<0.01	--	--	--	--	187
F54665	3	<10	<0.01	--	--	--	--	188
F54666	7	<10	<0.01	--	--	--	--	CFS2
F54667	<2	<10	<0.01	--	--	--	--	189
F54668	7	<10	<0.01	--	--	--	--	190
F54669	2	<10	<0.01	--	--	--	--	191
F54670	3	<10	<0.01	--	--	--	--	192
F54671	4	<10	<0.01	--	--	--	--	193
F54672	3	<10	<0.01	--	--	--	--	194
F54673	3	<10	<0.01	--	--	--	--	195
F54674	4	<10	<0.01	--	--	--	--	196
F54675	5	20	<0.01	--	--	--	--	197
F54676	37	<10	0.17	0.22	0.14	--	--	CFS2
F54677	5	<10	<0.01	--	--	--	--	198
F54678	3	<10	<0.01	--	--	--	--	199
F54679	4	<10	<0.01	--	--	--	--	200
F54680	3	<10	<0.01	--	--	--	--	201
F54681	3	<10	<0.01	--	--	--	--	202
F54682	6	<10	<0.01	--	--	--	--	203
F54683	7	<10	<0.01	--	--	--	--	204
F54684	160	20	0.20	0.20	0.21	--	--	205
F54685	28	<10	<0.01	--	--	--	--	206
F54686	7	<10	<0.01	--	--	--	--	CFS2
F54687	96	<10	<0.01	--	--	--	--	207
F54688	75	<10	<0.01	--	--	--	--	208
F54689	15	<10	<0.01	--	--	--	--	209
F54690	18	10	<0.01	--	--	--	--	210
F54691	7	<10	<0.01	--	--	--	--	211
F54692	4	<10	0.14	0.16	0.07	--	--	212
F54693	17	<10	<0.01	--	--	--	--	213
F54694	23	<10	<0.01	--	--	--	--	214
F54695	14	<10	<0.01	--	--	--	--	215
F54696	12	<10	<0.01	--	--	--	--	CFS2
F54697	23	<10	<0.01	--	--	--	--	216
F54698	190	30	1.66	1.82	2.00	--	--	217
F54699	59	70	27.9	36.9	35.8	36.3	--	218
F54700	54	140	4.90	6.00	5.44	4.40	--	219

UNITS	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	2	10	0.01	0.01	0.01	0.01
SCHEME	AAS1	AAS1	FA1	FA1	FA1	FA1



CLASSIC LABORATORIES LTD

Job: 0DN1104

O/N: 36894

Final

ANALYTICAL REPORT
NAVIGATOR 6 DH15A

SAMPLE	Cu	Bi	Au	Au	Dp1	AuRsp	AuRsp	Interval
F54701	40	760	24.8	25.5		22.8	24.0	219-220
F54702	15	170	38.8	50.0		41.8	42.2	221
F54703	21	40	50.2	54.0		--	--	222
F54704	11	60	14.2	15.2		13.8	13.8	223
F54705	20	30	3.54	3.36		3.06	--	224
F54706	77	10	0.96	1.00		0.40	--	CFS2
F54707	10	30	0.35	0.24		0.20	--	225
F54708	100	40	0.16	0.31		0.36	--	226
F54709	28	20	<0.01	0.07		0.07	--	227
F54710	9	20	1.45	0.44		0.80	--	228
F54711	6	<10	<0.01	0.01		0.06	--	229
F54712	5	<10	<0.01	--		--	--	230
F54713	5	<10	<0.01	--		--	--	231
F54714	6	<10	<0.01	--		--	--	232
F54715	7	<10	<0.01	--		--	--	233
F54716	19	<10	<0.01	--		--	--	CFS2
F54717	6	<10	<0.01	--		--	--	234
F54718	3	<10	<0.01	--		--	--	235
F54719	<2	<10	<0.01	--		--	--	236
F54720	<2	<10	<0.01	--		--	--	237
F54721	10	<10	<0.01	--		--	--	238
F54722	4	20	<0.01	--		--	--	239
F54723	3	20	2.52	1.98		2.72	--	240
F54724	7	20	0.93	<0.01		0.08	--	241
F54725	<2	<10	<0.01	--		--	--	242
F54726	28	<10	<0.01	--		--	--	CFS2
F54727	6	<10	<0.01	--		--	--	243
F54728	5	10	<0.01	--		--	--	244
F54729	4	30	<0.01	--		--	--	245
F54730	3	<10	<0.01	--		--	--	246
F54731	7	<10	<0.01	--		--	--	247
F54732	6	20	<0.01	--		--	--	248
F54733	7	<10	<0.01	--		--	--	249
F54734	4	<10	<0.01	--		--	--	250
F54735	5	20	<0.01	--		--	--	251
F54736	27	<10	<0.01	--		--	--	CFS2
F54737	4	<10	<0.01	--		--	--	252
F54738	3	<10	<0.01	<0.01		<0.01	--	253
F54739	5	<10	<0.01	--		--	--	254
F54740	730	60	<0.01	--		--	--	255
F54741	28	<10	<0.01	--		--	--	256
F54742	5	<10	<0.01	--		--	--	257
F54743	12	<10	<0.01	--		--	--	258
F54744	7	<10	<0.01	--		--	--	259
F54745	17	<10	<0.01	--		--	--	260

UNITS	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	2	10	0.01	0.01	0.01	0.01
SCHEME	AAS1	AAS1	FA1	FA1	FA1	FA1



CLASSIC LABORATORIES LTD

REPORT : ODN1104

PAGE : 3

ANALYSIS

NAVIGATOR 6 DH15A

SAMPLE MARK	Cu ppm	Interval
F54656	7	178 -179
F54666	8	CFS2
F54676	47	CFS2
F54676 RESPLIT	47	CFS2
F54686	12	CFS2
F54696	10	CFS2
F54706	35	CFS2
F54706 RESPLIT	16	CFS2
F54716	18	CFS2
F54726	23	CFS2
F54736	34	CFS2

METHOD: AAS1 - Re-assays

BASIC GEOTECHNICAL LOG SHEET

PAGE No.:1

DEPTH	DEPTH	ROCK	WEATH.	ALTN.	ROCK	BEDD:	CLEAV:	C.B.A	C.C.A	SENSE:	CORE	RQD	COMMENTS
FROM	TO	TYPE			STR.	ING	AGE	S0	S1	S0-S1:	REC.%	%	SHEARS , JOINTS , FAULTS , ETC.
102.00	103.00										100	100	
103.00	104.00										100	100	
104.00	105.00										100	93	
105.00	106.00										100	100	
106.00	107.00										100	90	
107.00	108.00										100	100	
108.00	109.00										100	83	
109.00	110.00										100	95	
110.00	111.00										100	100	
111.00	112.00										100	95	
112.00	113.00										100	62	
113.00	114.00										100	100	
114.00	115.00										100	93	
115.00	116.00										100	92	
116.00	117.00										100	95	
117.00	118.00										100	54	
118.00	119.00										100	41	
119.00	120.00										100	100	
120.00	121.00										100	86	
121.00	122.00										100	100	
122.00	123.00										100	100	
123.00	124.00										100	39	
124.00	125.00										100	87	
125.00	126.00										100	95	
126.00	127.00										100	100	
127.00	128.00										100	100	
128.00	129.00										100	70	
129.00	130.00										100	50	
130.00	131.00										100	62	
131.00	132.00										100	92	
132.00	133.00										100	91	
133.00	134.00										100	100	
134.00	135.00										100	93	
135.00	136.00										100	79	
136.00	137.00										100	90	

GEOPEKO-TENNANT CREEK

BASIC GEOTECHNICAL LOG SHEET

PROSPECT :NAVIGATOR 6

HOLE No. :DH15A

PAGE No.:2

DEPTH FROM	DEPTH TO	ROCK TYPE	WEATH.	ALTN.	ROCK STR.	BEDD: ING	CLEAV: AGE	C.B.A S0	C.C.A S1	SENSE S0-S1	CORE REC.%	RQD %	COMMENTS SHEARS , JOINTS , FAULTS , ETC.
137.00	138.00	:	:	:	:	:	:	:	:	:	100	90	:
138.00	139.00	:	:	:	:	:	:	:	:	:	100	80	:
139.00	140.00	:	:	:	:	:	:	:	:	:	98	0	:
140.00	141.00	:	:	:	:	:	:	:	:	:	100	46	:
141.00	142.00	:	:	:	:	:	:	:	:	:	100	40	:
142.00	143.00	:	:	:	:	:	:	:	:	:	100	40	:
143.00	144.00	:	:	:	:	:	:	:	:	:	90	19	:
144.00	145.00	:	:	:	:	:	:	:	:	:	100	90	:
145.00	146.00	:	:	:	:	:	:	:	:	:	100	88	:
146.00	147.00	:	:	:	:	:	:	:	:	:	100	100	:
147.00	148.00	:	:	:	:	:	:	:	:	:	100	100	:
148.00	149.00	:	:	:	:	:	:	:	:	:	100	100	:
149.00	150.00	:	:	:	:	:	:	:	:	:	100	92	:
150.00	151.00	:	:	:	:	:	:	:	:	:	100	56	:
151.00	152.00	:	:	:	:	:	:	:	:	:	100	100	:
152.00	153.00	:	:	:	:	:	:	:	:	:	100	100	:
153.00	154.00	:	:	:	:	:	:	:	:	:	100	100	:
154.00	155.00	:	:	:	:	:	:	:	:	:	100	100	:
155.00	156.00	:	:	:	:	:	:	:	:	:	100	100	:
156.00	157.00	:	:	:	:	:	:	:	:	:	100	100	:
157.00	158.00	:	:	:	:	:	:	:	:	:	100	100	:
158.00	159.00	:	:	:	:	:	:	:	:	:	100	100	:
159.00	160.00	:	:	:	:	:	:	:	:	:	100	100	:
160.00	161.00	:	:	:	:	:	:	:	:	:	100	100	:
161.00	162.00	:	:	:	:	:	:	:	:	:	100	100	:
162.00	163.00	:	:	:	:	:	:	:	:	:	100	100	:
163.00	164.00	:	:	:	:	:	:	:	:	:	100	100	:
164.00	165.00	:	:	:	:	:	:	:	:	:	100	100	:
165.00	166.00	:	:	:	:	:	:	:	:	:	100	96	:
166.00	167.00	:	:	:	:	:	:	:	:	:	100	100	:
167.00	168.00	:	:	:	:	:	:	:	:	:	100	100	:
168.00	169.00	:	:	:	:	:	:	:	:	:	100	100	:
169.00	170.00	:	:	:	:	:	:	:	:	:	100	100	:
170.00	171.00	:	:	:	:	:	:	:	:	:	100	100	:
171.00	172.00	:	:	:	:	:	:	:	:	:	100	100	:

BASIC GEOTECHNICAL LOG SHEET

PAGE No. :3

DEPTH :	DEPTH :	ROCK :	WEATH.:	ALTN.:	ROCK :	BEDD.:	CLEAV.:	C.B.A :	C.C.A :	SENSE:	CORE :	RQD :	COMMENTS
FROM :	TO :	TYPE :	:	:	STR.:	ING :	AGE :	S0 :	S1 :	S0-S1:	REC. % :	% :	SHEARS , JOINTS , FAULTS , ETC.
172.00	173.00	:	:	:	:	:	:	:	:	:	100	100	:
173.00	174.00	:	:	:	:	:	:	:	:	:	100	100	:
174.00	175.00	:	:	:	:	:	:	:	:	:	100	97	:
175.00	176.00	:	:	:	:	:	:	:	:	:	100	100	:
176.00	177.00	:	:	:	:	:	:	:	:	:	100	92	:
177.00	178.00	:	:	:	:	:	:	:	:	:	100	99	:
178.00	179.00	:	:	:	:	:	:	:	:	:	100	98	:
179.00	180.00	:	:	:	:	:	:	:	:	:	100	92	:
180.00	181.00	:	:	:	:	:	:	:	:	:	96	70	:
181.00	182.00	:	:	:	:	:	:	:	:	:	97	57	:
182.00	183.00	:	:	:	:	:	:	:	:	:	100	82	:
183.00	184.00	:	:	:	:	:	:	:	:	:	100	100	:
184.00	185.00	:	:	:	:	:	:	:	:	:	98	75	:
185.00	186.00	:	:	:	:	:	:	:	:	:	100	97	:
186.00	187.00	:	:	:	:	:	:	:	:	:	100	88	:
187.00	188.00	:	:	:	:	:	:	:	:	:	100	87	:
188.00	189.00	:	:	:	:	:	:	:	:	:	100	67	:
189.00	190.00	:	:	:	:	:	:	:	:	:	100	27	:
190.00	191.00	:	:	:	:	:	:	:	:	:	98	31	:
191.00	192.00	:	:	:	:	:	:	:	:	:	100	100	:
192.00	193.00	:	:	:	:	:	:	:	:	:	100	100	:
193.00	194.00	:	:	:	:	:	:	:	:	:	100	100	:
194.00	195.00	:	:	:	:	:	:	:	:	:	100	95	:
195.00	196.00	:	:	:	:	:	:	:	:	:	100	100	:
196.00	197.00	:	:	:	:	:	:	:	:	:	100	100	:
197.00	198.00	:	:	:	:	:	:	:	:	:	100	100	:
198.00	199.00	:	:	:	:	:	:	:	:	:	100	100	:
199.00	200.00	:	:	:	:	:	:	:	:	:	100	100	:
200.00	201.00	:	:	:	:	:	:	:	:	:	100	100	:
201.00	202.00	:	:	:	:	:	:	:	:	:	100	100	:
202.00	203.00	:	:	:	:	:	:	:	:	:	100	97	:
203.00	204.00	:	:	:	:	:	:	:	:	:	100	100	:
204.00	205.00	:	:	:	:	:	:	:	:	:	100	100	:
205.00	206.00	:	:	:	:	:	:	:	:	:	100	100	:
206.00	207.00	:	:	:	:	:	:	:	:	:	100	100	:

BASIC GEOTECHNICAL LOG SHEET

PAGE No.:4

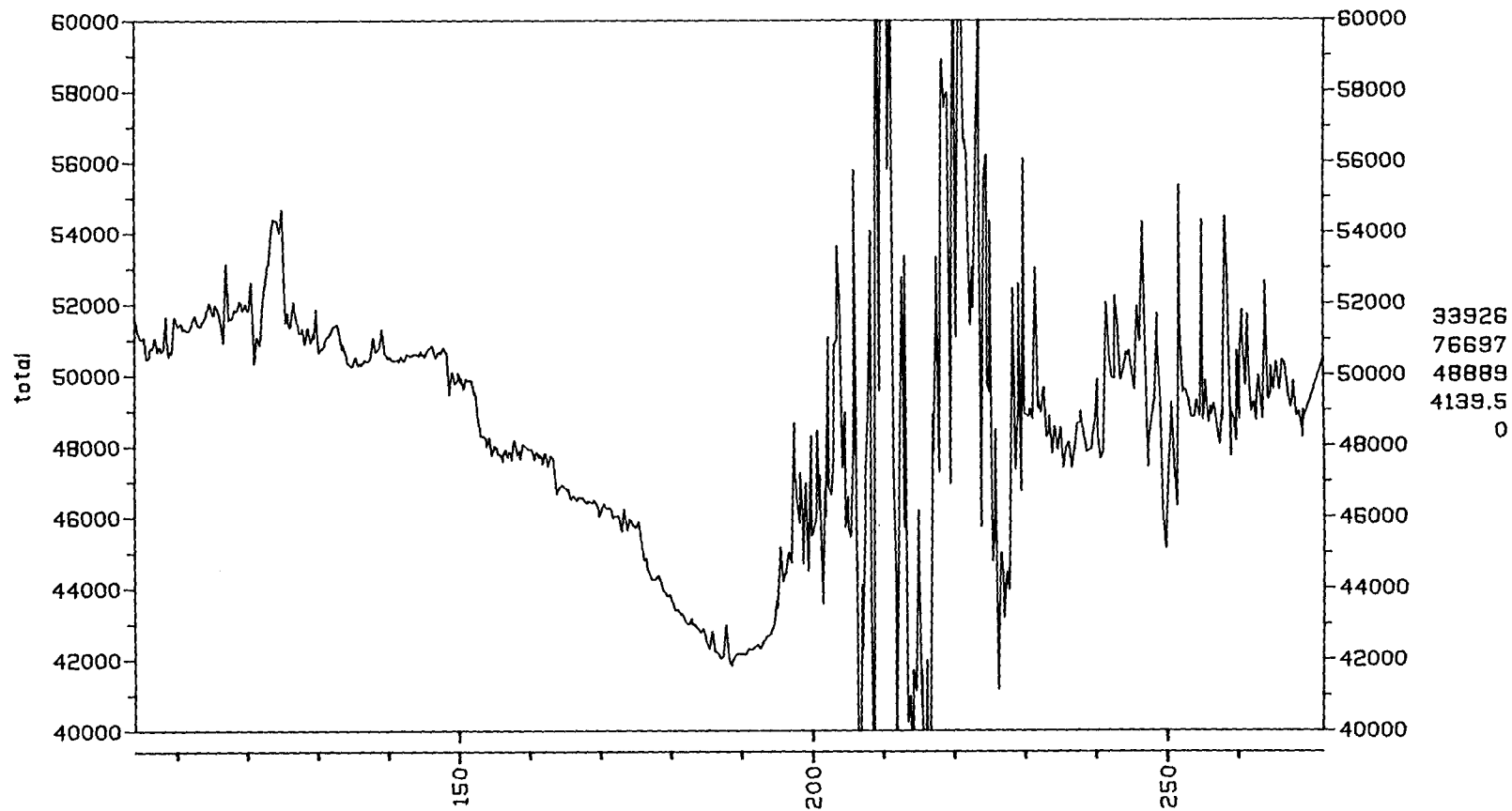
DEPTH	DEPTH	ROCK	WEATH.	ALTN.	ROCK	BEDD:	CLEAV:	C.B.A	C.C.A	SENSE:	CORE	RGD	COMMENTS
FROM	TO	TYPE			STR.	ING	AGE	S0	S1	S0-S1	REC.%	%	SHEARS , JOINTS , FAULTS , ETC.
207.00	208.00										100	100	
208.00	209.00										100	100	
209.00	210.00										100	98	
210.00	211.00										100	100	
211.00	212.00										100	100	
212.00	213.00										100	80	
213.00	214.00										100	66	
214.00	215.00										100	68	
215.00	216.00										100	66	
216.00	217.00										100	100	
217.00	218.00										100	100	
218.00	219.00										100	93	
219.00	220.00										100	91	
220.00	221.00										100	100	
221.00	222.00										100	100	
222.00	223.00										100	100	
223.00	224.00										100	100	
224.00	225.00										100	100	
225.00	226.00										100	100	
226.00	227.00										100	89	
227.00	228.00										100	100	
228.00	229.00										100	100	
229.00	230.00										100	100	
230.00	231.00										100	100	
231.00	232.00										100	100	
232.00	233.00										100	100	
233.00	234.00										100	93	
234.00	235.00										100	89	
235.00	236.00										100	91	
236.00	237.00										100	96	
237.00	238.00										100	90	
238.00	239.00										100	88	
239.00	240.00										100	90	
240.00	241.00										100	100	
241.00	242.00										100	54	

BASIC GEOTECHNICAL LOG SHEET

PAGE No.:5

[illegible]

line 9999
job 1
area 1



Navigator 6 DDH15A

Profile of Total Magnetic Intensity

Downhole Survey



GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DRILLHOLE SUMMARY SHEET

PROSPECT/MINE : NAVIGATOR 6 - WHITE DEVIL HOLE NO. : DH16

LOCATION : WHITE DEVIL EAST

Purpose of Hole : TEST EASTERN EXTENSION OF MINERALISATION

ENCOUNTERED IN DH15A

Proposed Collar Parameters

Easting : 1830
Northing : 1060
Azim (grid) : 360
Azim (mag) : 360
Dip : -75

Proposed by : R. Love

Surveyed Collar

Easting : 1830
Northing : 1060
R.L. : 993
Azim (grid) : 360
Azim (mag) : 360
Dip : -75.5

Surveyed by : R. Maher

Target Parameters

Easting : 1850
Northing : 1190

Depth below surface : 240m
Hole depth to target : 280m

Drilling Technique

Percussion
Diamond

Interval(m)

0 - 150
150-303

Hole Size

NQ

Actual Final Depth : 303m

Date Commenced : Drilled by : Stadcote

Terminated by : R.Love

Date Completed : 17.10.90 Rig Type : GK850

Logged by : R.Love

Reason for Termination : Passed through lode

Economic Summary :

<u>Lode Type</u>	<u>Interval(m)</u>	<u>Significant Intersections</u>
Quartz Chlorite Magnetite	235.25-240.25	-
Veined and Brecciated Seds	240.25-248.15	244-247, 3m @ 1.7g/t Au 36ppm Cu, 25ppm Bi
Veined and Altered Sediments	248.15-268.80	-

General Remarks :

*** PROSPECT : NAVIGATOR 6 ***
 *** HOLE : DH16 ACTUAL ***
 Collar Coordinates 1830.00 E 1060.00 N 993.0 RL
 Azimuth correction = .00
 Interpolation inc = 5.0

SURVEYS (Azimuth wrt Grid North)

DEPTH	DIP	AZIMUTH	EASTING	NORTHING	RL
.00	-75.50	360.00	1830.00	1060.00	993.00
60.00	-72.00	364.00	1830.65	1076.42	935.31
90.00	-68.00	365.00	1831.45	1086.53	907.08
120.00	-61.00	366.50	1832.74	1099.30	879.98
150.00	-52.00	367.00	1834.71	1115.84	855.08
174.00	-50.00	368.50	1836.75	1130.86	836.47
207.00	-48.00	367.50	1839.78	1152.31	811.57
237.00	-46.50	370.00	1842.88	1172.43	789.54
270.00	-45.00	369.00	1846.68	1195.14	765.91
303.00	-42.50	371.00	1850.72	1218.58	743.04

INTERSECTIONS along the EASTING plane

Depth	Easting	Northing	R.L
-------	---------	----------	-----

INTERSECTIONS along the NORTHING plane

Depth	Easting	Northing	R.L
-------	---------	----------	-----

.0	1830.00	1060.00	993.00
38.1	1830.26	1070.00	956.25
71.3	1830.91	1080.00	924.64
98.9	1831.77	1090.00	898.86
121.4	1832.82	1100.00	878.75
140.2	1834.00	1110.00	862.91
156.7	1835.24	1120.00	849.80
172.6	1836.63	1130.00	837.50
188.2	1838.11	1140.00	825.63
203.5	1839.48	1150.00	814.16
218.5	1840.85	1160.00	803.03
233.4	1842.46	1170.00	792.15
248.1	1844.21	1180.00	781.52
262.6	1845.86	1190.00	771.14
276.9	1847.46	1200.00	761.02
291.1	1849.14	1210.00	751.19

INTERSECTIONS along the RL plane

Depth	Easting	Northing	R.L
-------	---------	----------	-----

3.1	1830.00	1060.78	990.00
13.4	1830.03	1063.41	980.00
23.8	1830.10	1066.11	970.00
34.2	1830.21	1068.92	960.00
44.6	1830.36	1071.84	950.00
55.1	1830.55	1074.92	940.00
65.6	1830.78	1078.17	930.00
76.2	1831.04	1081.64	920.00
86.9	1831.35	1085.39	910.00
97.7	1831.72	1089.51	900.00
108.7	1832.18	1094.11	890.00
120.0	1832.74	1099.29	880.00
131.6	1833.43	1105.23	870.00
143.8	1834.26	1112.12	860.00
156.5	1835.21	1119.84	850.00
169.4	1836.32	1127.94	840.00
182.5	1837.56	1136.28	830.00
195.7	1838.79	1144.86	820.00
209.1	1839.97	1153.71	810.00
222.7	1841.27	1162.77	800.00
236.4	1842.81	1172.01	790.00
250.2	1844.46	1181.45	780.00
264.2	1846.04	1191.12	770.00
278.4	1847.63	1201.02	760.00
292.8	1849.36	1211.24	750.00

NAVIGATOR 6

DH16

DRILL CORE ORIENTATION RESULTS

Bedding

164.8m	59°→219°grid
174.2m	86°→035°grid
187.3m	79°→246°grid
199m	68°→230°grid
209.35m	62°→208°grid
228.6m	72°→245°grid
292m	79°→170°grid
295m	80°→340°grid

Veins

198.9m	74°→170°grid
200.52m	76°→162°grid
211.4m	72°→174°grid
230.2m	65°→170°grid
247.6m	78°→156°grid
248.8m	83°→166°grid
254.5m	73°→167°grid
287m	53°→122°grid

Foliation

228.6m	64°→326°grid
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Fractures

228.1m	64°→173°grid
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Cleavage (?)

302.4m	61°→166°grid
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GEOPEKO - DRILLING LOG SHEET

PROSPECT: NAVIGATOR 6

HOLE No: DH16

PAGE 1 OF 6

GEOLOGICAL LOG	Mineral Percentages							Sample Number	Interval From To	Au	Cu	Bi
Precollar 0 - 150m 150 - 154.7 SILTSTONE Slightly chloritic fine grained siltstone												
154.7 - 161.17 QUARTZ FELDSPAR PORPHYRY Interlensed minor fine grained chloritised sediment with densely packed quartz feldspar porphyry which consists of sub rounded quartz and K-feldspar aggregates in a foliated chlorite rich matrix. Slight alteration (bleaching) of sediments adjacent to porphyry (approx. 1mm)												
154.7 Upper contact 43° CA												
158.3 Fracture/foliation direction 33° CA												
160.7 - 160.95 Chlorite vein containing disseminated grains of magnetic (<0.5mm). Cleavage at 40° CA												
161.17 - 227.55 SILTSTONE GREYWACKE Interlensed fine-medium grained greywacke with fine grained siltstone. Fine grained magnetite present in coarser sediments								T2433	197-198	<0.01	8	10
164.8 Bedding-oriented 59° towards 219°								T2434	198-199	<0.01	5	<10
172.43-172.62 Chlorite lens with disseminated fine grained hematite								T2435	199-200	<0.01	14	<10
172.76 - 172.86 As above								T2436	200-201	<0.01	9	<10
173.22 Chlorite vein, 2.5cm wide at 53° CA								T2437	201-202	<0.01	13	<10
Bedding in opposite orientation (sense) at 53° CA								T2438	202-203	<0.01	8	<10
174.2 Bedding oriented at 86° towards 035°								T2439	203-204	<0.01	7	<10
180.5 Bedding 60° CA								T2441	204-205	<0.01	8	<10
187.3 Bedding oriented at 79° towards 246°								T2442	205-206	<0.01	4	<10
189.7 Fracture (fault?) oxidised hematite and clay on surfaces. Oriented at 40° CA								T2443	206-207	<0.01	5	<10
								T2444	207-208	<0.01	< 2	<10
								T2445	208-209	<0.01	4	<10
								T2446	209-210	<0.01	4	<10
								T2447	210-211	<0.01	6	<10
								T2448	211-212	0.60	3	<10

GEOPEKO – DRILLING LOG SHEET			PROSPECT: NAVIGATOR 6			HOLE No: DH16			PAGE 3 OF 6				
GEOLOGICAL LOG	Mineral Percentages								Sample Number	Interval From To	Au	Cu	Bi
	Hemt	Magt	Qtz	Chl	Ser		Cpy	Py					
227.55-229.65 SEDIMENTARY BRECCIA Matrix supported small to medium pebble (2.5mm) polymictic breccia/conglomerate. Poorly developed pebble foliation at 50° to core axis (CA). Coarse grained sedimentary fragments generally subrounded while siltstone fragments are more elongate. Fine (0.5mm) grains of magnetite distributed throughout unit. Apparent fining towards top of hole - 228.1 Set of fine (1mm wide) fractures sealed with chlorite and lesser quartz and magnetite Oriented at 64° towards 173° 228.5 Oriented foliation 64° towards 326° 228.6 Oriented bedding 72° towards 245° 229.65-232.82 GREYWACKE / SILTSTONE Interbedded slightly chloritic fine-medium grained greywacke and siltstone. Fine grained magnetite disseminated throughout but readily visible in coarser grained units where it defines cross bedding features. 230.2 Chlorite vein, 8mm wide, with subordinate amounts of magnetite and quartz. Oriented at 232.82-235.25 VEINED AND BRECCIATED SEDIMENTS Brecciated siltstone and greywacke with matrix and broader veins composed of sedimentary rock fragments (up to 3cm across), chlorite, granular-gritty quartz and magnetite. Unit possibly represents late stage structural / tectonic breccia formed during mineralisation. 233.5 General fabric orientation at 40° CA													
		2	1	5						232-333			
		4	10	6	1					233-234			
		6	12	6	1				T2449	234-235	0.13	29	10

[illegible]

GEOPEKO - DRILLING LOG SHEET

PROSPECT: NAVIGATOR 6

HOLE No: DH16

PAGE 5 OF 6

GEOLOGICAL LOG	Mineral Percentages								Sample Number	Interval From To	Au	Cu	Bi
	Hemt	Magt	Qtz	Chl	Ser		Cpy	Py					
248.15-268.8 VEINED AND ALTERED SEDIMENTS Chloritised sediments cut and in places brecciated by veins and vein sets of chlorite/magnetite/quartz. Generally lower intensity of veining and brecciation than previous interval.		7	3	6					T2465	248-249	0.03	13	< 10
		3	3	6					T2466	249-250	0.12	19	10
		10	5	12	Tr				T2467	250-251	0.11	17	< 10
		5	3	5					T2468	251-252	< 0.01	7	< 10
		8	5	10					T2469	252-253	< 0.01	14	< 10
248.8 Magnetite/chlorite vein orientation 83° towards 166°		4	3	2					T2471	253-254	< 0.01	10	< 10
254.45 Magnetite/quartz vein orientation 73° towards 167°		5	3	1					T2472	254-255	0.02	10	< 10
		8	4	6					T2473	255-256	0.13	29	15
257.3-260.4 Increase in intensity of veining		5	3	3					T2474	256-257	0.34	17	20
258.5 Bedding 25° CA		7	10	5					T2475	257-258	0.12	18	20
259.5 General vein orientation 57° CA		5	10	5			Tr		T2476	258-259	< 0.01	15	< 10
261.5 Cleavage 45° CA		6	10	10					T2477	259-260	< 0.01	38	20
263 Bedding 27° CA		2	8	3					T2478	260-261	0.17	180	15
268 Cleavage 55° CA		1	2	2					T2479	261-262	< 0.01	12	< 10
	Tr	1	1	1					T2481	262-263	< 0.01	7	< 10
	1	4	2						T2482	263-264	0.06	29	35
	2	3	Tr						T2483	264-265	0.42	19	35
	6	4	4						T2484	265-266	3.13	16	20
	5	3	4						T2485	266-267	0.12	16	10
	8	5	1						T2486	267-268	< 0.01	28	< 10
	7	6	3						T2487	268-269	< 0.01	8	< 10
268.8-288.95 CHLORITIC AND VEINED SEDIMENTS Chloritised fine-medium grained sediments cut by scattered and irregular thin chlorite quartz veins. Fine grained, remobilised, magnetite often rims chlorite veins				Tr					T2488	269-270	< 0.01	7	< 10
			1	Tr					T2489	270-271	< 0.01	3	< 10
		Tr		2					T2491	271-272	< 0.01	4	< 10
		Tr		2					T2492	272-273	< 0.01	< 2	< 10
	Tr	1	4						T2493	273-274	< 0.01	17	< 10

[illegible]



CLASSIC LABORATORIES LTD

Incorporated in WA; a wholly owned subsidiary of Amdel Ltd

Postal Address: P.O. Box 58, Berrimah, Northern Territory 0828
Marjorie Street., P.O. Box 58, Berrimah, Northern Territory 0828
Telephone: (089) 32 2637 Facsimile: (089) 32 3531

GEOPEKO
P.O. BOX 39443
WINNELLIE

N.T. 0821

ANALYSIS REPORT :

Your Reference : 36930

Our Reference : ODN1565

Samples Received : 25/10/90

Results Reported : 06/11/90

Number of Samples : 73

Report Pages : 1 to 2

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

Approved Signature:

for

Alan Ciplys
Manager - Darwin
CLASSIC LABORATORIES LTD

*** RELIABLE ANALYSES AT COMPETITIVE COST ***



Final

ANALYTICAL REPORT

SAMPLE	Cu	Bi	Au	AuDp1	AuDp2		
T2433	8	10	<0.01	--	--	197	- 198
T2434	5	<10	<0.01	--	--	198	- 199
T2435	14	<10	<0.01	--	--	199	- 200
T2436	9	<10	<0.01	--	--	200	- 201
T2437	13	<10	<0.01	--	--	201	- 202
T2438	8	<10	<0.01	--	--	202	- 203
T2439	7	<10	<0.01	--	--	203	- 204
T2440	175	<10	<0.01	--	--	CFS	
T2441	8	<10	<0.01	--	--	204	- 205
T2442	4	<10	<0.01	--	--	205	- 206
T2443	5	<10	<0.01	--	--	206	- 207
T2444	<2	<10	<0.01	<0.01	--	207	- 208
T2445	4	<10	<0.01	--	--	208	- 209
T2446	4	<10	<0.01	--	--	209	- 210
T2447	6	<10	<0.01	<0.01	--	210	- 211
T2448	3	<10	0.60	--	--	211	- 212
T2449	29	10	0.13	--	--	234	- 235
T2450	17	<10	0.01	--	--	CFS	
T2451	140	<10	0.14	--	--	235	- 236
T2452	63	10	<0.01	--	--	236	- 237
T2453	115	15	<0.01	--	--	237	- 238
T2454	48	<10	0.01	--	--	238	- 239
T2455	16	10	0.04	--	--	239	- 240
T2456	13	15	0.05	--	--	240	- 241
T2457	8	<10	0.15	--	--	241	- 242
T2458	9	<10	0.14	0.16	--	242	- 243
T2459	19	<10	0.02	--	--	243	- 244
T2460	55	<10	0.01	--	--	CFS	
T2461	20	20	1.09	0.89	0.77	244	- 245
T2462	26	25	1.46	2.69	2.99	245	- 246
T2463	63	30	1.80	2.06	2.75	246	- 247
T2464	24	20	0.31	--	--	247	- 248
T2465	13	<10	0.04	0.02	--	248	- 249
T2466	19	10	0.12	--	--	249	- 250
T2467	17	<10	0.11	--	--	250	- 251
T2468	7	<10	<0.01	--	--	251	- 252
T2469	14	<10	<0.01	--	--	252	- 253
T2470	17	<10	<0.01	--	--	CFS	
T2471	10	<10	<0.01	--	--	253	- 254
T2472	10	<10	0.02	--	--	254	- 255
T2473	29	15	0.13	--	--	255	- 256
T2474	17	20	0.34	--	--	256	- 257
T2475	18	20	0.14	0.10	--	257	- 258
T2476	15	<10	<0.01	--	--	258	- 259
T2477	38	20	<0.01	--	--	259	- 260
T2478	180	15	0.17	--	--	260	- 261
T2479	12	<10	<0.01	--	--	261	- 262
T2480	45	<10	<0.01	--	--	CFS	
T2481	7	<10	<0.01	--	--	262	- 263
T2482	29	35	0.06	--	--	263	- 264

UNITS	ppm	ppm	ppm	ppm	ppm
DET.LIM	2	10	0.01	0.01	0.01
SCHEME	AAS1	AAS1	FA1	FA1	FA1



CLASSIC LABORATORIES LTD

Final

ANALYTICAL REPORT

Job: ODN1565

O/N: 36930

NAVIGATOR 6 DH16

SAMPLE	Cu	Bi	Au	AuDp1	AuDp2		
T2483	19	35	0.42	--	--	264	- 265
T2484	16	20	3.47	2.80	3.52	265	- 266
T2485	16	10	0.12	--	--	266	- 267
T2486	28	<10	<0.01	--	--	267	- 268
T2487	8	<10	<0.01	--	--	268	- 269
T2488	7	<10	<0.01	--	--	269	- 270
T2489	3	<10	<0.01	--	--	270	- 271
T2490	50	<10	0.02	--	--	CFS	
T2491	4	<10	<0.01	--	--	271	- 272
T2492	<2	<10	<0.01	--	--	272	- 273
T2493	17	<10	<0.01	--	--	273	- 274
T2494	12	<10	<0.01	--	--	274	- 275
T2495	2	<10	<0.01	--	--	275	- 276
T2496	6	<10	<0.01	--	--	276	- 277
T2497	98	20	<0.01	--	--	277	- 278
T2498	27	<10	<0.01	--	--	278	- 279
T2499	13	<10	<0.01	--	--	279	- 280
T2500	16	<10	<0.01	--	--	CFS	
T2501	46	120	0.52	--	--	280	- 281
T2502	11	<10	<0.01	--	--	281	- 282
T2503	620	25	<0.01	--	--	282	- 283
T2504	95	25	0.05	--	--	283	- 284
T2505	2500	135	0.16	0.33	--	284	- 285
T2506	L.N.R.	L.N.R.	L.N.R.	L.N.R.	--		

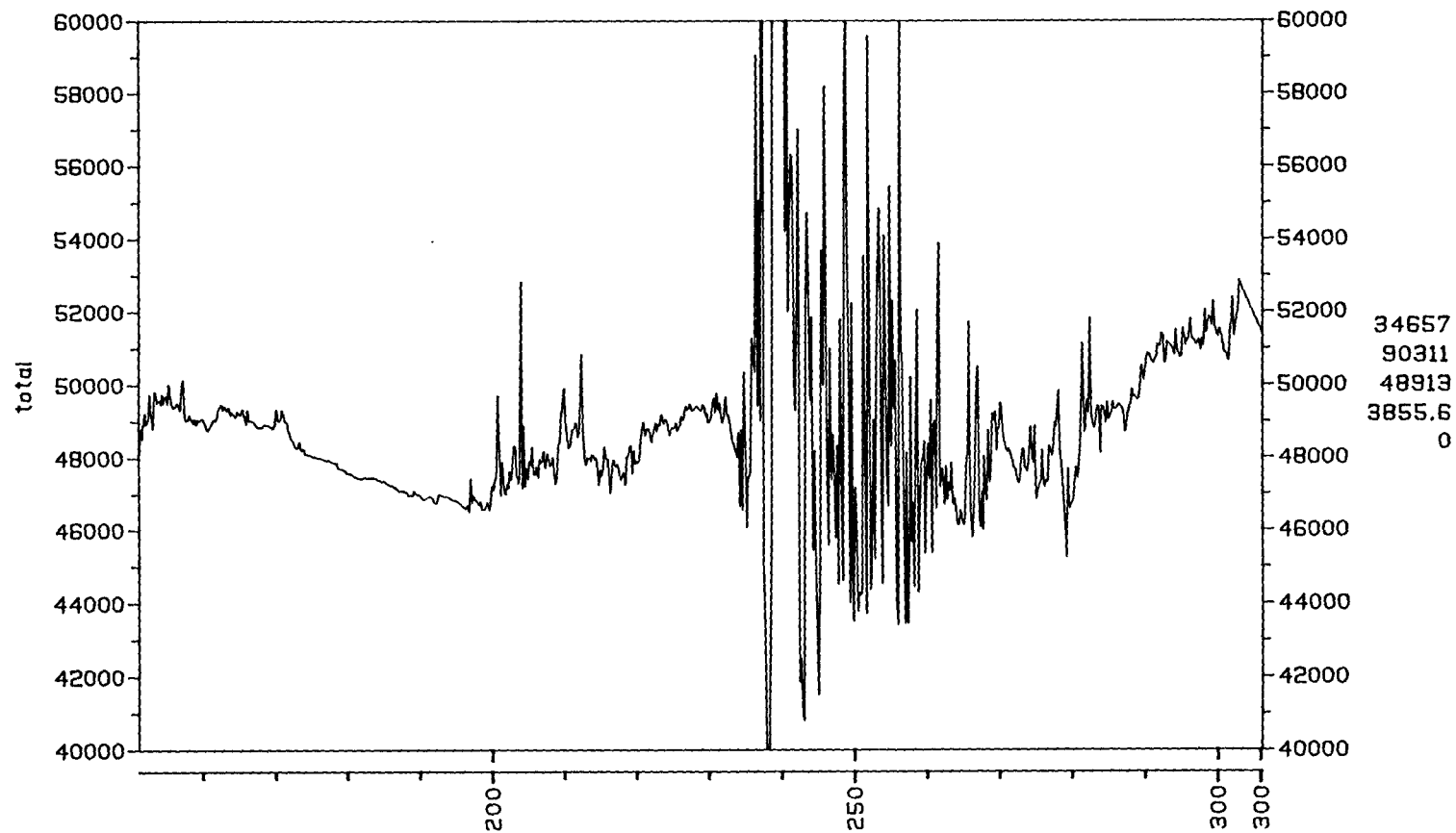
UNITS	ppm	ppm	ppm	ppm	ppm
DET.LIM	2	10	0.01	0.01	0.01
SCHEME	AAS1	AAS1	FA1	FA1	FA1

GEOPEKO
MAGNETIC SUSCEPTIBILITY READINGS

PROSPECT NAVIGATOR 6 DATE 26/10/90 INSTRUMENT SM - 5
HOLE NO. 16 USER SERIAL NO.
SPACER (mm) CORE SIZE 198 to 211 & 234 to 284 $\frac{1}{2}$ core

DEPTH (m)	SUSCEPTIBILITY		DEPTH (m)	SUSCEPTIBILITY		DEPTH (m)	SUSCEPTIBILITY	
	MIN	MAX		MIN	MAX		MIN	MAX
150	2.5	3.5	235	24.0	78.0	277	5.9	8.1
153	2.0	2.9	236	11.0	100+	278	1.4	3.9
156	1.1	1.3	237	88.0	100+	279	2.8	4.7
159	0.0	0.1	238	100+	100+	280	2.3	4.0
162	2.2	3.0	239	100+	100+	281	4.1	13.0
165	2.2	3.0	240	100+	100+	282	4.8	6.2
168	0.5	2.2	241	66	95.0	283	3.2	4.8
171	0.2	1.6	242	7.5	100+	284	5.7	14.0
174	0.0	0.2	243	1.2	100+	285	5.0	8.4
177	0.0	0.0	244	1.7	85.0	286	2.5	4.3
180	0.0	0.0	245	31.0	60.0	287	1.2	4.6
183	0.0	0.1	246	7.4	18.0	288	3.9	4.6
186	0.0	0.0	247	14.0	48.0	289	1.3	5.3
189	0.0	0.0	248	6.2	48.0	290	4.4	8.8
192	0.0	0.0	249	9.2	10.0	291	2.7	10.0
195	0.1	0.2	250	8.6	57.0	292	3.4	6.0
198	0.6	1.1	251	1.2	10.0	293	3.3	5.0
201	3.0	5.0	252	5.6	36.0	294	0.0	4.9
202	2.9	4.1	253	16.0	32	295	2.5	4.6
203	1.5	53.0	254	0.8	2.4	296	0.7	4.5
204	4.2	5.7	255	0.0	14.0	297	1.3	5.0
205	1.4	3.0	256	0.0	24.0	298	1.7	5.5
206	3.6	5.3	257	0.0	21.0	299	1.3	3.7
207	3.5	3.7	258	11	26.0	300	0.0	2.8
208	0.7	1.5	259	7.1	34.0	301	2.4	3.9
209	0.3	2.7	260	8.3	38.0	302	0.0	2.8
210	3.7	5.6	261	3.5	5.1			
211	4.2	16.0	262	3.9	5.1			
212	4.1	6.5	263	0.7	4.2			
213	1.6	4.4	264	0.2	1.0			
216	2.4	4.0	265	0.0	0.9			
219	0.8	3.7	266	0.0	0.7			
222	1.6	3.4	267	0.3	12.0			
225	0.8	3.0	268	2.1	15.0			
228	2.8	4.4	269	1.0	2.3			
229	1.4	2.8	270	0.4	1.1			
230	1.9	4.5	271	0.3	0.9			
231	3.5	6.0	272	5.4	6.8			
232	4.4	6.4	273	6.2	7.1			
233	1.2	12.0	274	2.2	4.8			
234	0.8	13.0	275	2.6	4.6			

line 9999
job 1
area 1



Navigator 6 DDH16

Profiles of Total Magnetic Intensity

Downhole Survey

GEOPEKO-TENNANT CREEK

BASIC GEOTECHNICAL LOG SHEET

PROSPECT :NAVIGATOR 6

HOLE No. :DH16

PAGE No.:1

DEPTH	DEPTH	ROCK	WEATH.	ALTN.	ROCK	BEDD.	CLEAV.	C.B.A	C.C.A	SENSE	CORE	RQD	COMMENTS
FROM	TO	TYPE			STR.	ING	AGE	S0	S1	S0-S1	REC.%	%	SHEARS, JOINTS, FAULTS, ETC.
150.00	151.00	SLST	FR	3	S	3	2				100	100	
151.00	152.00	SLST	FR	3	S	3	2				100	81	
152.00	153.00	SLST	FR	3	S	3	2				100	93	
153.00	154.00	SLST	FR	3	S	3	2				100	100	
154.00	155.00	SLST	FR	3	S	3	2				100	100	
155.00	156.00	QFPO	FR	3	S	3	2				100	100	
156.00	157.00	QFPO	FR	3	S	3	2				100	92	
157.00	158.00	QFPO	FR	3	S	3	2				100	100	
158.00	159.00	QFPO	FR	3	S	3	2				100	100	
159.00	160.00	QFPO	FR	3	S	3	2				100	90	
160.00	161.00	QFPO	FR	3	S	3	2				100	72	
161.00	162.00	SLST	FR	3	S	3	2				100	100	
162.00	163.00	SLST	FR	3	S	3	2				100	100	
163.00	164.00	SLST	FR	3	S	3	2				100	90	
164.00	165.00	SLST	FR	3	S	3	2				100	100	
165.00	166.00	SLST	FR	3	S	3	2				100	94	
166.00	167.00	SLST	FR	3	S	3	2				100	100	
167.00	168.00	SLST	FR	3	S	3	2				100	100	
168.00	169.00	SLST	FR	3	S	3	2				100	100	
169.00	170.00	SLST	FR	3	S	3	2				100	100	
170.00	171.00	SLST	FR	3	S	3	2				100	94	
171.00	172.00	SLST	FR	3	S	3	2				100	100	
172.00	173.00	SLST	FR	3	S	3	2				100	97	
173.00	174.00	SLST	FR	3	S	3	2				100	100	
174.00	175.00	SLST	FR	3	S	3	2				100	100	
175.00	176.00	SLST	FR	3	S	3	2				100	93	
176.00	177.00	SLST	FR	3	S	3	2				100	100	
177.00	178.00	SLST	FR	3	S	3	2				100	100	
178.00	179.00	SLST	FR	3	S	3	2				100	100	
179.00	180.00	SLST	FR	3	S	3	2				100	87	
180.00	181.00	SLST	FR	3	S	3	2				100	98	
181.00	182.00	SLST	FR	3	S	3	2				100	100	
182.00	183.00	SLST	FR	3	S	3	2				100	92	
183.00	184.00	SLST	FR	3	S	3	2				100	57	
184.00	185.00	SLST	FR	3	S	3	2				88	41	

GEOPEKO-TENNANT CREEK

BASIC GEOTECHNICAL LOG SHEET

PROSPECT : NAVIGATOR 6

HOLE No. : DH16

PAGE No.: 2

DEPTH	DEPTH	ROCK	WEATH.	ALTN.	ROCK	BEDD.	CLEAV.	C.B.A	C.C.A	SENSE	CORE	RQD	COMMENTS
FROM	TO	TYPE			STR.	ING	AGE	S0	S1	S0-S1	REC.%	%	SHEARS, JOINTS, FAULTS, ETC.
185.00	186.00	SLST	FR	3	S	3	2				100	79	
186.00	187.00	SLST	FR	3	S	3	2				100	100	
187.00	188.00	SLST	FR	3	S	3	2				100	100	
188.00	189.00	SLST	FR	3	S	3	2				100	89	
189.00	190.00	SLST	FR	3	S	3	2				100	88	
190.00	191.00	SLST	FR	3	S	3	2				100	98	
191.00	192.00	SLST	FR	3	S	3	2				100	100	
192.00	193.00	SLST	FR	3	S	3	2				100	92	
193.00	194.00	SLST	FR	3	S	3	2				100	64	
194.00	195.00	SLST	FR	3	S	3	2				100	80	
195.00	196.00	SLST	FR	3	S	3	2				100	100	
196.00	197.00	SLST	FR	3	S	3	2				100	100	
197.00	198.00	SLST	FR	3	S	3	2				100	89	
198.00	199.00	SLST	FR	3	S	3	2				100	71	
199.00	200.00	SLST	FR	3	S	3	2				100	94	
200.00	201.00	SLST	FR	3	S	3	2				100	97	
201.00	202.00	SLST	FR	3	S	3	2				100	91	
202.00	203.00	SLST	FR	3	S	3	2				100	93	
203.00	204.00	SLST	FR	3	S	3	2				100	78	
204.00	205.00	SLST	FR	3	S	3	2				100	100	
205.00	206.00	SLST	FR	3	S	3	2				100	100	
206.00	207.00	SLST	FR	3	S	3	2				100	100	
207.00	208.00	SLST	FR	3	S	3	2				100	66	
208.00	209.00	SLST	FR	3	S	3	2				100	38	
209.00	210.00	SLST	FR	3	S	3	2				100	67	
210.00	211.00	SLST	FR	3	S	3	2				100	100	
211.00	212.00	SLST	FR	3	S	3	2				100	92	
212.00	213.00	SLST	FR	3	S	3	2				100	100	
213.00	214.00	SLST	FR	3	S	3	2				100	100	
214.00	215.00	SLST	FR	3	S	3	2				100	93	
215.00	216.00	SLST	FR	3	S	3	2				100	100	
216.00	217.00	SLST	FR	3	S	3	2				100	100	
217.00	218.00	SLST	FR	3	S	3	2				100	100	
218.00	219.00	SLST	FR	3	S	3	2				100	93	
219.00	220.00	SLST	FR	3	S	3	2				100	83	

GEOPEKO-TENNANT CREEK

BASIC GEOTECHNICAL LOG SHEET

PROSPECT : NAVIGATOR 6

HOLE No. : DH16

PAGE No.: 3

DEPTH : FROM :	DEPTH : TO :	ROCK : TYPE :	WEATH. : :	ALTN. : :	ROCK : STR. :	BEDD : ING :	CLEAV : AGE :	C.B.A : S0 :	C.C.A : S1 :	SENSE : S0-S1 :	CORE : REC. % :	RQD : % :	COMMENTS : SHEARS , JOINTS , FAULTS , ETC. :
220.00	221.00	SLST	FR	3	S	3	2				100	92	
221.00	222.00	SLST	FR	3	S	3	2				100	100	
222.00	223.00	SLST	FR	3	S	3	2				100	100	
223.00	224.00	SLST	FR	3	S	3	2				100	82	
224.00	225.00	SLST	FR	3	S	3	2				100	84	
225.00	226.00	SLST	FR	3	S	3	2				100	100	
226.00	227.00	SLST	FR	3	S	3	2				100	100	
227.00	228.00	SLST	FR	3	S	3	2				100	100	
228.00	229.00	SDBR	FR	3	S	3	2				100	95	
229.00	230.00	SDBR	FR	3	S	3	2				100	93	
230.00	231.00	SLST	FR	3	S	3	2				100	100	
231.00	232.00	SLST	FR	3	S	3	2				100	82	
232.00	233.00	SLST	FR	3	S	3	2				100	60	
233.00	234.00	VBSD	FR	3	S	3	2				100	95	
234.00	235.00	VBSD	FR	4	VS	1	1				100	100	
235.00	236.00	QCMT	FR	4	VS	1	1				100	100	
236.00	237.00	QCMT	FR	4	VS	1	1				100	100	
237.00	238.00	QCMT	FR	4	VS	1	1				100	100	
238.00	239.00	QCMT	FR	4	VS	1	1				100	100	
239.00	240.00	QCMT	FR	4	VS	1	1				100	100	
240.00	241.00	VBSD	FR	4	VS	1	1				100	100	
241.00	242.00	VBSD	FR	4	VS	1	1				100	100	
242.00	243.00	VBSD	FR	4	VS	1	1				100	100	
243.00	244.00	VBSD	FR	4	S	1	2				100	100	
244.00	245.00	VBSD	FR	4	S	1	2				100	96	
245.00	246.00	VBSD	FR	4	S	1	2				100	69	
246.00	247.00	VBSD	FR	4	S	1	2				100	65	
247.00	248.00	VBSD	FR	4	S	1	2				100	95	
248.00	249.00	VASD	FR	4	S	1	2				100	90	
249.00	250.00	VASD	FR	4	S	1	2				100	64	
250.00	251.00	VASD	FR	4	S	1	2				100	100	
251.00	252.00	VASD	FR	4	S	1	2				100	100	
252.00	253.00	VASD	FR	4	S	1	2				100	100	
253.00	254.00	VASD	FR	4	S	1	2				100	94	
254.00	255.00	VASD	FR	4	S	1	2				100	90	

GEOPEKO-TENNANT CREEK

BASIC GEOTECHNICAL LOG SHEET

PROSPECT : NAVIGATOR 6

HOLE No. : DH16

PAGE No.: 4

DEPTH	DEPTH	ROCK	WEATH.	ALTN.	ROCK	BEDD.	CLEAV.	C.B.A	C.C.A	SENSE	CORE	ROD	COMMENTS
FROM	TO	TYPE			STR.	ING	AGE	S0	S1	S0-S1	REC.%	%	SHEARS, JOINTS, FAULTS, ETC.
255.00	256.00	VASD	FR	4	S	2	2				100	96	
256.00	257.00	VASD	FR	4	S	2	2				100	100	
257.00	258.00	VASD	FR	4	S	2	2				100	100	
258.00	259.00	VASD	FR	4	S	2	2				100	100	
259.00	260.00	VASD	FR	4	S	2	2				100	79	
260.00	261.00	VASD	FR	4	S	2	2				100	46	
261.00	262.00	VASD	FR	4	S	2	2				100	25	
262.00	263.00	VASD	FR	4	S	2	2				100	55	
263.00	264.00	VASD	FR	4	S	2	2				100	93	
264.00	265.00	VASD	FR	4	S	2	2				100	38	
265.00	266.00	VASD	FR	4	S	2	2				100	61	
266.00	267.00	VASD	FR	4	S	2	2				100	33	
267.00	268.00	VASD	FR	4	S	2	2				100	91	
268.00	269.00	VASD	FR	4	S	2	2				100	87	
269.00	270.00	CVSD	FR	3	S	2	2				100	57	
270.00	271.00	CVSD	FR	3	S	2	2				100	59	
271.00	272.00	CVSD	FR	3	S	2	2				100	34	
272.00	273.00	CVSD	FR	3	S	2	2				100	53	
273.00	274.00	CVSD	FR	3	S	2	2				100	77	
274.00	275.00	CVSD	FR	3	S	2	2				100	75	
275.00	276.00	CVSD	FR	3	S	2	2				100	79	
276.00	277.00	CVSD	FR	3	S	2	2				100	98	
277.00	278.00	CVSD	FR	3	S	2	2				100	98	
278.00	279.00	CVSD	FR	3	S	3	2				100	100	
279.00	280.00	CVSD	FR	3	S	3	2				100	95	
280.00	281.00	CVSD	FR	3	S	3	2				100	89	
281.00	282.00	CVSD	FR	3	S	3	2				100	96	
282.00	283.00	CVSD	FR	3	S	3	2				100	94	
283.00	284.00	CVSD	FR	3	S	3	2				100	97	
284.00	285.00	CVSD	FR	3	S	3	2				100	100	
285.00	286.00	CVSD	FR	3	S	3	2				100	93	
286.00	287.00	CVSD	FR	3	S	3	2				100	98	
287.00	288.00	CVSD	FR	3	S	3	2				100	100	
288.00	289.00	CVSD	FR	3	S	3	2				100	90	
289.00	290.00	CLSD	FR	3	S	3	2				100	95	

BASIC GEOTECHNICAL LOG SHEET

PAGE No. 17

[illegible]

*** PROSPECT : NAVIGATOR 6

*** HOLE : DH16 ACTUAL ***

Collar Coordinates 1830.00 E 1060.00 N 993.0 RL

Azimuth correction = .00

Interpolation inc = 5.0

SURVEYS (Azimuth wrt Grid North)

DEPTH	DIP	AZIMUTH	EASTING	NORTHING	RL
.00	-75.50	360.00	1830.00	1060.00	993.00
60.00	-72.00	364.00	1830.65	1076.42	935.31
90.00	-68.00	365.00	1831.45	1086.53	907.08
120.00	-61.00	366.50	1832.74	1099.30	879.98
150.00	-52.00	367.00	1834.71	1115.84	855.08
174.00	-50.00	368.50	1836.75	1130.86	836.47
207.00	-48.00	367.50	1839.78	1152.31	811.57
237.00	-46.50	370.00	1842.88	1172.43	789.54
270.00	-45.00	369.00	1846.68	1195.14	765.91
303.00	-42.50	371.00	1850.72	1218.58	743.04

INTERSECTIONS along the EASTING plane

Depth Easting Northing

R.L

INTERSECTIONS along the NORTHING plane

Depth Easting Northing

R.L

.0	1830.00	1060.00	993.00
38.1	1830.26	1070.00	956.25
71.3	1830.91	1080.00	924.64
98.9	1831.77	1090.00	898.86
121.4	1832.82	1100.00	878.75
140.2	1834.00	1110.00	862.91
156.7	1835.24	1120.00	849.80
172.6	1836.63	1130.00	837.50
188.2	1838.11	1140.00	825.63
203.5	1839.48	1150.00	814.16
218.5	1840.85	1160.00	803.03
233.4	1842.46	1170.00	792.15
248.1	1844.21	1180.00	781.52
262.6	1845.86	1190.00	771.14
276.9	1847.46	1200.00	761.02
291.1	1849.14	1210.00	751.19

INTERSECTIONS along the RL plane

Depth Easting Northing

R.L

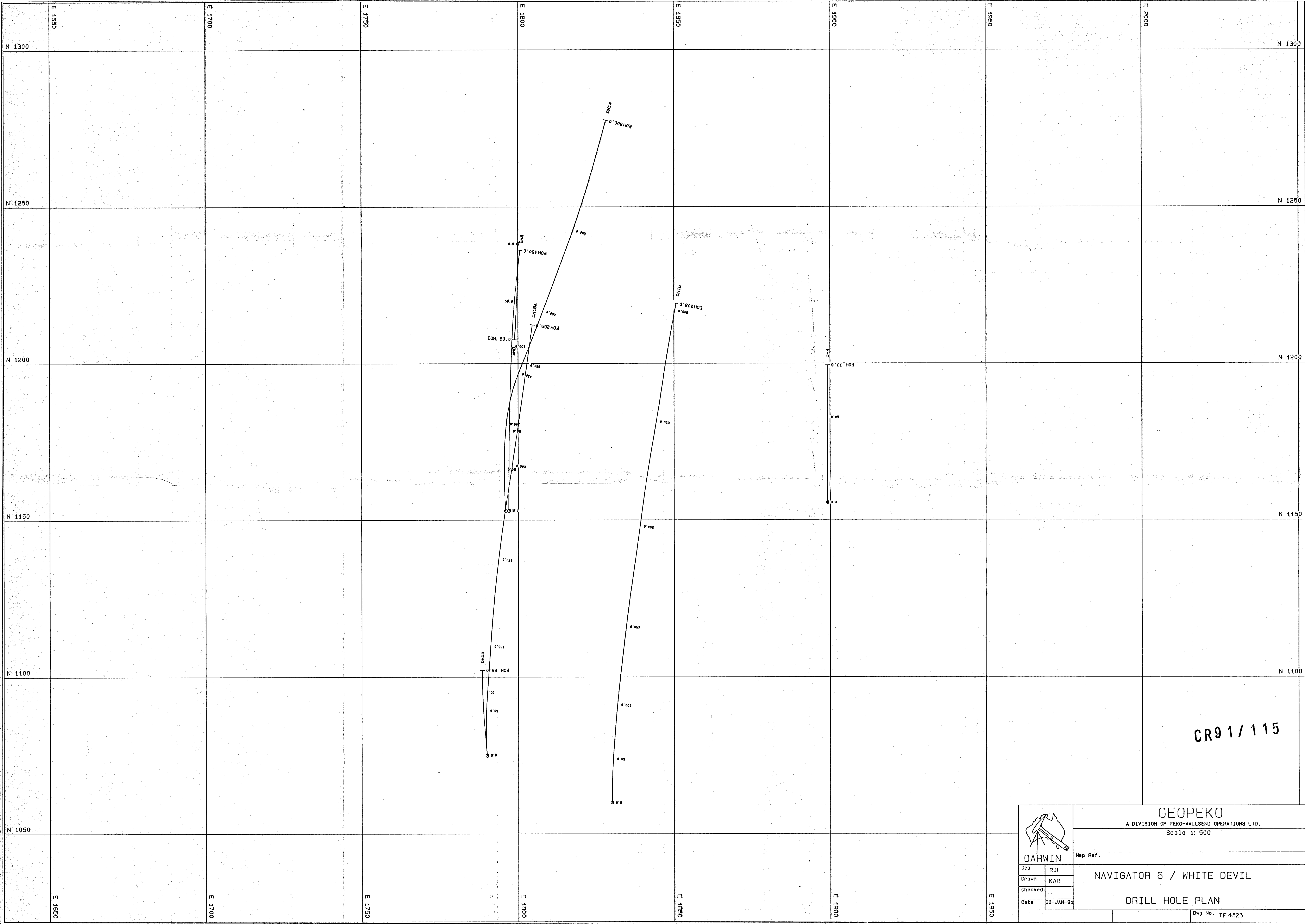
3.1	1830.00	1060.78	990.00
13.4	1830.03	1063.41	980.00
23.8	1830.10	1066.11	970.00
34.2	1830.21	1068.92	960.00
44.6	1830.36	1071.84	950.00
55.1	1830.55	1074.92	940.00
65.6	1830.78	1078.17	930.00
76.2	1831.04	1081.64	920.00
86.9	1831.35	1085.39	910.00
97.7	1831.72	1089.51	900.00
108.7	1832.18	1094.11	890.00
120.0	1832.74	1099.29	880.00
131.6	1833.43	1105.23	870.00
143.8	1834.26	1112.12	860.00
156.5	1835.21	1119.84	850.00
169.4	1836.32	1127.94	840.00
182.5	1837.56	1136.28	830.00
195.7	1838.79	1144.86	820.00
209.1	1839.97	1153.71	810.00
222.7	1841.27	1162.77	800.00
236.4	1842.81	1172.01	790.00
250.2	1844.46	1181.45	780.00
264.2	1846.04	1191.12	770.00
278.4	1847.63	1201.02	760.00
292.8	1849.36	1211.24	750.00

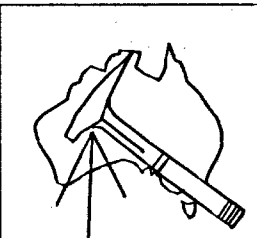
APPENDIX 4

Navigator 6

1800E Cross Section (Plan No. TF4522) /

Drillhole Plan (Plan No. TF4423) /





DARWIN

Geo	RJL
Drawn	KAB
Checked	
Date	30-JAN-94

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Map Ref.

NAVIGATOR 6 / WHITE DEVIL

DRILL HOLE PLAN

Dwg No. TF 4523