ANNUAL REPORT FOR

EXPLORATION RETENTION LICENCE 86

19 SEPTEMBER 1990 TO 18 SEPTEMBER 1991

TENNANT CREEK	1:250,000 SHEET	SE 53-14
FLYNN	1:100,000 SHEET	5759

DUNCAN ARCHIBALD
OCTOBER 1991

TABLE OF CONTENTS

LIST OF PLANS

Drawing No.	Title	Scale
1	General Location ERL 86	-
2	Geology of ERL 86	1:12,000
3	Aeromagnetics of ERL 86 - Contour Plan	1:12,000
4	Olive Wood Location Diagram Showing Drillholes 1 to 7	1:5,000
5	Summary of Work Carried Out by Geopeko - Sept. 1989 to Sept. 1990	1:5,000
6	General Geological Setting of ERL 86, Showing Major Prospects and Magnetic Features (North Flinders)	1:12,000

1. INTRODUCTION

Exploration Retention Licence 86 was granted for a period of five years on 19th September, 1989 to Peko Wallsend Operations Limited to test an "anomalous zone of possible economic potential" close to the Orlando mine. The licence area is centred on an aeromagnetic feature which extends south-east from the One-Oh-Two prospect on MLC 20.

A prominent peak occurs on this magnetic trend in close association with some old mine workings at Olive Wood. Geopeko tested this anomaly with two diamond drill holes and five percussion holes between 1959 and 1987.

In the year following the grant of ERL 86 Geopeko undertook exploration with a more regional scope. Vacuum drilling in bedrock (272 holes of 2-3 metres depth) located two parallel lines of copper anomalism in a structural extension of the feature hosting the Orlando gold/copper deposit. Three percussion holes were drilled to test these targets. Some surface rock chip/channel sampling was also carried out.

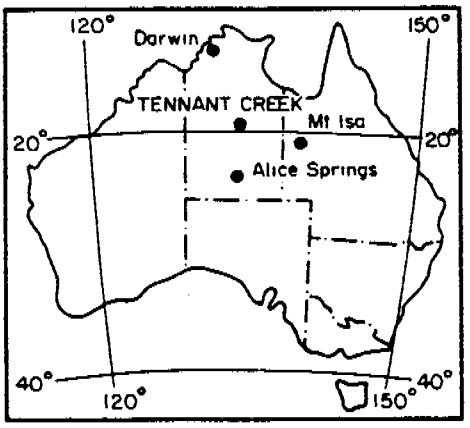
In 1991 North Flinders Mines Limited entered into a Joint Venture agreement with Geopeko over this, and other properties in the Tennant Creek Central Field area. North Flinders Exploration is the manager of the Joint Venture. Since this agreement was concluded, North Broken Hill Peko has sold all of its interests in the Tennant Creek area to Poseidon Gold Limited so that the Joint Venture is now between North Flinders Mines Limited and Poseidon Gold Limited. North Flinders Exploration remains the Joint Venture manager.

This report describes activity by North Flinders in relation to ERL 86 for the year to September 1991.

2. LOCATION AND ACCESS

The ERL 86 prospect, known as Olive Wood, is located approximately two kilometres south-east of the Orlando mine and thirty kilometres north-west of Tennant Creek. (Refer Drawing 1). It has an area of 474 hectares.

Access to Olive Wood is via a short track north from the Tennant Creek to Warrego road.



N

19°15'

NORTH STAR

STUART HIGHWAY

WARREGO

ORLANDO

GECKO

ERL 86

BARKLY HIGHWAY

WHITE DEVIL

19°30'

IVANHOE

TENNANT CREEK

AIRPORT

TC8

ARGO

PEKO

ELDORADO

JUNO

NOBLE'S NOB

0 20km

Scale

19°45'

134°00'

134°15'

TENNANT CREEK

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

	Tennant Creek SE 53-14	SCALE AS SHOWN
GEOLOGIST R.J.L	GENERAL LOCATION ERL 86 Drawing 1	
DATE 15-4-88		
DRAWN R.M.N		
CHECKED	PROJECT CENTRAL FIELD	DWG NO. TF 4432b

3. PREVIOUS EXPLORATION

3.1 Geophysics

Early Geopeko exploration targeted a "thumb print" aeromagnetic anomaly superimposed on a prominent south-easterly trending magnetic feature. Similar anomalies occur elsewhere on this trend within other nearby tenements. (Refer Drawing 3).

3.2 Geology

The main aeromagnetic anomaly in ERL 86 is coincident with one of the two south-east trending ironstone horizons mapped by Geopeko, and is adjacent to the old Olive Wood mine workings. Well exposed, folded, turbiditic greywackes and siltstones host the lodes. (Refer Drawing 2).

Seven drillholes (2 diamond, 5 percussion) tested the ground in the immediate vicinity of the Olive Wood anomaly prior to the grant of ERL 86. (Refer to the following table and Drawing 4).

Only two drillholes (No. 1 and 2) intersected the main lode zone underlying the magnetic anomaly. In both cases a quartz-jasper-magnetite body was encountered exhibiting similarities to the lodes at Peko and Northern Star mines. No economic mineralisation was recorded, though 10 metres at 1.0g Au/t was intersected in DDH1 and 20 metres at 0.8g Au/t in DDH2. Geopeko has some reservations about the accuracy of the assays in DDH2.

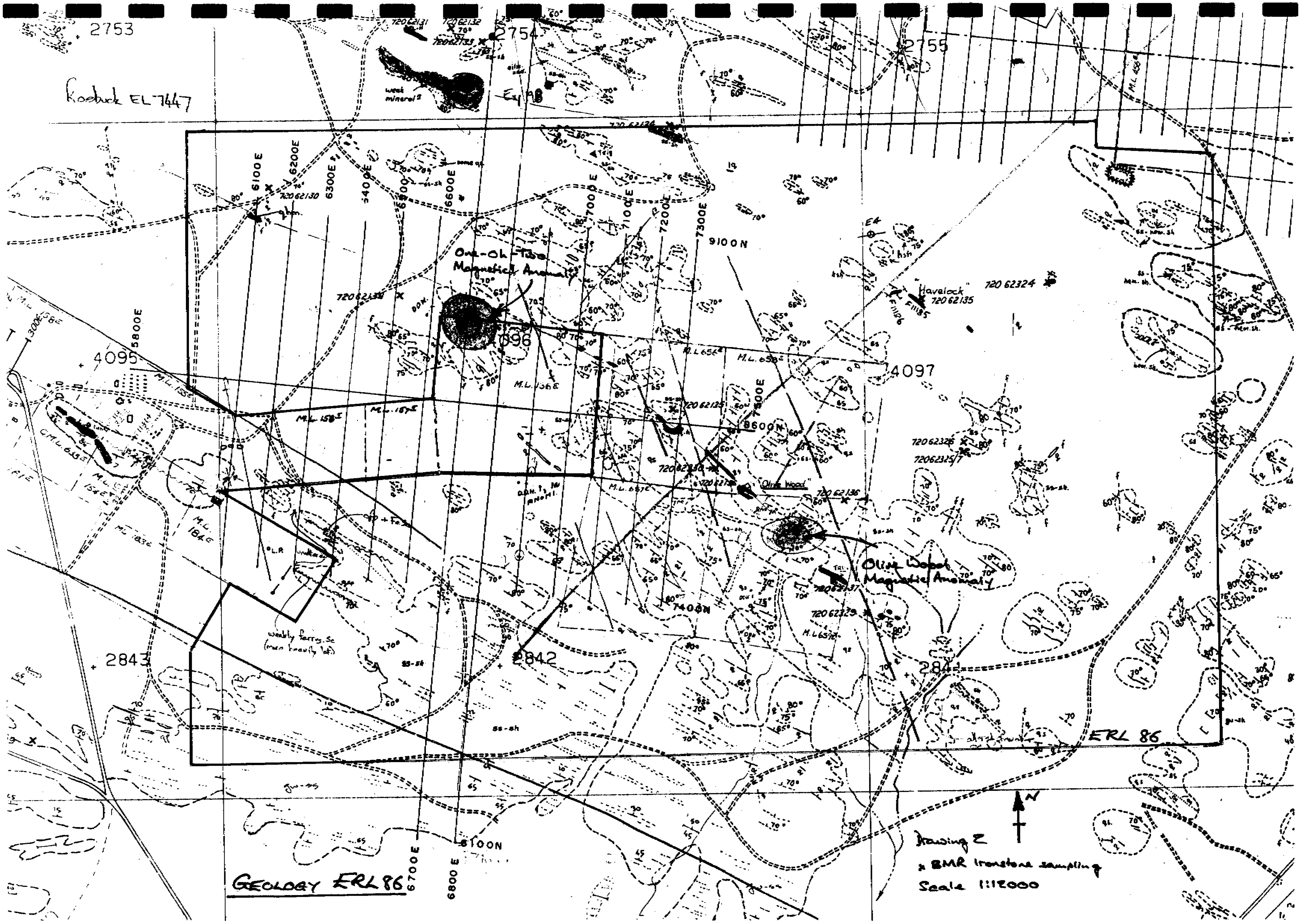
Drillhole No. 4 intersected a subsidiary lode along strike and very close to the old Olive Wood workings. A one metre interval (68-69m) at 9.9g Au/t was identified in this percussion hole.

Drillhole No. 6 was abandoned before reaching its target.

SUMMARY DATA FROM GEOPEKO DRILLING PRIOR TO GRANT OF ERL 86

Hole No.	Type	Depth(m)	Comments
1	Diamond	309	10m (259.7 to 269.7m) @ 1.0g Au/t Lode 251 to 302m
2	Diamond	483	8m (408 to 416m) @ 0.8g Au/t Lode 417 to 472m
3	Percussion	93	Shallow test, no anomalous gold
4	Percussion	76	Minor gold close and along strike from Olive Wood workings, 1m (68-69m) @ 9.9g Au/t
5	Percussion	118	Shallow test, no anomalous gold
6	Percussion	211	None

7	Percussion	68	Lode 34.5 to 50.5m. No anomalous gold



Roebuck EL 7447
2753
2754
2755
6100E
6200E
6300E
6400E
6600E
7000E
7200E
7300E
5800E
9100N
One-oh-Two Magnetic Anomaly
Havelock
720 62135
720 62324
4095
4096
4097
8600N
Olive Wood
720 62136
Olive Wood Magnetic Anomaly
7400N
2843
2842
ERL 86
8100N
6700E
6800E
GEOLOGY ERL 86
Drawing 2
x BMR Ironstone sampling
Scale 1:12000

AEROMAGNETICS OF ERL 86

Scale 1:12000

Drawing 3

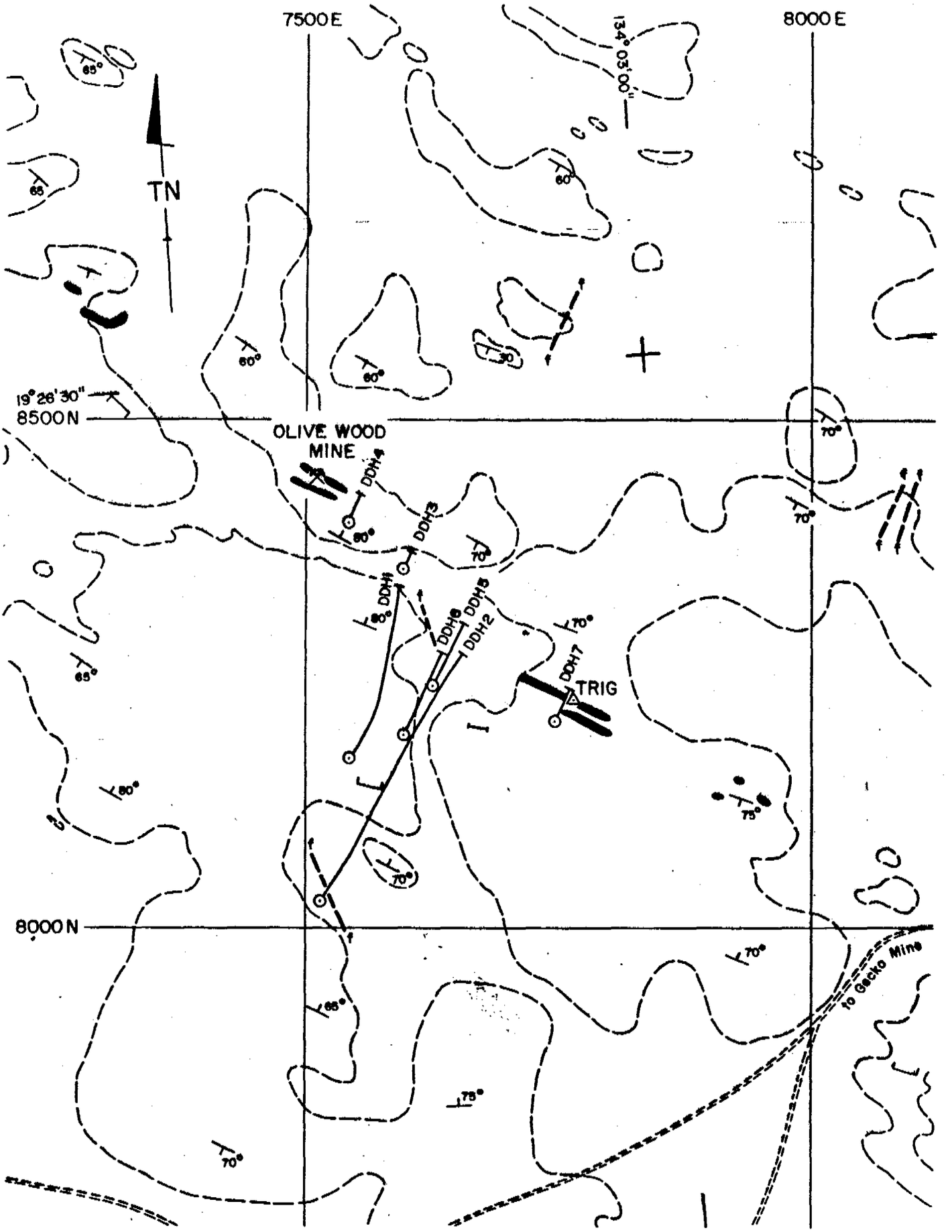
N

SCALE 1:12000

ERL 86

ERL 86

AEROMAGNETICS OF ERL 86



Note: The Gecko Metric Extended Mine grid has been shown. Grid north equals magnetic north for 1978 (4·2° east of True).

RJL
8-4-88
RMN
Drawing 4

OLIVE WOOD LOCATION DIAGRAM

CENTRAL FIELD

TF4148

During the first year of grant of ERL 86 Geopeko undertook a program of structural mapping, rock chip sampling, some localised shallow vacuum drilling and deeper reverse circulation drilling (Refer Drawing 5).

The structural mapping established that shear zones of the type which hosted mineralised ironstones in other parts of the Carraman Formation are present within ERL 86.

Chip and channel sampling of prospective outcrops for Au, Cu and Bi yielded minor anomalies of upto 1.55g Au/t from the area of the Olive Wood workings and other elevated values were located around other old workings situated at 1250E/350N. Fifty two samples were collected.

A geochemical bedrock sampling program was carried out with a vacuum drill over the south-west quadrant of ERL 86 in the search for along strike repetitions of Orlando mineralisation. Two hundred and seventy two holes were drilled on thirteen traverses to a depth of two to three metres and samples assayed for Au, Cu, Bi, Pb and Zn. Two zones of copper anomalism were discovered.

Three reverse circulation percussion holes were drilled to test these zones. Results were not encouraging. A tabulation of drillhole information appears below.

SUMMARY PERCUSSION DRILLING DATA - GEOPEKO ACTIVITY, ERL 86

Hole No.	Type	Depth (m)	Comments
ODH 175	RC	73	5m (26-31m) 500ppm Cu
ODH 176	RC	73	5m (57-62m) 0.2g Au/t 466ppm Cu and 224ppm Bi
ODH 177	RC	73	None

Summary of Work Carried Out by Geopeko - Sept. 1989 to Sept. 1990

Drawing 5

OLIVE WOOD

DDH1, DDH1A

DDH2

DDH1

DDH2

TRIG

Fest + qt

some qt

old workings

qt/peb

qt peb

DH176

DH175

DH173

DH177

peb

Fe

Fe + q

Fe + qt

qt / qgrwk

fgrak/slst

fssk

slst

slst/sh

slst/shj some grwt

slst + fgrw

sist

qt

q

gb

Cb

SOON

1500E

2000E

ORLANDO MINE GRID OON

ERL86

134°02'

134°03'

Scale 1:5000

N

Rock chip/channel sampling

Vacuum drill traverses

RC Percussion holes

4. RECENT EXPLORATION (for 12 months to September 1991

North Flinders Mines Ltd took over the management of exploration on ERL 86 in January 1991, under the terms of the Tennant Creek Central Joint Venture Agreement with Peko-Wallsend Operations Ltd. At that time Geopeko had not commenced an exploration program for 1990-91.

During 1991 the economic potential of ERL 86 has been investigated, with special attention given to the study of local geology in its regional context. All relevant geophysical and lithological information for the area has been collated and evaluated.

Subsequently the retention licence was inspected in the field. Reconnaissance mapping was also undertaken, together with an interpretation of the regional magnetic anomalies to identify major structural features.

The data reported by Geopeko was checked and the exploration potential of the ground was reassessed. The following observations can be made:-

- The lithologies of the retention licence area comprise a belt of comparatively well exposed turbiditic greywackes ad siltstones. These are similar to the host sequence enclosing lode rocks at the nearby Gecko and Orlando mines.

- Major WNW trending shears, clearly identifiable on aeromagnetics, pass through both Orlando and Gecko (Refer Drawing 6), where gold-copper mineralisation is hosted by ironstone lenses and enclosing veined, chloritised schists within the shear zones. NE trending magnetic cross-structures also cut the area.

- Traversing through the intervening area of ERL 86 are a series of subparallel shears, most notably the Olive Wood and Havelock Shears, along which are scattered outcrops of massive quartz-hematite and local zones of brecciated and silicified metasediments.

- These shears are essentially strike parallel and may represent zones of reverse faulting developed during the compressional folding event. They are commonly offset by a conjugate set of NNW and NNE trending faults.

As a result of this field checking and reappraisal of ERL 86, a comprehensive exploration program has been formulated to delineate and test targets which would not necessarily have been located by past activity. A particular priority will be the investigation of the Havelock lode/shear system which has received only slight previous attention.

General Geological Setting of ERL 86 Showing Major Prospects and Magnetic Features

Drawing 6.

rocks throughout moderately sheared

Marina Ross

Explorer 198 magnetic anomaly

sheared, altered rocks

Gecko magnetic anomaly

Shaft

19°26'

approximate boundary of ERL 86.

Havelock

ironstone

One Ok Two magnetic anomaly

Orlando magnetic anomaly

Shaft

trend layering/schistosity

photo lineaments

Olive Wood

Olive Wood magnetic anomaly

Fig

trace of shear zone

sheared, altered rocks

Explorer 71 (Gamplus JV)

regional magnetic lineaments

Warrego road

19°27'

134°02'

134°03'

134°04'

To Tennant Creek

Figure 2 General geological setting of ERL 86, showing major prospects and magnetic features.

Scale: 1: 12,000

5. EXPENDITURE (for 12 months to September 1991)

A breakdown of costs for ERL 86 is given below.

	$
Geological consultant (5 days @ $500/day)	2,500.00
Geologist (10 days @ $400/day)	4,000.00
Field assistant (3 days @ $250/day)	750.00
Accomodation	800.00
Air fares	2,020.00
Vehicles (rent, running expenses)	900.00
Base support costs	1,500.00
Administration	970.00
TOTAL	13 440.00

A consequence of the management transfer to North Flinders Mines was a break in continuity of the field operations formerly undertaken by Geopeko.

The Company has also sought to ensure that its future activity will not prejudice the integrity of aboriginal sacred sites in the area. To this end, North Flinders Mines has approached the relevant authorities for the grant of necessary clearances prior to going beyond the reconnaissance/mapping stage of field activity.

This has resulted in a shortfall of expenditure below that covenated by Geopeko prior to North Flinders Mines becoming manager of ERL 86 exploration. A variation to the covenant is sought.

A full and varied exploration program is proposed for the next 12 months and this is reflected in the expenditure covenant given in Section 6.

6. PROPOSED EXPENDITURE (for 12 months to September 1992)

It is intended to widen the scope of exploration techniques used to prospect ERL 86. Specific tasks planned for the 12 months to September 1992 include:-

- Remapping the area in detail with further emphasis on the recording of structural data. This will be interpreted with reference to recently formulated theories on the structural evolution of Tennant Creek lithologies.

- Chip Sampling Ironstone outcrops systematically.

- Accurately gridding and levelling selected areas. A gravimetric and ground magnetometer survey will then be conducted

- Vacuum drilling non-outcropping areas (where not already tested) to yield soil/bedrock samples for multi-element assays.

Proposed expenditure on ERL 86 for the next 12 months.

	$
Regional geological and structural mapping (15 days)	7,000
Gridding and levelling (5 days)	2,500
Gravimetric survey (5 days)	4,500
Ground magnetometer survey	1,500
Chip sampling ironstone outcrops (5 days)	1,200
Vacuum drilling areas of cover	8,000
Assaying (chip and vacuum samples)	10,000
Drafting	5,000
Accomodation	1,200
Air fares	2,200
Vehicles	2,500
Administration	5,000
TOTAL	50,600

It is anticipated that the proposed program would make up the 1990-91 expenditure shortfall and yield a similar aggregate figure for the 1991-92 period. Drill testing of any anomalies generated would lead to a further escalation of exploration spending in the year 1992-93

7. REASONS FOR REQUEST FOR RENEWAL

Exploration activity to October 1991 has indicated that ERL 86 remains a prospective tenement though no economic mineralisation has yet been located.

NFM, as the new manager of the retention licence, wishes to intensify Geopeko's regional search for economic mineralisation and extensively test some target lithologies using previously unutilised exploration methods. The activity would extend over the whole of ERL 86 rather than be restricted to localised parts of the tenement, as in the past. Consequently the renewal of the licence is sought, rather than the grant of smaller mineral leases or claims which would preclude the effectiveness of spatially extensive geochemical and geophysical techniques the Company intends to use.

APPENDIX I

GEOPEKO DIAMOND AND PERCUSSION DRILLHOLE LOGS

FOR HOLES DRILLED PRIOR TO SEPTEMBER 1989

DRILLHOLES 1 TO 7

LOG OLIVE WOOD. D.D.H. 1

LOCATION:	Marion Ross Locality, about 1 mile east of Orlando.
TO TEST:	Magnetic anomaly
CO-ORDS OF COLLAR:	902.28S, 2252.44E (B.H.R.): 16.0N, 648.0E
R.L. OF COLLAR:	-
BEARING:	32° 30' (B.H.R.): 004° 0' ([illegible])
INCLINATION:	- 70°
PROPOSED TARGET:	900'
ACTUAL TARGET:	834'
PROPOSED DEPTH:	1000'
ACTUAL DEPTH:	1015'

SURVEYS:

Type.	Depth	Dip read	Dip corrected	Remarks
ACID	100'	71½	66½	
"	120'	70	64½	
"	120'	69½	62½	
"	160'	66½	60½	
"	177½'	66½	60½	
"	236'	64½	58	
"	270'	64½	58	
"	290'	64	57½	
"	300'	64	57½	
"	310'	62	55½	
"	331'	61½	54½	
ACID	490'	64½	55½	Wedge survey
"	520'	65	59	
"	525'	65	59	
"	600'	61½	54½	
"	650'	59½	52½	
"	711'	58½	51½	
"	880'	55	48	
"	900'	52	45	
"	1000'	51	44	

Type	Depth	Dip	Brg.	Gridazimuth	Remarks
TROPARI	350'	60°	N22°E	353½°	
"	440'	58°	N14½°E	346°	
"	460'	58°	N17°E	340½°	
"	531'	54°	N12°E	343½°	
"	Wedge 1 at 465'				
"	520'	50°	N57°E		Abandoned
"	630'	41°	N47°E		"
"	650'	53°	N11¼°E	343½°	
"	700'	51°	N30°E		Abandoned
"	730'	70°	N21°E		"
"	750'	49°	N11½°E	342½°	
"	800'		N[illegible]	(Water in instrument [illegible])	

GEOPEKO

TENNANT CREEK - NORTHERN TERRITORY

DRILLHOLE SURVEYS

PAGE of

PROJECT: EL 4179 AREA: OLIVE WOOD DRILLHOLE TYP

MINE: LEVEL: SURFACE

CO-ORDS:	BEARING:	DIP:	R.L.:	DRILLHOLE No.
6010·3 S 8042·4 W	?	-70°	1000·3'	DDH 1.

DOWN HOLE SURVEY						PLOTTING DATA		
DEPTH feet ~~(metres)~~	DIP		BEARING		REMARKS	~~NORTH~~/SOUTH	~~EAST~~/WEST	R.L. (feet)
	READ	CORR.	MAG.	GRID				
0		70				6010·3	8042·4	1000·3
80		66·5						
120		64·5						
160		60·5						
177·5		60·5						
236		58						
270		58						
290		57·5						
300		57·5						
310		55·5						
330		54·5						
490		58·5						
520		59						
525		59						
600		54·5						
650		52·5						
711		51·5						
880		48						
900		45						
1000		44						

GEOPEKO

TENNANT CREEK - NORTHERN TERRITORY

DRILLHOLE SURVEYS

PROJECT: EL 4179 AREA: OLIVE WOOD DRILLHOLE TY

MINE: OLIVE WOOD LEVEL: SURFACE

CO-ORDS:	6010·3 S	BEARING:	DIP:	R.L.:	DRILLHOLE N
	8042·4 W	32·5° Mag.	-70°	1000	OWDH 1

DOWN HOLE SURVEY							PLOTTING DATA		
DEPTH (feet)	DEPTH (metres)	DIP READ	DIP CORR.	BEARING MAG.	BEARING GRID	REMARKS	~~NORTH~~/SOUTH	~~EAST~~/WEST	R.L. (metres)
0	0		70		32·5		6010·3	8042·4	1000
100	30·5		66·5		33		5979·1	8022·4	971·7
120	36·6		63		34		5972·0	8017·6	966·2
(3)	48·8		60·5		36	x	5956·5	x 8006·8	x 955·4
177·5	54·1		60·5		34		5949·4	8001·8	950·8
236	71·9		58		32·5		5924·4	7985·4	935·5
270	82·3		58		32	x	5909·2	x 7975·8	x 926·7
290	88·4		57·5		31		5890·2	7980·4	925·3
300	91·4		57·5		29		5885·6	7977·7	922·8
310	94·5		55·3		27	x	5880·7	x 7975·1	x 920·2
331	100·9		54·5		25		5869·8	7969·8	915·0
350	106·7		54		22		5859·6	7965·4	910·3
440	134·1		54		18	x	5809·9	x 7947·3	x 888·1
480	146·3		54		15	Wedged at 485 feet.	5787·4	7940·6	878·2
(9)	161·8		54		12	x	5758·3	x 7933·6	x 865·7
485	147·8		54		15	Wedge. x	5784·6	x 7939·8	877·0
490	149·4		58·5		14		5781·9	7939·1	875·7
520	158·5		59		13·5		5766·8	7935·4	867·9
525	160·0		59		13	x	5764·2	x 7934·9	866·6
600	182·9		54·5		12·5		5724·1	7925·8	847·5
650	198·1		53		12		5695·2	7919·5	835·2
700	213·4		52		12	x	5665·5	x 7913·2	823·1
711	216·7		51·5		11·5		5658·8	7911·8	820·5
750	228·6		50		11		5634·6	7907·0	811·3
800	243·8		49		10	x	5602·7	x 7901·0	799·7
880	268·2		48		9·5		5583·1	7897·7	792·6
900	274·3		45		9		5535·5	7889·9	777·4
1000	304·8		44		8·5	x	5465·0	x 7879·1	756

ASSAYS:

Sample No.	From	To	Au-Det/Ton	Sum
E 196	447	448	0.4	
197	467	474	0.4	
198	474	481'6"	1.2	
199	486	492	0.6	
683	624	629	Tr.	
687	629	634	0.4	
692	634	637	0.2	
694	637	641'3"	0.2	
695	641'3"	644'3"	0.8	
696	644'3"	647	Tr.	
698	647	650	0.2	
699	650	652	0.2	259.7 - 269.7 m
650	652	657	0.6	10m @ 1.0 g/t Au
659	657	662	0.6	
662	662	667	0.4	
663	667	672	0.4	
664	672	677	1.2	
665	677	681'9"	0.8	
691	681'9"	685	0.6	
692	685	690	0.4	
694	690	695	Tr.	
696	695	900	0.4	
699	900	906'3"	0.6	
410	906'3"	910	0.2	
411	910	920	0.2	
412	920	925'9"	0.2	
573	925'9"	930'9"	0.6	
574	930'9"	938'9"	Tr.	
451	938'9"	946	0.2	
453	946	954	0.2	
455	954	961'6"	0.4	
457	961'6"	971	0.2	
459	971	980	0.2	
461	980	988	0.4	
463	988	1000	1.0	

DESCRIPTION OF CORE BY J. HALLSTON, G. C.

Footage.

From	To.	(metres)
0'	412'	125.6

Particulars of Core.

Fine grained turbidite. Contains small s
pellets and small rounded grains of quart
sparsely distributed in a very abundant
matrix. What were apparently original fe
magnesian minerals are now weathered to b
of iron-oxide. There is a definite linea
which may represent original bedding but
probably represents the impressed schisto
The suggestion for bedding is enhanced by
"lay" of the clots pellets and ferromagnes
detritus along the planes, and it is dif.
to tell if the original compaction confor
the present cleavage. Alternating "zones
finer and coarser material are stratified
conformity with the cleavage and pellet o
which tends to support the bedding idea.

Cont.

Quartz veins are rare, but present throughc the rock.

Hell. This rock rather resembles the beds ov lying the Caroline mud flow conglomerate. Rock appears to be finer grained below 364 this may be due to the fact that the pellet not stand out so well in the semi-oxidised 431' - 435' - Still basically the same but (3-5 mm) porphyroblasts are developed, some which have an almost cubedral form. Some - pink, some white, but this may be due to oxidation. They appear to be growing to th typical impure felspars of the "porphyroids There is also a suggestion that they occur bands and zones, in conformity with the ori bedding.

Hell. Partial oxidation from 364' - 384'.
Barely oxidised from 384' - 467'

		(metres)	
422'	431'	140.5	Fine grained, well bedded, light grey, some oxidised rather talcose slate. A disturbed zone at 447' is mineralised with specularit The slate is in sharp contact with the tur above, and the contact is parallel to the within the turbidite.
461'	466'9"	142.3	Granular, semi-oxidised turbidite greywacke before. Porphyroblasts are developed.
466'9"	474'	144.5	Vein quartz with chlorite. (Assay yielded 1 dwt/ton Au.)
474'	475'	144.8	Disturbed fine grained slate. Oxidation n almost non-existent.
475'	478'	145.7	Vein quartz with chlorite.
478'	484'6"	147.7	Fine grained disturbed slate with minor st of quartz.
484'6"	487'6"	148.6	Vein quartz in khaki slate.
487'6"	494'3"	150.6	Fine grained khaki slate showing a trace o oxidation at 493'9", disturbed and broken.
494'3"	535'	163.1	Fine grained, well bedded khaki slate. (Bec at 493').
484'6"	486'6"		Fine grained slate.
486'6"	490'		Substantially vein quartz.
490'	497'		Some vein quartz in disturbed fine grained slate.
497'	558'6"	170.2	Light grey slate.
558'6"	565'		Substantially fine grained slate, very dis with wavy and contorted bedding. A great of quartz mineralisation in the disturbance

Cont.

From	To	Particulars of Core.
565'	575' 175.3	Fine grained light grey slate with wavy bedding and opposed dips which suggest acute diagenetic disturbance. Example of opposed dips at 573' " " wavy bedding at 571'
575'	587'6" 179.1	Very contorted and disturbed fine grained slate with some granular slump rock. Quartz as veinlet agglomerations, and augen, is abundant in the disturbances.
587'6"	593' 180.7	Fine grained slate.
593'	597' 182.0	Disturbed zone with quartz in fine grained slate.
597'	693' 212.8	Interbedded "pelletoidal" turbidite type greywack and fine grained slate. Considerable diagenetic disturbance now abundantly mineralised with quart: Some of the fingers of greywacke are very chlorit and exhibit incipient crystal growth. Wavy bedding; sharp, angular, discordant contacts "omega" type crenulations; and small slip faults, some of which are blind, indicate extreme diagen plasticity and activity. Nell. It is particularly noticeable that quartz is abundantly present wherever there is more seve diagenetic disturbance.
693'	703' 214.3	Mainly fine grained siltstone and slate with a fe disturbed zones. No coarse greywacke.
703'	704' 214.6	Vein quartz.
704'	740' 225.6	Fine grained; somewhat disturbed (diagenetically) slate.
740'	740'6" 228.1	Fine grained chloritic slate gradually becoming more banded and finely laminated, and developing the "wavy bedding" effect.
740'6"	750' 228.6	Band of greywacke with coarse pink incipient felspars. Completely impregnated with quartz and a few flecks of chalcopyrite.
750'	750'9" 228.8	Banded slate.
750'9"	751'6" 229.1	Vein quartz, chlorite, and chalcopyrite in what may be a diagenetic disturbance.
751'6"	821'6" 250.4	Well banded slates somewhat resembling the "wavy bedding" type. Minor diagenetic disturbances and crenulations mineralised with quartz at practicall every disturbance. Cl.B. At 769'6" - Transgressive veinlet of haematit and a trace of chalcopyrite. At 776' - concordant veinlets of haematite. These veinlets originate from iron rich"juices" and are probably responsible for much iron staini seen on cleavage planes elsewhere. There is also a light coloured iron silicate occurring as veinlets, on cleavage planes, and in places in crenulations [illegible]

Cont.

From	To	Particulars of Core.
821'6"	822' 250.5	Vein quartz.
822'	824' 251.2	Chloritic slate.
824'	824'9" 251.4	Vein quartz with specularite.
824'9"	826' 251.8	Chloritic slate with vein quartz and specularite
826'	826'6" 251.9	Jaspery quartz magnetite with specularite.
826'6"	827' 252.1	Vein quartz with chlorite.
827'	831' 253.3	Chloritic slate siliceous, and impregnated with magnetite.
831'	834' 254.2	Vein quartz with some specularite.
834'	868' 264.6	Very siliceous quartz magnetite rock with jasper and specularite. No sulphides and no apparent earthy impurities. Veins of quartz at 845', 897' 860', 864'6". Specularite is a later mineral ramifying in veins through the jaspery magnetite Pyrite is associated with it in places.
868'	871'6" 265.6	Jasper-magnetite as before but rather less silic with a velvety texture and possibly contains li chlorite.
871'6"	936' 285.3	Jaspery magnetite rock as from 834' to 868'. Loo most barren. Later veins of specularite as befo Quartz veins at 896'6", 901', 909', 911', 919, 926', and 934'9", and lesser amounts of quartz elsewhere.
936'	938'9" 286.1	Pure white vein quartz.
938'9"	941' 286.8	Massive vein quartz and jasper with disseminate chlorite. Quartz crystals in vughs.
941'	941'6" 287.0	Quartz, magnetite, and specularite.
941'6"	962'6" 293.4	White massive quartz, jasper, chlorite, magnetit specularite, and (?) ilmenite in varying proport Rare specks of pyrite, and a pale crystalline mi in the vughs which may be opaque quartz.
962'6"	965' 294.1	Vein quartz.
965'	967'3" 294.8	Mottled quartz, jasper, magnetite rock with one two flecks of pyrite.
967'3"	969' 295.4	Mainly vein quartz with some magnetite, and spec
969'	976' 297.5	Quartz, jasper, magnetite, specularite rock wit crystalline mineral. At 974'9" quartz is vuggy associated iron minerals have an iridescent blu tinge.
976'	981'3" 299.4	Mainly vein quartz with rare jasper and chlorit

From	To		Cont. Particulars of core.
982'3"	991'	302.4	Quartz, jasper rock with patches of magnetite and specularite and rare chlorite.
992'	1000'	304.8	(Recovery 12") Brecciated silicified slate.
1000'	1005'	306.3	Strongly cleaved slate tending to schistosity in places, veined by contorted stringers of quar
1005'	1015'	309.4	Slate as before but quartz stringers are rare.
	1015'		END OF HOLE DW1

GEOPEKO LIMITED

TENNANT CREEK

Northern Territory

o OLIVE WOOD DDH 2

Log of Hole DDH2

Location: 1.5 km east of Orlando Mine

Purpose of Hole: To test magnetic body below DDH1. Target at 1000ft below 5750 S 7700 W.

Proposed Co-Ordinates: 8130 W 6473 S

Surveyed Co-Ordinates: 8130 W 6473 S

Actual Co-Ordinates: 8130 W 6473 S

R.L. of Collar: 7.908m below DDH 1

Bearing: Grid: 040° Magnetic: 040°

Inclination: -75°

Target Depth: 420m

Planned Depth: 450m

Actual Depth: 482.5m

Hole Proposed by: R.L.Richardson **Date:**

Hole Planned by: **Checked:** **Date:**

Hole Surveyed in by: D.H.Bamford **Date:**

Date Commenced: 23.8.73 **Date Completed:** 15.10.73

Remarks:

Summary Result: No economic mineralisation.

OLIVE WOOD DDH 2.

DRILLING PARTICULARS

Drill Method	Machine	Size	Parent From	Parent To
Blade	F 30	5.1/8"	0	7
Diamond		NW	7	12.20
		NQ	12.20	95
		BQ	95	262
		AQ	262	488.6

CASING PLACED.

Size	Depth	Recovered
NW	12.20	12.20
BX	95	9.15
AX	262	262

DRILLING FLUIDS USED: Shell Dromus B. Mylling B Grease.

SPECIAL BITS USED: BQ Bullnose.

WEDGES PLACED.

Position	Type	Purpose	Result
111m	Clappison	UP	Successful
157m	Clappison	UP	Not Successfu
202m	Clappison	UP	Successful

GEOPEKO

TENNANT CREEK - NORTHERN TERRITORY

DRILLHOLE SURVEYS

PROJECT: EL 4179 AREA: OLIVE WOOD DRILLHOLE TYPE

MINE: OLIVE WOOD LEVEL: SURFACE

CO-ORDS:	BEARING:	DIP:	R.L.:	DRILLHOLE No.
6470.1 S 8129.5 W	40° Mag. Grid	-75°	992.4m	OWDH 2

feet	DOWN HOLE SURVEY						PLOTTING DATA		
	DEPTH (metres)	DIP READ	DIP CORR.	BEARING MAG.	BEARING GRID	REMARKS	~~NORTH~~/SOUTH	~~EAST~~/WEST	R.L. (M)
0	0		75		40		6470.1	8129.5	992.4
75.5	23		75.5		43	Assumed	6455.7	8116.8	970.1
124.7	38		76		46		6447.1	8108.3	955.6
164.0	50		76		45.5	Assumed	6440.4	8101.5	944.0
213.3	65		75.5		45		6431.9	8092.9	929.4
311	95		74		38		6412.5	8075.7	900.5
334.6	102		73		31		6407.1	8072.0	893.8
367.5	112		72		25.5		6398.4	8067.3	884.2
380.6	116		72		25.5		6394.8	8065.6	880.4
400.3	122		74		~~30~~ 26	Assumed	6389.6	8063.1	874.7
423.2	129		73.5		27		6383.8	8060.2	868.0
456.0	139		72.5		27		6375.3	8055.9	858.4
482.3	147		72		25		6368.1	8052.4	850.8
492.1	157		71		24		6365.3	8051.1	848.0
528.2	161		69		29		6354.2	8045.6	837.6
584.0	178		67.5		26		6335.9	8036.0	821.8
633.2	193		66		25		6318.3	8027.6	808.0
65 2	200		66		25		6309.9	8023.7	801.6
675.9	206		64		28.5		6302.4	8019.9	796.2
711.9	217		63.5		28		6288.4	8012.4	786.4
761.2	232		59		27		6267.4	8001.5	773.2
810.4	247		56		26		6243.7	7989.7	760.5
859.6	262		49.5		26		6217.0	7976.6	748.6
902.2	275		47		27.5		6191.6	7963.8	738.9
951.4	290		41		28.5		6160.4	7947.2	728.5
1000.7	305		36		29.5		6126.6	7928.5	719.1
1082.7	330		37		27		6068.6	7897.3	704.3
1131.9	345		32.5		27	Assumed - Read 12.5°	6032.5	7879.0	695.7
1181.1	360		28		27		5994.7	7859.7	~~688.2~~ 681.7
1230.3	375		23.5		27		5955.2	7839.6	~~681.7~~ 675.4
1279.5	390		22		29		5915.1	7818.3	675.9
1328.7	405		18		34	Affected. Assumed 31°	5875.1	7795.1	670.7

OLIVE WOOD DDH2.

SURVEYS.

Date	Depth	Type	Dip Read	Dip Corr.	Mag.	Grid.	Remarks.
28.8.73	23m 75.6'	Photo	75.5°	75.5°	-	-	
28.8.73	38m 124.3'	Photo	76°	76°	046	046	
29.8.73	50m 164'	Photo	76°	76°	-	-	
29.8.73	65m 213.4'	Photo	75.5°	75.5°	045	045	
30.8.73	95m 311.8'	Photo	74°	74°	038	038	
31,8,73	102m 334,6	Photo	73°	73°	031	031	
31.8.73	112m 367.5	Photo	72°	72°	025.5	025.5	
4.9.73	116m 380.6	Photo	72°	72°	025.5	025.5	
4.9.73	122m 400.3	Photo	74°	74°	030	030	
6.9.73	129m 423.2	Photo	73.5°	73.5°	027	027	
6.9.73	139m 456	Photo	72.5°	72.5°	027	027	
8.9.73	147m 482.3	Photo	72°	72°	025	025	
8.9.73	157m 515.1	Photo	71°	71°	024	024	
10.9.73	161m 528.2	Photo	69°	69°	029	029	
13.9.73	178m 584	Photo	67.5°	67.5°	026	026	
13.9.73	193m 633.2	Photo	66°	66°	025	025	
14.9.73	200m 656.2	Photo	66°	66°	025	025	
14.9.73	206m 675.9	Photo	64°	64°	028.5	028.5	
20.9.73	217m	Photo	63.5°	63.5°	028	028	
20.9.73	232m 761.2	Photo	59°	59°	027	027	
20.9.73	247m	Photo	56°	56°	026	026	
20.9.73	262m 859.6	Photo	49.5°	49.5°	026	026	
25.9.73	275m	Photo	47°	47°	027.5	027.5	
25.9.73	290m 951.4	Photo	41°	41°	028.5	028.5	
25.9.73	305m	Photo	36°	36°	029.5	029.5	
3.10.73	330m 1082.7	Photo	37°	37°	027	027	
3.10.73	345m	Photo	32.5°	32.5°	012.5	012.5	
3.10.73	360m 1181.1	Photo	28°	28°	assumed (027) R. Love Apr 1984		Bad Photo
3.10.73	375m	Photo	23.5°	23.5°	027	027	
3.10.73	390m 1279.5	Photo	22°	22°	029	029	
3.10.73	405m 1328.7	Photo	18°	18°	034	034	Affected by magnetics EOH

482.5

GEOPEKO

MAGNETIC SUSCEPTIBILITY READINGS

PROSPECT: OLIVE WOOD DATE: 25/2/86 INSTRUMENT: SM-5

HOLE NO: 2 USER: H.S. HORVATH SERIAL NO:

HALF CORE

DEPTH (M)	SUSCEPTIBILITY MIN	SUSCEPTIBILITY MAX	SPACER (mm)	CORE SIZE / REMARKS	DEPTH (m)	SUSCEPTIBILITY MIN	SUSCEPTIBILITY MAX	SPACER (mm)	CORE SIZE / REMARKS
(400-401) 400	0.2	0.8			435	14.0	34.0		MAG JASP
401	0.2	1.0			436	1.5	29.0		"
402	0.2	0.8			437	1.4	53.0		"
403	0.4	1.1			438	4.4	56.0		
404	1.5	25.0			439	0.0	69.0		
405	1.2	3.3			440	8.2	74.0		
406	0.5	36.0		(MIN. QTZ MAX HEM/ MAG)	441	0.1	61.0		MIN QTZ
407	0.1	58.0		" "	442	0.0	57.0		"
408	23.0	51.0		HEM/MAG	443	0.0	42.0		"
409	0.3	5.4			444	0.3	19.0		"
410	0.3	52.0		HEM/MAG	445	0.0	6.4		"
411	0.4	52.0			446	5.3	78.0		
412	1.4	83.0			447	0.0	62.0		
413	0.2	12.0		QTZ JASPER MAGNETITE	448	0.0	71.0		
414	0.8	11.0			449	0.0	25.0		
415	3.7	9.8			450	0.0	78.0		
416	2.7	24.0			451	0.0	13.0		
417	4.3	53.0			452	0.0	29.0		
418	3.7	8.1			453	0.0	37.0		
419	0.6	5.9			454	0.0	21.0		
420	0.4	32.0			455	8.0	42.0		
421	4.0	52.0			456	0.0	44.0		
422	5.1	57.0			457	0.0	52.0		
423	4.2	62.0			458	0.0	63.0		
424	0.0	54.0		[MIN QTZ	459	0.0	64.0		
425	0.0	34.0		MAX MAG]	460	0.0	38.0		
426	0.0	0.0		MILKY QTZ	461	0.0	8.2		
427	0.0	0.1		(VEIN)	462	0.0	0.8		
428	0.0	0.0		"	463	0.0	4.4		
429	0.0	0.1		"	464	0.2	23.0		
430	0.0	0.0		"	465	0.0	18.0		
431	0.0	0.0		"	466	3.1	73.0		
432	0.0	0.0		"	467	0.0	86.0		
433	0.0	14.0		MAINLY VEIN QTZ	468	0.0	74.0		MAINLY MA
434	0.0	59.0		ZONE OF MAG	469	26.0	90.0		IVE MAGNETIT

GEOPEKO

MAGNETIC SUSCEPTIBILITY READINGS

PROSPECT: OLIVE WOOD DATE: 25/2/86 INSTRUMENT: SM-5

HOLE NO: 2 USER: H.S. HORVATH SERIAL NO:

DEPTH (M)	SUSCEPTIBILITY MIN	SUSCEPTIBILITY MAX	SPACER (mm)	CORE SIZE / REMARKS	DEPTH (m)	SUSCEPTIBILITY MIN	SUSCEPTIBILITY MAX	SPACER (mm)	CORE SIZ / REMARK
470	1.4	78.0		MAINLY MASS-IVE MAGNETITE					
471	36.0	53.0			(HYDROTHERMAL GREEN)				
472	0.0	0.3		WHOLE CORE CHLORITE					
473	0.0	0.8		CHLORITIC SILTSTONE					
474	0.0	0.1		"					
475	0.0	0.4		"					
476	0.0	0.2							
477	0.0	0.2							
478	0.0	0.1							
479	0.0	0.0							
480	0.0	0.0							

OLIVE WOOD
DDH 2

PEKO MINES

ASSAY CERTIFICATE

Job No. E 84 / 044 **Date** 11.1.84

Checks

Sample No.	Au	ppm Cu	Ag	Au	Cu	Ag				Sample Interval From	To
F 23000	0.1			CHECK SAMPLE = 23321 PEKO PDH 17						23	2
23001	0.1									310	31
23002	0.1									311	31
23003	<0.1									312	31
23004	<0.1									313	31
23005	<0.1									314	31
23006	<0.1									315	31
23007	<0.1									316	31
23008	<0.1									317	31
23009	<0.1									318	31
23010	Av <0.1 <0.1			<0.1						319	32
23011	<0.1									320	32
23012	<0.1									321	32
23013	<0.1									322	32
F 23014	<0.1	20	2							323	32
23015	<0.1	20	2							324	32
23016	<0.1	Av 13 16	Av 2 2		10	2				325	32
23017	<0.1	25	2							326	32
23018	<0.1	20	2							327	32
23019	<0.1	18	2							328	32
(22971) 23020	Av <0.1 0.1	Av 13 16	Av 2 2							329	33
23021	<0.1	14	2							330	331
23022	<0.1 Av <0.1	16	2	<0.1						331	332
23023	0.1	14	2							332	333
23024	0.1	14	2							333	334
23025	0.1	16	2							334	335
23026	0.7	Av 12 14	Av 2 2		10	2				335	33
23027	0.1	14	2							336	387
23028	0.1	14	2							337	338
23029	0.1	12	2							338	339

Au & Ag are expressed in GRAMS/TONNE

OLIVE WOOD
DDH 2

PEKO MINES

ASSAY CERTIFICATE

Job No. E 84 / 044

Date 11.1.84

Checks

Sample No.	Au	% Cu ug/g	% Bi	Ag	Au	Cu	Ag			Sample Interval From	To
F 23030 (22972)	Av 0.1 0.1	Av 11 12		Av 2 1						339	34
23031	<0.1	12		1						340	34
23032	<0.1	12		1						341	34
23033	<0.1	11		1						342	34
23034	<0.1	11		1						343	34
23035	<0.1	10		1						344	34
23036	<0.1	Av 10 10		Av 1 1		10	1			345	34
23037	0.1	12		1						346	34
23038	<0.1	12		1						347	348
23039	Av <0.1 <0.1	10		1	<0.1					348	34
(22973) 23040	<0.1 Av <0.1	12 Av 8		1 Av 2						349	35
23041	<0.1	12		1						350	35
23042	<0.1	14		1						351	35
23043	<0.1	12		1						352	3
23044	<0.1	12		1						353	3
23045	<0.1	14		1						354	35
23046	<0.1	14 Av 15		2 Av 2		16	2			355	35
23047	0.1	12		1						356	35
23048	<0.1	12		2						357	35
23049	0.1	10		2						358	35
(22974) 23050	<0.1 Av <0.1	12 Av 13		1 Av 1						359	36
23051	0.1 Av <0.1	8		1	<0.1					360	36
23052	<0.1	10		2						361	36
23053	<0.1	10		1						362	36
23054	<0.1	8		1						363	36
23055	<0.1	8		2						364	36
23056	0.1	8 Av 7		1 Av 1		6	1			365	36
23057	0.1	8		1						366	36
23058	<0.1	8		1						367	36
23059	<0.1	8		1						368	36

Au & Ag are expressed in GRAMS/TONNE

3 hotrak

OLIVE WOOD
DDH 2

PEKO MINES

ASSAY CERTIFICATE

E 84 /044

11.1.84

Job No. _____ **Date** _____

Sample No.	Au	ug/g % Cu	% Bi	Ag	Checks Au	Checks Cu	Checks Ag			Sample Interval From	To (m
F 22975 23060	Av <0.1 <0.1	Av 8 8		Av 2 2						369	370
23061	Av <0.1 <0.1	16		1	0.1					370	371
23062	<0.1	6		1						371	372
23063	<0.1	8		1						372	373
23064	0.1	10		<1						373	374
23065	<0.1	6		<1						374	375
23066	<0.1	6		<1						375	376
23067	0.1	4		<1						376	377
23068	<0.1	4		<1						377	378
23069	<0.1	6		1						378	379
(22976) 23070	<0.1 Av <0.1	Av 12 18		Av 1 1						379	380
23071	<0.1	10		1						380	381
23072	<0.1	10		<1						381	382
23073	<0.1 Av <0.1	4		<1	0.1					382	383
23074	<0.1	6		<1						383	384
23075	<0.1	16		<1						384	385
23076	<0.1	25		<1						385	386
23077	<0.1	10		<1						386	387
23078	<0.1	8		<1						387	388
23079	<0.1	4		<1						388	389
(22977) 23080	<0.1 Av <0.1	Av 4 4		Av 1 1						389	390
23081	<0.1	4		1						390	391
23082	<0.1	4		1						391	392
23083	<0.1	4		1						392	393
23084	<0.1	4		1						393	394
23085	<0.1 Av <0.1	4		1	0.1					394	395
23086	<0.1	4		1						395	396
23087	<0.1	4		2						396	397
23088	<0.1	4		2						397	398
23089	<0.1	6		1						398	399

Au & Ag are expressed in GRAMS/TONNE

Z Hetzgah

OLIVE WOOD
DDH 2

PEKO MINES

ASSAY CERTIFICATE

E 84 / 044

Job No. _____

11.1.84

Date _____

Sample No.	Au	ug/g % Cu	% Bi	Ag	Au	Cu	Ag			Sample Interval From	To (m
E 23090 (22978)	<0.1 Av<0.1	4 Av 4		1 Av 1						399	400
23091	<0.1	4		1						400	401
23092	<0.1	4		1						401	402
23093	<0.1	4		1						402	403
23094	<0.1	4		1						403	404
23095	<0.1 Av<0.1	4		1	0.1					404	405
23096	<0.1	4		1						405	406
23097	<0.1	6		1						406	407
F 23098	<0.1	10		2						407	408
Checks											
F 23020 22971	<0.1	10		2						329	330
(23030) 22972	<0.1	10		2	0.3					339	340
(23040) 22973	<0.1	4		2						349	350
(23050) 22974	<0.1	18		1						359	360
(23060) 22975	<0.1	.8		1						369	370
(23070) 22976	<0.1	16		1						379	380
(23080) 22977	<0.1	4		1						389	390
F 23090 22978	<0.1	4		1						399	400
Field Samples	2.2										
" "	2.1										
" "	3.1										
" "	2.0										

Au & Ag are expressed in GRAMS/TONNE

Z. Kostyak

CLASSIC COMLABS LTD
Analytical Laboratories (INC. IN W.A.)

305 South Road, Mile End South, South Australia, 5031
Telephone: (08) 43 5722 Fax: (08) 234 0321 Telex: LABCOM AA89323

Mr. Harry Horvath
Geopeko Tennant Creek
OUR REF: Cnr. Schmidt and Irvine Streets
YOUR REF: TENNANT CREEK
NT 5760 Australia

JOB NUMBER: 8AD1003

Your Reference: 35811

Date Received: 29-MAR-1988 Turnaround 2 days
Date Relayed: 31-MAR-1988
Date Reported: 31-MAR-1988

Number of Samples: 21

Report Comprising: Cover Sheet
Pages 1 to 1

Comments:

Report Dist'n: Carbon Copies(CC),Electronic Media(EM),Magnetic Media(MM)

Type	Recipient	Location	Date	Copies

Approved Signature:

for Harry Fishman
Deputy Managing Director.
CLASSIC COMLABS LTD
(Please address any enquiries to Mr. Trevor Francis)

This report relates specifically to the sample(s) tested in so far as that the sample(s) is truly representative of the sample source as supplied.

CLASSIC COMLABS LTD
Analytical Laboratories (INC. IN W.A.)

OLIVE WOOD

Job: 8AD1003
O/N: 35811

DDH: 2 RE-ASSAYS
ANALYTICAL REPORT

SAMPLE	Au Avg	Au Dp1	Au Dp2	Au Dp3	Cu	Bi	INTERVAL	PREVIOUS AU A g/t	
12301	0.02	0.02	0.02	--	40	<4	439 - 440	0.5	0.3
12302	0.01	--	--	--	19	<4	440 - 441	<0.1	0.1
12303	<0.01	--	--	--	22	8	441 - 442	0.1	0.3
12304	0.01	--	--	--	34	<4	442 - 443	0.5	0.5
12305	0.01	--	--	--	24	<4	443 - 444	0.3	0.6
12307	<0.01	<0.01	<0.01	--	12	<4	445 - 446	0.1	<0.1
12310	<0.01	--	--	--	22	6	448 - 449	0.3	0.5
12311	0.02	--	--	--	52	6	449 - 450	0.1	0.2
12315	0.05	--	--	--	30	<4	453 - 454	0.3	0.3
12316	0.18	--	--	--	1180	140	454 - 455	0.2	0.2
12317	0.02	0.02	0.02	--	42	8	455 - 456	0.7	0.5
12318	0.02	--	--	--	22	<4	456 - 457	<0.1	<0.1
12319	0.02	0.01	0.02	--	15	<4	457 - 458	0.2	0.2
12321	<0.01	--	--	--	66	4	459 - 460	0.1	<0.1
12322	0.01	--	--	--	22	<4	460 - 461	0.1	0.1
12323	0.01	--	--	--	26	<4	461 - 462	0.1	0.
12325	0.01	--	--	--	26	<4	463 - 464	0.2	0.
12326	0.01	--	--	--	54	4	464 - 465	<0.1	
12327	0.02	--	--	--	22	<4	465 - 466	0.4	<0.
12329	0.01	0.01	0.01	--	36	<4	467 - 468	0.3	0.
12333	0.02	0.02	0.02	--	36	4	471 - 472	<0.1	0.
UNITS	ppm	ppm	ppm	ppm	ppm	ppm			
SCHEME	FAS1	FAS1	FAS1	FAS1	AAS1	AAS1			

OLIVE WOOD DDH2

ASSAYS.

Sample	Assayed Section Metres	Type	Au gm/mt	Cu%	Bi%	Pb%	Remarks
F12269	407 - 408	H/C	0.9 0.4	<0.01	<0.01	<0.01	
F12270	408 - 409		1.2 0.7 0.95	<0.01	<0.01	<0.01	
F12271	409 - 410		0.4 0.1 0.25	<0.01	<0.01	<0.01	
F12272	410 - 411		0.3 0.3 0.3	<0.01	<0.01	<0.01	
F12273	411 - 412		0.7 0.8 0.75	<0.01	<0.01	<0.01	
F12274	412 - 413		0.9 0.7 0.8	<0.01	<0.01	<0.01	
F12275	413 - 414		0.5 0.6 0.55	<0.01	<0.01	<0.01	
F12276	414 - 415		1.6 0.5 1.05	<0.01	<0.01	<0.01	
F12277	415 - 416		0.8 1.1 0.95	<0.01	<0.01	<0.01	
F12278	416 - 417		0.3 0.5 0.4	0.01	<0.01	0.01	
F12279	417 - 418		0.6 0.7 .65	<0.01	<0.01	<0.01	
F12280	418 - 419		0.5 0.6 .55	<0.01	<0.01	<0.01	
F12281	419 - 420		1.0 1.5 1.25	<0.01	<0.01	<0.01	
F12282	420 - 421		0.5 0.6 .55	<0.01	<0.01	<0.01	
F12283	421 - 422		2.9 1.3 2.1	<0.01	<0.01	<0.01	
F12284	422 - 423		0.7 0.5 .6	<0.01	<0.01	<0.01	
F12285	423 - 424		0.1 0.4 .25	<0.01	<0.01	<0.01	
F12286	424 - 425		0.4 0.3 .35	<0.01	<0.01	<0.01	
F12287	425 - 426		0.3 2.1 1.2	<0.01	<0.01	<0.01	
F12288	426 - 427		1.8 0.2 1.0	<0.01	<0.01	<0.01	
F12289	427 - 428		<0.1 <0.1	<0.01	<0.01	<0.01	
F12290	428 - 429		<0.1 0.3	<0.01	<0.01	<0.01	
F12291	429 - 430		<0.1 0.3	<0.01	<0.01	<0.01	

OLIVE WOOD DDH2

ASSAYS Continued.

Sample	Assayed Section Metres	Type	Au gm/mt	Cu%	Bi%	Pb%	Remarks
F12292	430 - 431	H/C	0.3 0.4	<0.01	<0.01	<0.01	
F12293	431 - 432		0.3 0.2	0.01	<0.01	<0.01	
F12294	432 - 433		0.1 <0.1	<0.01	<0.01	<0.01	
F12295	433 - 434		<0.1 0.2	<0.01	<0.01	<0.01	
F12296	434 - 435		0.7 0.1	0.01	<0.01	<0.01	
F12297	435 - 436		0.3 0.4	0.01	<0.01	<0.01	
F12298	436 - 437		0.4 0.6	0.01	<0.01	<0.01	
F12299	437 - 438		0.5 0.5	0.01	<0.01	<0.01	
F12300	438 - 439		1.0 0.6	<0.01	<0.01	<0.01	
F12301	439 - 440		0.3 0.3	<0.01	<0.01	<0.01	
F12302	440 - 441		<0.1 0.1	<0.01	<0.01	<0.01	
F12303	441 - 442		0.1 0.3	<0.01	<0.01	<0.01	
F12304	442 - 443		0.5 0.5	<0.01	<0.01	<0.01	
F12305	443 - 444		0.3 0.6	<0.01	<0.01	<0.01	
F12306	444 - 445		0.3 0.6	<0.01	<0.01	<0.01	
F12307	445 - 446		0.1 <0.1	<0.01	<0.01	<0.01	
F12308	446 - 447		0.2 0.2	<0.01	<0.01	<0.01	
F12309	447 - 448		0.7 0.2	<0.01	<0.01	<0.01	
F12310	448 - 449		0.3 0.5	<0.01	<0.01	<0.01	
F12311	449 - 450		0.1 0.2	<0.01	<0.01	<0.01	
F12312	450 - 451		0.3 0.3	<0.01	<0.01	<0.01	
F12313	451 - 452		0.1 0.3	<0.01	<0.01	<0.01	

OLIVE WOOD DDH2

ASSAYS Continued.

Sample	Assayed Section Metres	Type	Au gm/mt	Cu%	Bi%	Pb%	Remarks
F12314	452 - 453	H/C	0.2 0.1	<0.01	<0.01	<0.01	
F12315	453 - 454		0.3 0.3	0.01	<0.01	<0.01	
F12316	454 - 456		0.2 0.2	0.19	0.02	0.01	
F12317	455 - 456		0.7 0.5	0.01	0.01	<0.01	
F12318	456 - 457		<0.1 <0.1	<0.01	<0.01	<0.01	
F12319	457 - 458		0.2 0.2	<0.01	<0.01	<0.01	
F12320	458 - 459		0.1 0.1	<0.01	<0.01	<0.01	
F12321	459 - 460		0.1 <0.1	0.01	<0.01	<0.01	
F12322	460 - 461		0.1 0.1	<0.01	<0.01	<0.01	
F12323	461 - 462		0.1 0.1	<0.01	<0.01	<0.01	
F12324	462 - 463		<0.1 <0.1	<0.01	<0.01	<0.01	
F12325	463 - 464		0.2 0.1	<0.01	<0.01	<0.01	
F12326	464 - 465		<0.1	0.01	<0.01	<0.01	
F12327	465 - 466		0.4 <0.1	<0.01	<0.01	<0.01	
F12328	466 - 467		0.2 0.3	0.01	<0.01	<0.01	
F12329	467 - 468		0.3 0.3	0.01	0.01	<0.01	
F12330	468 - 469		0.2 0.2	<0.01	<0.01	<0.01	
F12331	469 - 470		0.1 0.1	<0.01	0.01	<0.01	
F12332	470 - 471		0.3 0.2	0.01	0.01	<0.01	
F12333	471 - 72		<0.1 0.2	<0.01	0.01	<0.01	

OLIVE WOOD DDH 2.

GEOLOGICAL LOG

By: D.H.Bamford.

0 - 3m — No recovery

3 - 84.75m — SILTSTONE:
Brown oxidised siltstone and interbedded shale. Bedding is very clearly defined, but recording of bedding directions is useless because of deformation by numerous pre-consolidation plumps and later fault
RECOVERIES ARE
The core is very badly broken but high, generally complete, except between 3 and 12 metres, where 60% was recovered.

84.75 - 85.17m — BRECCIA:
A sedimentary breccia in which earlier bedding has been lost by pre-consolidation slumping and brecciat

85.17 - 87.40m — FAULT BRECCIA:
A quartz-chlorite fault breccia. The chlorite has been oxidised and bleached by leaching of iron.

87.40 - 92.40m — BEDDED SEDIMENT:
A siltstone - shale with the bedding indistinct at approximately 70° to the core axis. Cleavage is more distinct, at 45° to the core axis.

9 .33 — Base of oxidation; a very sharp definition

92.40 - 93.5m — QUARTZ-CHLORITE VEIN:
Quartz and chlorite are dispersed irregularly throug out the core

93.50 - 247.55m — "OLIVE WOOD LENS":
A featureless, slightly chloritic sedimentary rock containing blobs of quartz which show syneresis cracking. There is some degree of foliation, probably related to slaty cleavage, at 35° to the core axis.

9 -100 — A zone of dense quartz veining.

11 -115.30 — No recovery due to placing of a wedge.

1 7-161 — Very thin (6 mm diameter) core due to drilling a bull-nose bit.

163.40-164.5 — Quartz vein containing a small amount of specular haematite running sub-parallel to the core axis.

164.5-168 — Abundant quartz veins with irregular boundaries an commonly showing ptygmatic folding. Fine hair-li quartz veins ptygmaticall folded are present throu lens, but these are much thicker.

OLIVE WOOD DDH 2

GEOLOGICAL LOG Continued

172.8-173.3	A quartz and chlorite vein with a true width of 10 cm intersects the core at 20°.
176.9-177.7	Quarts vein with brecciated fragments of sedimen
180.15	Tiny vein with specular haematite.
181-212	Abundant and complex quartz veining.
212-231	Quartz veins and blobs are less frequent although still present.
231	Quartz veins are moderately prominent comprising 15% of the rock. The rock generally appears to be slightly more chloritic than before.
247.55-252.9m	SLIPSHEARED SEDIMENT Bedded siltstone-shale which has been slip shear Angle between slip plane and core axis = 53°.
252	Sediment continues to be slipsheared but becomes distinctly more chloritic.
252.9-253.0m	CHLORITE-HAEMATITE A small intersection of chlorite-haematite that appears to be quite barren.
253.0-253.54m	CHLORITE-HAEMATITE A small band of barren chlorite-haematite. A faint magnetisation suggests oxidation of quartz magnetite.
253.54-278m	SLIPSHEARED SEDIMENT A strongly chloritic bedded siltstone-shale whic has been shipsheared.
259.2-260.6	A large quartz-chlorite vein.
261	Chloritisation visibly diminishes.
261.1	A very clear bedding plane ? at 50° to the core
262.6	Core size reduces from BQ to AQ.
269	Slip plane at 60° to the core axis.
278-300m	SHALE Normally bedded siltstone-shale, very slightly chloritic. Very little sign of slipshearing.
286	Angle between bedding and core axis = 70° Angle between cleavage and core axis = 56°, sub-parallel to the bedding.

OLIVE WOOD DDH2.

GEOLOGICAL LOG Continue l.

293.2	Angle between bedding and core axis = 76°. Angle between cleavage and core axis = 61°.
298.14-298.78	A coarse grit bed. Fragments are very angular and another interpretation could be a fine-grained sedimentary breccia. Angle between bedding and core axis = 45°.
300-309.53m	SLIPSHEARED SEDIMENT A bedded siltstone-shale, cleaved with displacemen onthe cleavage.
300.1	Angle between cleavage and core axis = 58°. Angle between bedding and core axis = 70°.
306	Sediment becomes strongly chloritised
306.56-306.63	Quartz-chlorite vein.
307.37-307.60	Quartz-chlorite vein. Also contains streamed magnetite.
307.75-307.90	Quartz-chlorite porphyry. A very minor occurrence, strongly foliated at 47° to the core axis.
309.20-309.53m	QUARTZ-CHLORITE PORPHYROID A fine-grained quartz-chlorite porphyroid.
309.53-311.7m	CHLORITISED SEDIMENT An intersection of strongly chloritised slipsheare sediment. Angle between cleavage and core axis = 52°.
311.7-316.20m	MINERALISED SEDIMENT A zone of strong mineralisation by quartz, chlorit and magnetite. No sulphide minerals are visible
316.20-416.95m	CHLORITISED SLIPSHEARED SEDIMENT The sediment is much more strongly slipsheared than previously with many many beds being smeared into pseudo-breccias. Cleavage slip planes vary between 80-90° to the core axis.
327-334.5	Occassional small intersections of quarts magneti
351-359	Several small and one large (355.5-357m) quartz-chlorite veins.

OLIVE WOOD DDH 2

GEOLOGICAL LOG Continued.

	377.1-377.9	Quartz-chlorite-jasper vein.
	405.54-406	Quartz-chlorite vein.
	406.3-406.55	Quartz-chlorite vein.
	407.3-408.9	Quartz-jasper-magnetite vein, containing minor chlorite.
	410.5-411.9	Quartz-magnetite with minor jasper.
	413-414.7	Quartz-jasper magnetite.
	414.7-416.95	Chloritic sediment.
416.95-423.85m		QUARTZ JASPER MAGNETITE The rock is basically jasper with minor patches of magnetite and very minor occurrences of haematite. This has subsequently been fractured and is laced with quartz veins. No sulphide minerals are visible.
423.85-434.06m		QUARTZ VEINS A clean white quartz with minor flecks of haematite.
434.06-472m		QUARTZ-MAGNETITE The quartz-magnetite contains minor jasper and haematite, the latter commonly specular. No sulphides present generally.
	439.3	Minor flecks of pyrite with specular haematite.
	468.35	The magnetite becomes the dominant mineral, with small amounts of quarts.
472-482.5m		SLIP-SHEARED SEDIMENT Similar to the previously recorded sediment, being shales where there has been obvious movement along cleavage planes.
482.5m		END OF HOLE.

dp 3.1.74

OLIVE WOOD DDH 2

SUMMARY OF GEOLOGICAL LOG.

The hole intersected normal bedded sediments to 93.50m where the Olive Wood Quickstone Lens was entered. This persisted until 247.55 m, where the hole entered slip-sheared sediment, containing occassional patches of haematite mineralisation. This was interupted between 278 and 300 m by a section of normally bedded shale. Between 300 and 307 m the slipsheared sediment was once again intersected, and this was followed by quartz-chlorite prophyry to 309.53m. A strongly chloritised slip-sheared sediment intersected between 309.53 and 407.3m was followed by quartz-magnetite with varying amounts of jasper but no economic mineralisation dow to 472m. Between 472m and the end of the hole at 482.5m slip-sheared sediment was intersected.

GEOPEKO LIMITED

TENNANT CREEK
Northern Territory

PROSPECT/MINE: OLIVE WOOD

Log of Hole: O.W.D.H. 3

Location: EL 4179

Purpose of Hole: To investigate supergene gold potential of the Olive Wood ironstone

Proposed By: R. Love Date:

Proposed Target: E: N: R.L.

Hole Planned By: R. Love Date: Checked:

Hole Approved By: B. Williams

Hole Logged By: P. Balind

Collar Co-Ordinates: (Extended Gecko Grid)

Proposed: E: N: R.L.

Surveyed: E: N: R.L. Surveyed in By: R. Love Date: 2/3/84

Actual: 7866.5 ft ~~E~~/W 5395.7' ~~N~~/S 994.7m R.L. Picked up By: R. Maher Date:

Collar Bearing:

Proposed: 025° Grid: 025° Magnetic:

Surveyed: 025° Grid: 025° Magnetic: Surveyed in By: P. Balind

Actual: 025° Grid: 025° Magnetic: Picked up By. R. Maher

Collar Inclination:

Proposed: -80°

Surveyed: -80° Surveyed in By: P. Balind

Actual: -80° Picked up By: R. Maher

Target Depth: 80 m.

Proposed Final Depth: 90 m.

Actual Final Depth: 93 m. Hole Terminated By: P. Balind

Reason for Termination: Hole passed base of oxidation

Drilling:- Date Commenced: 3/4/84 Date Completed: 4/4/84

Drilled By: Overland Drilling

Wedges Placed At:

Remarks: Percussion Drill Hole. 1000 RL at 8000W 6000S

Economic Summary Result:

S.McD. 11937/1073

GEOPEKO

TENNANT CREEK - NORTHERN TERRITORY

DRILLHOLE SURVEYS

PAGE of

PROJECT: EL 4179		AREA: OLIVE WOOD			DRILLHOLE TYPE: Percussion
MINE: Olive Wood		LEVEL:			
CO-ORDS: Extended Gecko Grid	7866.5 feet W 5395.7 feet S	BEARING: 025° Mag	DIP: -80°	R.L.: 994.7m	DRILLHOLE No.: O.W.D.H. 3

DOWN HOLE SURVEY						PLOTTING DATA		
DEPTH (metres)	DIP		BEARING		REMARKS	~~NORTH~~/SOUTH feet	X~~EAST~~/WEST feet	R.L. (metres)
	READ	CORR.	MAG.	GRID				
0		80	025	025	Collar	5395.7	7866.5	994.7
93		77	029	029	EOH	5341.5	7838.9	903.6

PEKO MINES

ASSAY CERTIFICATE

No. E 84 /068 - 16.4.84 OLIVE WOOD PDH 3 Date 16.5.84

Sample No.	Au	ug/g Cu	ug/g Bi	AuChecks				INTERVAL FROM	TO		
24194	<0.1	8	6	<0.1				51	55		
24195	<0.1	4	6					55	56		
24196	<0.1	4	6					56	57		
24197	<0.1	4	<5					57	58		
24198	<0.1	2	<5					58	59		
24199	<0.1	2	<5					59	60		
F 24200	<0.1	<2	6					60	61		
24201	<0.1	2	6					61	62		
24202	<0.1	<2	<5					62	63		
24203	<0.1	<2	8					63	64		
24204	<0.1	<2	6					64	65		
24205	<0.1	2	6					65	66		
24206	<0.1	4	6	<0.1				66	69		
24207	<0.1	2	<5					69	72		
24208	<0.1	2	6					72	73		
24209	<0.1	2	6					73	74		
24210	<0.1	<2	6					74	75		
24211	<0.1	2	6					75	76		
24212	<0.1	<2	12					76	77		
24213	<0.1	4	6					77	78		
24214	<0.1	6	<5					78	79		
24215	<0.1	20	8					79	80		
24216	<0.1	8	<5					80	81		
24217	<0.1	2	<5					81	82		
24218	<0.1	6	<5					82	83		
24219	<0.1	2	<5					83	84		
24220	<0.1	<2	6					84	89		
24221	<0.1	<2	<5					89	94		

OLIVE WOOD

PERCUSSION DRILL HOLE PROGRAMME

DETAIL CHIP LOG 3.4.84 - 9.4.84

by Paul BALIND

HOLE NO. O.W.D.H. 3 COORDINATES

DEPTH	DESCRIPTION
0 - 27m	Pale to red pink powdery soil.
27 - 30m	Red brown siltstone/shale chips. Weakly laminated, extremely fine grained. Moderately oxidised and indurated.
30 - 33m	As above.
33 - 36m	Rock type as above Sample also contains approx. 10% vein quartz chips many of which contain striae (or slikensides) on at least one surface. Some of the quartz chips also contain black hematite inclusions.
36 - 39m	As above. 3% vein quartz up to 1cm in width.
39 - 42m	As above. 5% vein quartz.
42 - 45m	60% as above. 5% quartz 35% grey siltstone, oxidised upon fracture surfaces.
45 - 46m	As above.
46 - 47m	Predominantly grey micaceous siltstone/shale. Almost phyllitic. Rock is probably more correctly termed as argillite.
47 - 48m	As above. 10% quartz veining. Minor hematite associated with quartz.
48 - 49m	As above.
49 - 50m	As above.
50 - 51m	Quartz content increased to 30%.
51 - 52m	Sample consists of :- 60% vein quartzand hematite. 40% argillite :- grey, micaceous.
52 - 53m	20% vein quartz. 80% oxidised argillite. Typically red brown in colour. Occasion grey coloured chips.
53 - 54m	30% quartz. 30% grey fresh looking argillite. 40% red oxidised argillite. The argillite is strongly cleaved.
54 - 55m	40% quartz 50% oxidised argillite 10% fresh grey argillite
55 - 56m	Red brown very fine grained granular chips; micaceous but coarser grained than above (?micaceous sandstone) strongly oxidised 10% vein quartz

HOLE NO. Cont. COORDINATES

DEPTH	DESCRIPTION
56 - 57m	70% vein quartz and hematite 30% argillite
57 - 58m	As above.
58 - 59m	25% quartz 75% fresh argillite, grey in colour
59 - 60m	40% quartz 30% fresh argillite 30% oxidised argillite
60 - 61m	70% quartz 30% argillite
61 - 62m	As above.
62 - 63m	100% quartz containing hematite veinlets and inclusions. No apparent mineralisation.
63 - 64m	As above.
64 - 65m	As above.
65 - 66m	As above.
66 - 67m	As above.
67 - 68m	Predominantly vein quartz with strong hematite.
68 - 69m	25% quartz 75% red strongly oxidised argillite.
69 - 70m	Mainly oxidised argillite. Minor quartz.
70 - 71m	As above.
71 - 72m	As above.
72 - 73m	As above.
73 - 74m	As above.
74 - 75m	50% oxidised argillite. 50% dark brown grey moderately indurated argillite. Micaceous, strongly cleaved.
75 - 76m	Dark brown - grey extremely fine grained argillite 50% vein quartz
76 - 77m	Strongly oxidised argillite. Minor vein quartz.
77 - 78m	20% oxidised chips. 20% quartz 60% weak to moderately oxidised brown grey siltstone
78 - 79m	Brown grey siltstone 15% hematised siltstone. Minor quartz.
79 - 80m	Dark green grey argillite. Chips are slightly chloritic, fresh, well indurated.
80 - 81m	75% dark grey chloritic siltstone. 25% strongly oxidised siltstone Minor vein quartz.
81 - 82m	Moderately oxidised siltstone
82 - 83m	As above.
83 - 84m	Weakly oxidised to fresh dark green grey siltstone. Granular texture, extremely fine grained, weakly micaceous. Minor vein quartz.
84 - 85m	85% red hematitic strongly oxidised siltstone 15% dark green grey relatively fresh siltstone. No apparent mineralisation.

HOLE NO. Cont. COORDINATES

DEPTH	DESCRIPTION
85 - 86m	Base of oxidation at 85m. 100% dark green grey weakly chloritic laminated siltstone. Minor vein quartz.
86 - 87m	Relatively fresh grey green weakly chloritic argillite. Minor hematite and vein quartz. Chips are more massive, not as strongly cleaved but well laminated.
87 - 88m	As above.
88 - 89m	As above.
89 - 90m	As above.
90 - 91m	As above.
91 - 92m	As above.
92 - 93m	As above. ie: weakly chloritised argillite.
93m	E.O.H.

GEOPEKO LIMITED

TENNANT CREEK
Northern Territory

PROSPECT/MINE: OLIVE WOOD

Log of Hole: O.W.D.H.4

Location: EL 4179

Purpose of Hole: To investigate supergene gold potential of the Olive Wood ironstone

Proposed By: P. Balind **Date:** 4/4/84

Proposed Target: **E:** **N:** **R.L.**

Hole Planned By: P. Balind **Date:** 4/4/84 **Checked:**

Hole Approved By: B. Williams

Hole Logged By: P. Balind

Collar Co-Ordinates: (Extended Gecko Grid)

Proposed: **E:** **N:** **R.L.**

Surveyed: **E:** **N:** **R.L.** **Surveyed in By:** P.Balind **Date:** 4/4/84

Actual: 8048.0' W 5248.4' S 1005.6m **R.L.** **Picked up By:** R. Maher **Date:**

Collar Bearing:

Proposed: 025° **Grid:** 025° **Magnetic:**

Surveyed: 025° **Grid:** 025° **Magnetic:** **Surveyed in By:** P.Balind

Actual: 025° **Grid:** 025° **Magnetic:** **Picked up By.** R.Maher.

Collar Inclination:

Proposed: -70°

Surveyed: -70° **Surveyed in By:** P. Balind

Actual: -70° **Picked up By:** R. Maher

Target Depth: 60 m.

Proposed Final Depth: 70 m.

Actual Final Depth: 76 m. **Hole Terminated By:** P. Balind

Reason for Termination: Hole past through lode zone

Drilling:- Date Commenced: 5/4/84 **Date Completed:** 5/4/84

Drilled By: Overland Drilling

Wedges Placed At:

Remarks: Percussion Drill Hole 1000RL at 8000W 6000S

Economic Summary Result:

GEOPEKO

TENNANT CREEK - NORTHERN TERRITORY

DRILLHOLE SURVEYS

PAGE of

PROJECT: EL 4179		AREA: OLIVE WOOD			DRILLHOLE TYPE: Percussion
MINE: Olive Wood		LEVEL:			
CO-ORDS: Extended Gecko Grid	8048.0 feet W 5248.4 feet S	BEARING: 025° Mag	DIP: -70°	R.L.: 1005.6m	DRILLHOLE No.: O.W.D.H. 4

DOWN HOLE SURVEY						PLOTTING DATA		
DEPTH (metres)	DIP		BEARING		REMARKS	NORTH/SOUTH feet	EAST/ WEST feet	R.L. (metres)
	READ	CORR.	MAG.	GRID				
0		70	025	025	Collar	5248.4	8048.0	1005.6
76		65	028	028	EOH	5163.0	8005.4	935.4

PEKO MINES

ASSAY CERTIFICATE

E 84 / 068 - 16.4.84 — OLIVE WOOD PDH 4 — 16.5.84

Sample No.	Au	ug/g % Cu	ug/g % Bi	AuChecks	Au Rpt				INTERVAL FROM	TO	
24222	<0.1	6	6						28	31	
F 24223	<0.1	6	6						31	34	
24224	<0.1	12	<5						34	37	
24225	<0.1	6	<5						37	38	
24226	<0.1	8	6						38	39	
24227	<0.1	4	<5						39	40	
24228	<0.1	4	8						40	41	
24229	<0.1	6	10						41	42	
24230	<0.1	4	6						42	43	
24231	<0.1	4	<5						43	44	
24232	<0.1	2	6						44	47	
24233	<0.1	2	<5						47	50	
24234	<0.1	2	<5	<0.1					50	53	
24235	<0.1	2	<5						53	56	
24236	<0.1	2	<5						56	59	
24237	<0.1	2	<5						59	62	
24238	0.2	2	<5						62	63	
24239	0.4	2	<5						63	64	
24240	0.1	2	<5						64	65	
24241	<0.1	4	<5						65	66	
24242	<0.1	2	<5						66	67	
24243	<0.1	4	<5						67	68	
24244	9.9	6	<5		8.0	7.5	(av. 8.5g/t)		68	69	
24245	0.3	6	<5						69	70	
24246	0.1	4	<5						70	73	
F 24247	0.1	2	<5	0.1					73	76	

HOLE NO. O.W.D.H. 4 COORDINATES

DEPTH	DESCRIPTION
0 - 4m	Strongly cleaved and oxidised argillite typical of outcrop in the near vicinity.
4 - 6m	Red brown extremely fine grained argillite. Strongly oxidised.
6 - 7m	As above.
7 - 8m	As above. Moderately indurated. Occasionally well laminated.
8 - 9m	As above.
9 - 10m	As above.
10 - 11m	As above.
11 - 12m	As above.
12 - 13m	As above with approx. 5% quartz veining.
13 - 14m	As above.
14 - 15m	As above.
15 - 16m	Poor chip sample (rock type as above) Powdery loamy soil. Pink in colour.
16 - 29m	As above. The zone 15 to 29m may represent poorly indurated weathered rock or a weathered fault zone.
29 - 30m	50% quartz (+ hematite : var. specularite) 40% pale green grey claylike chips. Micaceous in appearance. Almost a phyllite. 10% oxidised hematitic chips.
30 - 31m	40% quartz 60% micaceous phyllitic chips many of which contain 5 to 10% extremely fine grained disseminated hematite.
31 - 32m	90% vein quartz 10% phyllitic chips
32 - 33m	30% green grey phyllitic chips 30% hematitic chips (red coloured) 40% quartz contain red hematite and black specularite.
33 - 34m	90% quartz 5% green grey phyllitic chips 5% hematite (specularite) chips.
34 - 35m	75% quartz 15% black specularite. Leafy ~~coverage~~ aggregates. Waxy lustre. 10% phyllitic chips : green grey in colour.
35 - 36m	As above.
36 - 37m	50% quartz and specularite 50% red strongly oxidised hematitic sediments
37 - 38m	75% quartz (? vein) 15% specularite 5% hematitic chips 5% phyllitic chips
38 - 39m	95% ironstone : extremely fine grained black granular (micro crystalline). Mainly hematite; traces of magnetite. Minor vein quartz.
39 - 40m	Predominantly ironstone as above.
40 - 41m	Dark coloured rock. Possibly chloritic, dense. Non-metallic lustre. Not ironstone. Possibly high in quartz. 25% clay in sample.

HOLE NO. Cont. COORDINATES

DEPTH	DESCRIPTION
41 - 42m	Quartz - ironstone rock
42 - 43m	20% ironstone similar to above. 30% quartz (mainly vein) 50% yellow brown strongly oxidised micaceous sediments.
43 - 44m	As above.
44 - 45m	15% ironstone (contamination) 30% quartz 55% yellow brown oxidised argillite
45 - 46m	85% weakly oxidised quartz 15% ironstone (contamination)
46 - 47m	As above.
47 - 48m	20% pale green grey micaceous chips 15% ironstone (contamination) 65% quartz
48 - 49m	As above.
49 - 50m	10% ironstone 30% oxidised quartz 70% oxidised yellow brown argillite
50 - 51m	75% oxidised argillite 20% quartz (weakly oxidised) 5% ironstone (weak uphole contamination)
51 - 52m	Mainly red brown oxidised argillite. Weak vein quartz. Weak ironstone contamination.
52 - 53m	As above.
53 - 54m	As above.
54 - 55m	As above.
55 - 56m	As above.
56 - 57m	As above. ie: Red brown strongly oxidised argillite.
57 - 58m	As above.
58 - 59m	As above.
59 - 60m	As above.
60 - 61m	As above.
61 - 62m	As above.
62 - 63m	Extremely hematised argillite. Deep red in colour. Moderately indurated. (Possible supergene effect).
63 - 64m	As above. Chips are relatively more granular: Possible siltstone.
64 - 65m	Deep red brown intensely oxidised rock. Dense, granular; the rock appears to be more a sediment than ironstone.
65 - 66m	Dark green to black rock. Possible ironstone but also appears to be somewhat chloritic. Dense, well indurated, predominantly hematitic and chloritic, minor quartz and magnetite.
66 - 67m	50% dark brown grey oxidised ? chloritic rock 50% dark green extremely fine grained granular chloritic rock. Both appear to be chloritised granular sediments. Relatively less hematitic in this interval but overall it is at a moderate to strong level. Minor ? muscovite upon fracture surfaces. There is no apparent mineralisation.

HOLE NO. Cont. COORDINATES

DEPTH	DESCRIPTION
67 - 68m	Mainly ironstone containing up to 25% magnetite
68 - 69m	As above; good moderately oxidised ironstone. Well indurated, extremely fine grained, granular. No apparent mineralisation.
69 - 70m	Back into hematitic argillite and vein quartz 30% vein quartz 65% strongly oxidised red brown argillite 5% ironstone
70 - 71m	60% oxidised (hematitic) argillite 40% vein quartz Minor ironstone contamination.
71 - 72m	Mainly oxidised siltstone. Minor vein quartz and iron stone contamination.
72 - 73m	As above.
73 - 74m	As above.
74 - 75m	As above.
75 - 76m	60% red hematitic siltstone 40% dark grey weakly oxidised to fresh siltstone. Possible base of oxidation at 76m.
76m	E.O.H.

GEOPEKO LIMITED

TENNANT CREEK
Northern Territory

PROSPECT/MINE: OLIVE WOOD

Log of Hole: O.W.D.H. 5

Location: EL 4179

Purpose of Hole: To investigate supergene gold potential beneath Olive Wood trig station ironstone

Proposed By: R. Love Date:

Proposed Target: E: N: R.L.

Hole Planned By: R. Love Date: Checked:

Hole Approved By: B. Williams

Hole Logged By: P. Balind

Collar Co-Ordinates: (Extended Gecko Grid)

	E:	N:	R.L.		
Proposed:					
Surveyed:	7765' W:	5770' S:	997.5m R.L.	Surveyed in By: R. Love	Date: 5/4/84
Actual:	7764.7' W:	5771.7' S:	997.5m R.L.	Picked up By: R. Maher	Date:

Collar Bearing:

Proposed:	025°	Grid:	025°	Magnetic:		
Surveyed:	025°	Grid:	025°	Magnetic:	Surveyed in By:	R. Love
Actual:	025°	Grid:	025°	Magnetic:	Picked up By.	R. Maher

Collar Inclination:

Proposed:	-60°		
Surveyed:	-60°	Surveyed in By:	P. Balind
Actual:	-60°	Picked up By:	R. Maher

Target Depth: 90 m.

Proposed Final Depth: 100 m.

Actual Final Depth: 118 m. Hole Terminated By: P. Balind

Reason for Termination: Hole passed through base of oxidation

Drilling:- Date Commenced: 6/4/84 Date Completed: 9/4/84

Drilled By: Overland Drilling

Wedges Placed At:

Remarks: Percussion Drill Hole 1000RL at 8000W 6000S

Economic Summary Result:

GEOPEKO

TENNANT CREEK - NORTHERN TERRITORY

DRILLHOLE SURVEYS

PAGE of

PROJECT: EL 4179		AREA: OLIVE WOOD			DRILLHOLE TYPE: Percussion
MINE: Olive Wood		LEVEL:			
CO-ORDS: Extended Gecko Grid	7764.7feet W 5771.7feet S	BEARING: 025° Mag	DIP: -60m	R.L.: 997.5m	DRILLHOLE No. O.W.D.H. 5

DOWN HOLE SURVEY						PLOTTING DATA		
DEPTH (metres)	DIP		BEARING		REMARKS	NORTH/SOUTH Feet	EAST / WEST Feet	R.L. (Metres)
	READ	CORR.	MAG.	GRID				
0		60	025°	025°	Collar	5771.7	7764.7	997.5
118		48	030°	030°	EOH	5569.9	7659.6	902.0

PEKO MINES

ASSAY CERTIFICATE

Job No. E 84 / 068 - 16.4.84 OLIVE WOOD PDH 5 Date 16.5.84

Sample No.	Au	ug/g Cu	ug/g Bi	AuChecks					DEPTH (m) FROM	TO	
F 24163	<0.1	2	10			PDH:5			34	37	
24164	<0.1	<2	6						37	40	
24165	<0.1	<2	8						40	43	
24166	<0.1	2	10						43	46	
24167	<0.1	2	6						46	49	
24168	<0.1	<2	6						49	52	
24169	<0.1	<2	<5						52	55	
24170	<0.1	<2	<5						55	58	
24171	<0.1	2	6						58	61	
24172	<0.1	<2	<5	<0.1					61	64	
24173	<0.1	2	<5						64	67	
24174	<0.1	2	<5						67	70	
24175	<0.1	<2	10						70	73	
24176	<0.1	<2	4						73	76	
24177	<0.1	2	<5						76	79	
24178	<0.1	2	<5						79	82	
24179	<0.1	<2	6						82	83	
24180	<0.1	<2	<5						83	84	
24181	<0.1	2	6						84	85	
24182	<0.1	<2	<5						85	86	
24183	<0.1	2	8						86	87	
24184	<0.1	2	5	<0.1					87	88	
24185	<0.1	2	5						88	89	
24186	<0.1	2	5						89	90	
24187	<0.1	2	5						90	91	
24188	<0.1	2	6						91	92	
24189	<0.1	2	5						92	97	
24190	<0.1	2	5						97	102	
24191	<0.1	4	6						102	107	
24192	<0.1	2	6						107	112	
F 24193	<0.1	4	6			PDH:5			112	118	

HOLE NO. O.W.D.H. 5 HOLE COORDINATES:

DEPTH	DESCRIPTION
0 - 5m	Sporadic chips: oxidised argillite
5 - 7m	Yellow brown extremely fine grained argillite chips. Minor oxidised ironstone (possibly from float blocks derived from nearly ironstone outcrop).
7 - 10m	Reg grey to red brown argillite. 10% ironstone
1o - 13m	Mainly yellow brown well laminated extremely fine grained argillite chips.
13 - 16m	Minor chips in a loamy powdery soil. Rock type as above.
16 - 19m	As above.
19 - 22m	As above.
22 - 25m	Moderate chip sample consisting mainly of vein quartz often with striated margins. Moderately oxidised. Some chips contain minor specularite. Minor ironstone (?contamination) also found. Possibly a narrow ironstone vein was intersected in this interval.
25 - 28m	Poor sample, mainly quartz chips.
28 - 31m	Change of rock type to predominantly argillite; red brown to pale green grey in colour. Less oxidised chips are micaceous. Minor vein quartz.
31 - 34m	As above.
34 - 35m	Strongly oxidised, hematised, argillite.
35 - 37m	Oxidised ironstone. Massive, hematite rich. Minor vein quartz.
37 - 38m	Deep blood red coloured strongly oxidised iron stone and argillite. The ironstone has a vague metallic lustre.
38 - 39m	Rock types as above. 60% oxidised argillite 40% oxidised ironstone
39 - 40m	Predominantly strongly oxidised, red, hematitic ? shale. Hematite possibly derived from oxidised chlorite.
40 - 41m	As above. Very strongly oxidised
41 - 42m	As above.
42 - 43m	As above.
43 - 44m	As above.
44 - 45m	As above.
45 - 46m	As above ie: strongly hematised ? shale. Well indurated. Minor siliceous jasperoidal chips also found.
46 - 47m	As above.
47 - 48m	As above.
48 - 49m	As above ie: oxidised, hematised shale.
49 - 50m	As above.
50 - 51m	As above.
51 - 52m	Rock type as above. Red to dark brown well indurated. Strongly oxidised hematitic chips.
52 - 53m	As above.
53 - 54m	As above.
54 - 55m	Although moderately oxidised the shales are relatively more brown to grey in colour (chocolate coloured)

HOLE NO. Cont. HOLE COORDINATES

DEPTH	DESCRIPTION
55 - 56m	Back into red hematitic sediments. Not as shale like as previously but more granular in appearance. Moderately indurated. Possible siltstone or extremely fine grained sandstone.
56 - 57m	50% chips as above. 50% strongly hematised argillite chips.
57 - 58m	Predominantly hematised argillite. Moderately indurated. Laminated and well cleaved.
58 - 59m	As above. Minor vein quartz.
59 - 60m	As above.
60 - 61m	As above.
61 - 62m	As above.
62 - 63m	As above. Minor vein quartz.
63 - 64m	Mainly as above. 15% vein quartz and specularite
64 - 65m	As above.
65 - 66m	As above.
66 - 67m	Predominantly as above. Approx. 30% well cleaved shale.
67 - 68m	As above.
68 - 69m	As above. Minor vein quartz.
69 - 70m	As above.
70 - 71m	As above.
71 - 72m	As above.
72 - 73m	Mainly as above. Minor red jasperoidal chips.
73 - 74m	Back into cleaved and hematised argillite.
74 - 75m	As above.
75 - 76m	As above.
76 - 77m	As above.
77 - 78m	50% hematised argillite. 50% ironstone; massive, crystalline. Submetallic lustre.
78 - 79m	Strongly oxidised shale. Extremely fine grained. Not as micaceous as the argillite.
80 - 81m	As above.
81 - 82m	As above.
82 - 83m	85% strongly oxidised (hematitic) shale 15% vein quartz
83 - 84m	45% as above 50% dark green to grey chloritic sediments (? chloritised shale). 5% vein quartz.
84 - 85m	Rock type change to a strongly hematised argillite. Micaceous, well cleaved. Minor chloritic chips and vein quartz.
85 - 86m	As above.
86 - 87m	Weak to moderately oxidised argillite; grey red to grey green in colour, well cleaved, micaceous. Minor vein quartz also in sample.
87 - 88m	Base of oxidation at 87m. Relatively fresh dark green moderately chloritised argillite. Well cleaved. Minor quartz and hematitic chips.
88 - 89m	As above.
89 - 90m	As above.

HOLE NO. Cont. HOLE COORDINATES

DEPTH	DESCRIPTION
90 - 91m	As above. Weakly oxidised upon fracture surfaces.
91 - 92m	As above.
92 - 93m	As above.
93 - 94m	As above.
94 - 95m	As above.
95 - 96m	As above.
96 - 97m	Rock type as above ie: green grey microgranular phyllitic well cleaved argillite. Only minor hematite upon fracture surfaces. Traces of magnetite. Minor vein quartz.
97 - 98m	As above.
98 - 100m	As above.
100 - 101m	As above.
101 - 102m	As above. Minor vein quartz (+ hem)
102 - 103m	As above.
103 - 104m	As above.
104 - 105m	As above.
105 - 106m	As above.
106 - 107m	As above.
107 - 108m	As above. Minor vein quartz.
108 - 109m	Rock type as above but more silty in texture and appearance. Not so micaceous. Vaguely granular. Well laminated and cleaved.
109 - 110m	Rock type as above. Approx. 15% milky white quartz veining containing minor specularite.
110 - 111m	As above.
111 - 112m	As above.
112 - 113m	As above.
113 - 114m	As above.
114 - 115m	As above.
115 - 116m	As above. Slightly green grey siltstone chips, well cleaved and laminated. Minor quartz veining.
116 - 117m	As above.
117 - 118m	As above.
118m	E.O.H.

GEOPEKO
TENNANT CREEK
DRILL LOG

Collar Parameters
Northing : 5945.0' S
Easting : 7882.8' W
Azim.(grid) : 025°
Azim.(mag.) : 025°
Dip : -65°

Surveyed Collar
Northing : 5945.9' S
Easting : 7876.8' W
Azim.(grid) : 025°
Azim.(mag.) : 025°
Dip : -65°
R.L. :
Surveyed by : R. Maher

PROJECT :
PROSPECT : OLIVE WOOD
HOLE NO. : OWDH:6

Proposed by : R. LOVE
Logged by : P. BALIND
Drilling Contractor : ROCKDRIL
Drilling Technique : REVERSE CIRCULATION - PERCUSSION
Comments : TO INTERSECT POSSIBLE IRONSTONE BETWEEN OWDH'S 2 AND 5

Date Commenced : 23.8.87 Date Completed : 24.8.87

Rig Type : ROTOMAC 1302

GEOLOGICAL LOG	Mineral Percentages QTZ	Sample No.	Interval from to	Au	Cu	Bi
0-117m SEDIMENTS From 0 to 84m predominantly very fine grained siltstone and fine grained shale, generally poorly cleaved and strongly oxidised. A zone of moderate to strong quartz veining is intersected from 36 to 84m. This zone may be the same that was intersected in OWDH:2 FROM 181.5 TO 212.5m and OWDH:5 from 21.5 to 27.5m. Below 84m well cleaved shale is the dominant rock type down to 111m. Base of oxidation is at 97m and below this level the shale is typically greenish grey. From 111 to 114m, mixed poorly cleaved siltstone and greywacke.	<1		0 - 3			
	<1		3 - 6			
	<1		6 - 9			
	<1		9 - 12			
	<1		12 - 15			
	<1		15 - 18			
	<1		18 - 21			
	1		21 - 24			
	2		24 - 27			
	<1		27 - 30			
	3		30 - 33			
	2		33 - 36			
	35		36 - 39			
	60		39 - 42			
	60		42 - 45			
	15		45 - 48			
	5		48 - 51			
	20		51 - 54			
	1		54 - 57			
	1		57 - 60			
	5		60 - 63			
	20		63 - 66			
	40		66 - 69			
	10		69 - 72			
	10		72 - 75			

GEOPEKO - DRILLING LOG SHEET PROSPECT : OLIVE WOOD HOLE NO. : OWDH:6 PAGE 2 OF 3

GEOLOGICAL LOG	Mineral Percentages									Sample No.	Interval from to	Au	Cu	Bi
	QTZ	CLY	PYR											
117-211m CHLORITISED SEDIMENT Dark green well indurated excellently cleaved shale generally strongly chloritised with sporadic intervals of intense chloritic alteration (especially from 132m onwards). Very weak vein quartz (<1%) and no magnetite. The general level of chloritisation drops after 174m to a moderate to strong level. Well cleaved shale is ubiquitous through the interval. Mineralisation is confined to rare traces of smeared pyrite upon fracture surfaces and isolated pyrite euhedron.	3										75 - 78			
	5										78 - 81			
	20										81 - 84			
	<1										84 - 87			
	<1										87 - 90			
	<1										90 - 93			
	<1										93 - 96			
	<1										96 - 99			
	<1										99 - 102			
	<1										102 - 105			
	<1										105 - 108			
	<1										108 - 111			
	<1										111 - 114			
	5										114 - 117			
	5	60	Tr								117 - 120			
	1	60	Tr								120 - 123			
	1	60									123 - 126			
	1	60									126 - 129			
	1	60	Tr								129 - 132			
		80									132 - 135			
		60									135 - 138			
		80	Tr								138 - 141			
		80	Tr								141 - 144			
		60									144 - 147			
		60	Tr								147 - 150			
		60									150 - 153			
		60	Tr								153 - 156			
		60	Tr								156 - 159			
		80									159 - 162			
		80	Tr								162 - 165			
		80	Tr								165 - 168			
		60	Tr								168 - 171			
		60									171 - 174			
											174 - 177			
											177 - 180			
											180 - 183			

GEOPEKO - DRILLING LOG SHEET PROSPECT : OLIVE WOOD HOLE NO. : OWDH:6 PAGE 3 OF 3

GEOLOGICAL LOG	Mineral Percentages	Sample No.	Interval from to	Au	Cu	Bi
			183 - 186			
			186 - 189			
			189 - 192			
			192 - 195			
			195 - 198			
			198 - 201			
			201 - 204			
			204 - 207			
			207 - 210			
211m Hole abandoned due to poor return and high water flow.			210 - 211			

- PROPOSAL -

GEOPEKO

TENNANT CREEK - NORTHERN TERRITORY

DRILLHOLE SURVEYS

PROJECT: OLIVE WOOD | AREA: | DRILLHOLE TYPE:

MINE: | LEVEL: SURFACE

CO-ORDS:	BEARING:	DIP:	R.L.:	DRILLHOLE No.
5945.0' S 7882.8' W	35° GRID	-70°	1000 M	OW DH 6

DOWN HOLE SURVEY						PLOTTING DATA		
DEPTH (metres)	DIP READ	DIP CORR.	BEARING MAG.	BEARING GRID	REMARKS	SOUTH (FEET)	WEST (FEET)	R.L. (METRES)
0		70	35	35		5945.0	7882.8	1000.0
25		70		36		5922.2	7866.5	976.5
50		71		37		5900.2	7850.2	953.0
75		70		38		5878.4	7833.6	929.4
100		69		36		5855.5	7816.3	906.0
125		68		34		5830.9	7799.0	882.7
150		66		32		5804.0	7781.6	859.7
175		64		30		5774.2	7763.7	837.0
194.0					TARGET	5750.0	7750.0	820.0
200		63		29		5742.4	7745.7	814.6
225		62		28		5709.1	7727.6	792.5
250		61		27		5674.4	7709.6	770.5
275		60		26		5638.3	7691.5	748.8
300		58		25		5600.1	7673.3	727.3

- PROPOSAL -

*** PROSPECT : OLIVE WOOD ***
*** HOLE : DH 7 ***
Collar Coordinates .00 E .00 N 1000.0 RL
Azimuth correction = .00
Interpolation inc = 5.0

SURVEYS (Azimuth wrt Grid North)

DEPTH	DIP	AZIMUTH	EASTING	NORTHING	RL
.00	-60.00	25.00	.00	.00	1000.00
68.00	-60.00	25.00	14.37	30.81	941.11

GEOPEKO
TENNANT CREEK
DRILL LOG

Collar Parameters
Northing : 5895 S
Easting : 7392' W
Azim.(grid) : 025°
Azim.(mag.) : 025°
Dip : -60°

Surveyed Collar
Northing : 5902.3' S
Easting : 7394.0' W
Azim.(grid) : 025°
Azim.(mag.) : 025°
Dip : -60°
R.L. :
Surveyed by : R. Maher

PROJECT :
PROSPECT : OLIVE WOOD
HOLE NO. : OWDH:7

Proposed by : P. BALIND
Logged by : P. BALIND
Drilling Contractor : ROCKDRIL
Drilling Technique : REVERSE CIRCULATION - PERCUSSION
Comments : TO INVESTIGATE OLIVE WOOD TRIG IRONSTONE AT DEPTH

Date Commenced : 25.8.87 Date Completed : 25.8.87
Rig Type : ROTOMAC 1302

GEOLOGICAL LOG	Mineral Percentages HEM	QTZ	Sample No.	Interval from	to	Au	Cu	Bi
0-21m SEDIMENTS Mixed dark brown well cleaved shale and liss well cleaved siltstone with patchy strong quartz veining.				0	3			
		25		3	6			
		5		6	9			
				9	12			
				12	15			
		5		15	18			
		20		18	21			
21-34.5m OXIDISED CHLORITISED SEDIMENT Dark reddish brown to maroon mixed shale and siltstone with patchy vein quartz. Coloration suggests the sediments were strongly chloritised.		40		21	24			
		25		24	27			
		-		27	30			
		-	42816	30	33	<0.1		
	50	2	17	33	36	<0.1		
34.5-50.5m CHLORITISED SEDIMENTS (Oxidised) AND HEMATITE A unit similar to above but also with intervals (?up to 3m wide) of black very dense metallic hematite. The ironstone contains 5 to 10% interstitial quartz and is weak to moderately magnetic.	50	25	18	36	39	<0.1		
	10	65	19	39	40	<0.1		
	-	55	21	40	42	<0.1		
	-	5	23	42	43	<0.1		
	-	2	24	43	44	<0.1		
	75	10	25	44	46	<0.1		
	90	5	26	46	47	<0.1		
	90	5	27	47	48	<0.1		
	85	10	28	48	49	<0.1		
	85	10	29	49	50	<0.1		
50.5-59m OXIDISED CHLORITISED SEDIMENTS A unit similar to above again with strong vein quartz.	55	35	31	50	51	<0.1		
	10	5	32	51	52	<0.1		

GEOPEKO - DRILLING LOG SHEET | PROSPECT : OLIVE WOOD | HOLE NO. : OWDH:7 | PAGE 2 OF 2

GEOLOGICAL LOG	Mineral Percentages HEM	QTZ	Sample No.	Interval from	to	Au	Cu	Bi
	3	35	42833	52	53	<0.1		
		-	34	53	54	<0.1		
		80	35	54	56	<0.1		
	2	50	37	56	59	<0.1		
59-68m SEDIMENTS								
Grey brown moderately oxidised well cleaved shale.		20	38	59	62	<0.1		
		3		62	65			
68m E.O.H.		2		65	68			

APPENDIX II

GEOPEKO REVERSE CIRCULATION DRILLHOLE LOGS

SEPTEMBER 1989 TO 1990

DRILL HOLES 175 TO 177

KEY FOR GEOLOGICAL LOGS

N/S = *not sampled*

BN = *Brown*

RD/BN = *Red/Brown*

CR = *Cream*

YW = *Yellow*

VF = *very fine grained*

FN = *Fine grained*

MD = *Medium grained*

All in absolute terms rather than modified by rocktype ie. no such thing as MD grained siltstone MD = sand size grains = GWKE or sandstone

fe-oxid = *Iron oxide stained. Not nessecarily a measure of the degree of weathering*

Blocky/Cleaved = *The general appearance of the chips. Rough structural indicator.*

T, S, M, C, A, = *relative abundance indications. Trace, Sparse, Minor Common, Abundant.*

L(?) = *Locally concentrated in (?) quantities*

Ka = *Kaolinite rock alteration (not always associated with 'clayey')*

li = *limolite*

Qt = *Quartz fragments*

MnOx = *Manganese oxides*

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DRILLHOLE SUMMARY SHEET

PROSPECT/MINE : ORLANDO HOLE NO. : 175

LOCATION :

Purpose of Hole : Eastern extension of Main Lode System downplunge of anomalous Cu values.

Proposed Collar Parameters

Easting : 1240
Northing : 210
Azim (grid) : 360
Azim (mag) : 026
Dip : 060

Proposed by : R. LOVE

Surveyed Collar

Easting : 1240
Northing : 205
R.L. :
Azim (grid) :
Azim (mag) :
Dip : 58

Surveyed by :

Target Parameters

Easting :
Northing :

Depth below surface :
Hole depth to target :

Drilling Technique	Interval(m)	Hole Size
R/C	0 - 73	4½

Actual Final Depth : 73
Terminated by : G. HOWL
Logged by : G. HOWL
Reason for Termination :

Date Commenced : 25/9/90
Date Completed : 25/9/90

Drilled by : STADCOTE
Rig Type : GK850

Economic Summary :

Lode Type	Interval(m)	Significant Intersections

General Remarks :

SURVEY 73m DIP 51.5 Bearing 035

GEOLOGICAL LOG : ORLANDO RC DRILLING DATE : SEPT ' 90 HOLE NO.: 175 PAGE NO. : 1

DEPTH TO BASE	ROCK CODE	ROCK TYPE	COLOUR	GRAIN SIZE	LITHOLOGICAL QUALIFIERS	TEXURAL AND BEDDING FEATURES	MINERALISATION		
							R	MINERAL	OCC.
3		N/S							
7	Slst	Siltstone	BN	FN/VF	str fe-oxid Weakly ferruginized some clay minor bleaching	Blocky	S	Mnox	
23	Slst	Siltstone	RD/BN	VF	str fe-oxid	Blocky			
73	Slst	Siltstone	BN	VF	mod-str fe-oxid	Blocky	L	Qt	

SAMPLE	Au	Au Dpl	Cu	Bi	Interval	Hole No.
T 2200	<0.01	--	70	<10	3 - 4	DH175
T 2201	<0.01	--	100	<10	5	
T 2202	<0.01	--	170	<10	6	
T 2203	<0.01	--	140	<10	7	
T 2204	<0.01	--	83	<10	8	
T 2205	<0.01	--	440	<10	CFS12	
T 2206	<0.01	--	100	30	8 - 9	
T 2207	<0.01	<0.01	86	40	10	
T 2208	<0.01	<0.01	130	20	11	
UNITS	ppm	ppm	ppm	ppm		
DET.LIM	0.01	0.01	2	10		
SCHEME	FA1	FA1	AAS1	AAS1		

CLASSIC LABORATORIES LTD

Job: 0DN1382
O/N: 36919

Final

ORLANDO RC
DRILLING

ANALYTICAL REPORT

SAMPLE	Au	Au Dpl	Cu	Bi	Interval	Hole No.
T 2209	0.11	--	97	<10	11 - 12	DH175
T 2210	0.12	--	80	20	13	
T 2211	<0.01	--	100	<10	14	
T 2212	<0.01	--	64	<10	15	
T 2213	<0.01	--	110	<10	16	
T 2214	<0.01	--	82	<10	17	
T 2215	<0.01	--	110	<10	18	
T 2216	<0.01	--	120	<10	19	
T 2217	<0.01	--	91	<10	20	
T 2218	<0.01	--	100	<10	21	
T 2219	<0.01	--	160	<10	22	
T 2220	<0.01	--	150	<10	23	
T 2221	<0.01	--	490	<10	24	
T 2222	<0.01	--	190	<10	25	
T 2223	<0.01	--	270	<10	26	
T 2224	<0.01	--	430	<10	27	
T 2225	<0.01	--	680	<10	CFS12	
T 2226	<0.01	--	440	<10	27 - 28	
T 2227	<0.01	--	660	<10	29	
T 2228	<0.01	--	490	20	30	
T 2229	<0.01	--	480	<10	31	
T 2230	<0.01	--	360	<10	32	
T 2231	<0.01	--	280	<10	33	
T 2232	<0.01	<0.01	280	40	34	
T 2233	<0.01	--	150	10	35	
T 2234	<0.01	--	110	<10	36	
T 2235	<0.01	--	150	<10	37	
T 2236	<0.01	--	200	<10	38	
T 2237	<0.01	--	200	40	39	
T 2238	<0.01	--	190	<10	40	
T 2239	<0.01	<0.01	150	<10	41	
T 2240	<0.01	--	160	<10	42	
T 2241	<0.01	--	170	<10	43	
T 2242	<0.01	--	230	<10	44	
T 2243	<0.01	--	140	<10	45	
T 2244	<0.01	--	81	<10	46	
T 2245	<0.01	--	680	<10	CFS12	
T 2246	<0.01	--	78	<10	47	
T 2247	<0.01	--	64	<10	48	
T 2248	<0.01	--	73	<10	49	
T 2249	<0.01	--	75	<10	50	
T 2250	<0.01	--	60	<10	51	
T 2251	<0.01	--	45	<10	52	
T 2252	<0.01	--	29	<10	53	
T 2253	<0.01	--	76	<10	54	
T 2254	<0.01	--	78	<10	55	
T 2255	<0.01	--	200	10	56	
T 2256	<0.01	--	230	<10	57	
T 2257	<0.01	--	130	<10	58	
T 2258	<0.01	--	73	<10	59	
UNITS	ppm	ppm	ppm	ppm		
DET.LIM	0.01	0.01	2	10		
SCHEME	FA1	FA1	AAS1	AAS1		

Final

ANALYTICAL REPORT

ORLANDO RC DRILLING

SAMPLE	Au	Au Dpl	Cu	Bi	Interval	Hole No.
T 2259	<0.01	--	94	<10	59 - 60	DH175
T 2260	<0.01	--	42	<10	61	
T 2261	<0.01	--	41	<10	62	
T 2262	<0.01	--	38	<10	63	
T 2263	<0.01	--	73	<10	64	
T 2264	<0.01	--	59	<10	65	
T 2265	<0.01	--	490	<10	CFS12	
T 2266	<0.01	--	53	<10	65 - 66	
T 2267	<0.01	--	30	<10	67	
T 2268	<0.01	--	35	10	68	
T 2269	<0.01	<0.01	54	30	69	
T 2270	<0.01	--	47	10	70	
T 2271	<0.01	--	52	<10	71	
T 2272	<0.01	--	46	<10	72	
T 2273	<0.01	--	92	<10	73	
T 2274	<0.01	--	100	<10	19 - 20 DUP	
T 2275	<0.01	--	180	<10	39 - 40 DUP	
T 2276	<0.01	--	77	<10	59 - 60 DUP	

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

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DRILLHOLE SUMMARY SHEET

PROSPECT/MINE : ORLANDO HOLE NO. : 176

LOCATION :

Purpose of Hole : New footwall system downplunge of anomalous values around old workings

Proposed Collar Parameters

Easting : 1240
Northing : 320
Azim (grid) : 360
Azim (mag) : 026
Dip : 60

Proposed by : R. Love

Surveyed Collar

Easting :
Northing :
R.L. :
Azim (grid) :
Azim (mag) :
Dip :

Surveyed by :

Target Parameters

Easting :
Northing :

Depth below surface :
Hole depth to target :

Drilling Technique	Interval(m)	Hole Size
R/C	0-73	4½

Actual Final Depth :
Terminated by : G. HOWL
Logged by : G. HOWL
Reason for Termination :

Date Commenced : 26/9/90
Date Completed : 26/9/90

Drilled by : STADCOTE
Rig Type : GK850

Economic Summary :

Lode Type	Interval(m)	Significant Intersections

General Remarks :

Survey 73m Dip 54 Bearing 035

GEOLOGICAL LOG : ORLANDO RC DRILLING DATE : SEPT ' 90 HOLE NO.: 176 PAGE NO. : 1

DEPTH TO BASE	ROCK CODE	ROCK TYPE	COLOUR	GRAIN SIZE	LITHOLOGICAL QUALIFIERS	TEXURAL AND BEDDING FEATURES	MINERALISATION		
							R	MINERAL	OCC.
3		N/S							
22	Slst	Siltstone	BN	FN/VF	str fe-oxid minor clay bleaching	Blocky			
32	Slst	Siltstone	RD/BN	VF	str fe-oxid silicified ferruginized	Blocky			
73	Slst	Siltstone	BN	VF	mod->str fe-oxid	Blocky			
EOH									

ORLANDO RC
DRILLING

SAMPLE	Au	Au Dpl	Cu	Bi	Interval	Hole No.
T 2277	<0.01	--	24	<10	3 - 4	DH176
T 2278	<0.01	--	28	<10	5	
T 2279	<0.01	--	35	<10	6	
T 2280	<0.01	--	35	<10	7	
T 2281	<0.01	--	41	<10	8	
T 2282	<0.01	--	41	<10	9	
T 2283	<0.01	--	68	<10	10	
T 2284	<0.01	--	79	<10	11	
T 2285	<0.01	--	380	<10	CFS12	
T 2286	<0.01	--	100	<10	11 - 12	
T 2287	<0.01	--	100	<10	13	
T 2288	<0.01	--	120	<10	14	
T 2289	<0.01	--	68	<10	15	
T 2290	<0.01	--	78	<10	16	
T 2291	<0.01	--	90	<10	17	
T 2292	<0.01	<0.01	110	<10	18	
T 2293	<0.01	--	100	<10	19	
T 2294	<0.01	--	140	<10	20	
T 2295	<0.01	--	140	30	21	
T 2296	<0.01	--	130	50	22	
T 2297	<0.01	<0.01	190	20	23	
T 2298	<0.01	--	120	40	24	
T 2299	<0.01	--	160	20	25	
T 2300	<0.01	<0.01	140	<10	26	
T 2301	<0.01	--	140	10	27	
T 2302	<0.01	--	170	20	28	
T 2303	<0.01	--	190	40	29	
T 2304	<0.01	--	220	30	30	
T 2305	<0.01	--	260	10	CFS12	
T 2306	<0.01	--	220	10	30 - 31	
T 2307	<0.01	--	200	<10	32	
T 2308	<0.01	--	210	<10	33	
UNITS	ppm	ppm	ppm	ppm		
DET.LIM	0.01	0.01	2	10		
SCHEME	FA1	FA1	AAS1	AAS1		

CLASSIC LABORATORIES LTD

Job: 0DN1382
O/N: 36919

Final

ANALYTICAL REPORT

ORLANDO RC
DRILLING

SAMPLE	Au	Au Dpl	Cu	Bi	Interval	Hole No.
" 2309	<0.01	--	200	<10	33 - 34	DH176
" 2310	<0.01	--	150	<10	35	
" 2311	<0.01	--	150	<10	36	
" 2312	<0.01	--	160	<10	37	
" 2313	<0.01	--	44	<10	38	
" 2314	<0.01	--	29	<10	39	
" 2315	<0.01	--	68	<10	40	
" 2316	<0.01	--	28	<10	41	
" 2317	<0.01	--	27	<10	42	
" 2318	<0.01	--	15	<10	43	
" 2319	<0.01	--	34	<10	44	
" 2320	<0.01	--	100	<10	45	
" 2321	<0.01	--	140	<10	46	
" 2322	<0.01	--	80	<10	47	
" 2323	<0.01	--	91	<10	48	
" 2324	<0.01	--	250	<10	49	
" 2325	<0.01	--	330	<10	CFS12	
" 2326	<0.01	--	160	<10	49 - 50	
" 2327	<0.01	--	180	<10	51	
" 2328	<0.01	--	190	<10	52	
" 2329	<0.01	--	200	<10	53	
" 2330	<0.01	--	260	40	54	
" 2331	<0.01	--	150	20	55	
" 2332	<0.01	--	280	50	56	
" 2333	<0.01	--	210	20	57	
" 2334	0.28	--	510	230	58	
" 2335	0.49	0.56	1020	640	59	
" 2336	0.06	--	260	40	60	
" 2337	0.12	--	250	150	61	
" 2338	0.11	--	290	60	62	
" 2339	<0.01	--	240	10	63	
" 2340	<0.01	--	180	<10	64	
" 2341	<0.01	--	150	<10	65	
" 2342	<0.01	--	89	<10	66	
" 2343	<0.01	--	150	120	67	
" 2344	<0.01	--	170	50	68	
" 2345	<0.01	--	260	<10	CFS12	
" 2346	<0.01	--	180	<10	68 - 69	
" 2347	<0.01	<0.01	31	<10	70	
" 2348	<0.01	--	190	70	71	
" 2349	<0.01	--	110	20	72	
" 2350	<0.01	--	450	30	73	
" 2351	<0.01	--	130	<10	19 - 20	DUP
" 2352	<0.01	<0.01	140	<10	26 - 27	DUP
" 2353	0.04	--	400	10	39 - 40	DUP
" 2354	<0.01	--	340	<10	59 - 60	DUP
" 2355	<0.01	--	170	20	66 - 67	DUP

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

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DRILLHOLE SUMMARY SHEET

PROSPECT/MINE : ORLANDO HOLE NO. : 177

LOCATION :

Purpose of Hole : Eastern extension of Main Orlando Lode System downplunge of anomalours Cu values.

Proposed Collar Parameters

Easting : 1400
Northing : 230
Azim (grid) : 360°
Azim (mag) : 026°
Dip : 60°

Proposed by : R. Love

Surveyed Collar

Easting :
Northing :
R.L. :
Azim (grid) :
Azim (mag) :
Dip :

Surveyed by :

Target Parameters

Easting :
Northing :

Depth below surface :
Hole depth to target :

Drilling Technique	Interval(m)	Hole Size
R/C	0 - 73	4½"

Actual Final Depth : 73m
Terminated by : G. Howl
Logged by : G. Howl
Reason for Termination :

Date Commenced : 27/9/90
Date Completed : 27/9/90

Drilled by : STADCOTE
Rig Type : GK850

Economic Summary :

Lode Type	Interval(m)	Significant Intersections

General Remarks :

Survey 73m Dip 54 Bearing 036

GEOLOGICAL LOG : ORLANDO RC DRILLING DATE : SEPT ' 90 HOLE NO.: 177 PAGE NO. : 1

DEPTH TO BASE	ROCK CODE	ROCK TYPE	COLOUR	GRAIN SIZE	LITHOLOGICAL QUALIFIERS	TEXURAL AND BEDDING FEATURES	MINERALISATION		
							R	MINERAL	OCC.
3		N/S							
5	Slst	Siltstone	CR	VF	bleached mod fe-oxid	Blocky			
73	Slst	Siltstone	BN	VF	mod -> str fe-oxid	Blocky			
EOH									

CLASSIC LABORATORIES LTD

Job: 0DN1382
O/N: 36919

Final

ANALYTICAL REPORT

ORLANDO RC DRILLING

SAMPLE	Au	Au Dpl	Cu	Bi	Interval	Hole No.
T 2356	<0.01	--	210	<10	3 - 4	DH177
T 2357	<0.01	--	90	<10	5	
T 2358	<0.01	--	230	<10	6	
UNITS	ppm	ppm	ppm	ppm		
DET.LIM	0.01	0.01	2	10		
SCHEME	FA1	FA1	AAS1	AAS1		

CLASSIC LABORATORIES LTD

Job: 0DN1382
O/N: 36919

Final

ANALYTICAL REPORT

ORLANDO RC DRILLING

SAMPLE	Au	Au Dpl	Cu	Bi	Interval	Hole No.
T 2359	<0.01	--	42	<10	6 - 7	DH177
T 2360	<0.01	--	9	<10	8	
T 2361	<0.01	--	26	<10	9	
T 2362	<0.01	--	38	<10	10	
T 2363	<0.01	--	41	<10	11	
T 2364	<0.01	--	77	<10	12	
T 2365	<0.01	--	440	<10	CFS12	
T 2366	<0.01	--	120	<10	12 - 13	
T 2367	<0.01	<0.01	89	<10	14	
T 2368	<0.01	--	31	<10	15	
T 2369	<0.01	<0.01	23	<10	16	
T 2370	<0.01	--	34	<10	17	
T 2371	<0.01	--	24	<10	18	
T 2372	<0.01	--	39	<10	19	
T 2373	<0.01	--	74	<10	20	
T 2374	<0.01	--	77	<10	21	
T 2375	<0.01	--	51	<10	22	
T 2376	<0.01	--	48	<10	23	
T 2377	<0.01	--	54	<10	24	
T 2378	<0.01	--	47	<10	25	
T 2379	<0.01	--	43	<10	26	
T 2380	<0.01	--	71	<10	27	
T 2381	<0.01	--	51	<10	28	
T 2382	<0.01	--	130	<10	29	
T 2383	<0.01	--	110	<10	30	
T 2384	<0.01	--	150	<10	31	
T 2385	<0.01	--	390	<10	CFS12	
T 2386	<0.01	--	160	<10	31 - 32	
T 2387	<0.01	--	100	<10	33	
T 2388	<0.01	--	51	<10	34	
T 2389	<0.01	--	37	<10	35	
T 2390	<0.01	--	46	<10	36	
T 2391	<0.01	--	160	<10	37	
T 2392	<0.01	--	160	<10	38	
T 2393	<0.01	--	92	<10	39	
T 2394	<0.01	--	69	<10	40	
T 2395	<0.01	--	33	<10	41	
T 2396	<0.01	--	34	<10	42	
T 2397	<0.01	--	21	<10	43	
T 2398	<0.01	--	20	<10	44	
T 2399	<0.01	--	28	<10	45	
T 2400	<0.01	--	73	<10	46	
T 2401	<0.01	--	70	<10	47	
T 2402	<0.01	--	46	<10	48	
T 2403	<0.01	--	48	<10	49	
T 2404	<0.01	<0.01	51	<10	50	
T 2405	<0.01	--	310	10	CFS12	
T 2406	<0.01	--	95	<10	50 - 51	
T 2407	<0.01	--	80	<10	52	
T 2408	<0.01	--	37	<10	53	
UNITS	ppm	ppm	ppm	ppm		
DET.LIM	0.01	0.01	2	10		
SCHEME	FA1	FA1	AAS1	AAS1		

CLASSIC LABORATORIES LTD

Job: 0DN1382
O/N: 36919

Final

ANALYTICAL REPORT

ORLANDO RC
DRILLING

SAMPLE	Au	Au Dpl	Cu	Bi	Interval	Hole No.
						DH 177
T 2409	<0.01	--	110	<10	53 - 54	
T 2410	<0.01	--	64	<10	55	
T 2411	<0.01	--	26	<10	56	
T 2412	<0.01	--	23	<10	57	
T 2413	<0.01	--	100	<10	58	
T 2414	<0.01	--	75	<10	59	
T 2415	<0.01	--	32	<10	60	
T 2416	<0.01	--	16	<10	61	
T 2417	<0.01	--	17	<10	62	
T 2418	<0.01	--	13	<10	63	
T 2419	<0.01	--	13	<10	64	
T 2420	<0.01	--	24	<10	65	
T 2421	<0.01	--	7	<10	66	
T 2422	<0.01	--	9	<10	67	
T 2423	<0.01	<0.01	14	<10	68	
T 2424	<0.01	--	15	<10	69	
T 2425	<0.01	--	360	<10	CFS12	
T 2426	<0.01	--	31	<10	69 - 70	
T 2427	<0.01	--	35	<10	71	
T 2428	<0.01	--	45	<10	72	
T 2429	<0.01	--	42	<10	73	
T 2430	<0.01	--	33	<10	19 - 20 DUP	
T 2431	<0.01	--	95	<10	39 - 40 DUP	
T 2432	<0.01	--	84	<10	59 - 60 DUP	

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