DIAMOND DRILL REPORT

RINGWOOD COPPER PROSPECT.

- by -

I.P. YOULES.

CONTENTS

PLATES

DIAMOND DRILL REPORT

RINGWOOD COPPER PROSPECT.

INTRODUCTION

This report details the geological information from two diamond drill holes at the Ringwood Copper Prospect.

LOCATION & ACCESS

From Alice Springs the prospect is 98 road miles east along a graded unmetaled road; it is 20 miles south east of Ringwood Homestead and 2 miles south of Phillipson No.6 Bore.

HISTORY.

Traces of copper minerals were discovered in 1954, by M. Collins, who brought the occurrence to the attention of the Resident Geologist, Alice Springs. It was examined by Jones (1954) but the deposit was considered to be uneconomic. During an investigation of mineral deposits in the Alice Springs district in 1965 it was decided to examine the occurence at depth.

PREVIOUS INVESTIGATIONS

The geology of the area is described by Wells et.al (1965). Jones (1954) examined the prospect, and so did Youles (1965), who recommended the drilling.

GEOLOGY

The prospect occurs near the base of the Areyonga Formation of Upper Proterozoic age.

Wells et al described the lithology as:-

"The Areyonga Formation consists of boulder clay, pebble and cobble conglomerate, arkose and poorly sorted sandstone and siltstone. - - -. The lithology of the formation varies rapidly along strike". Tuffaceous sediments have since been observed in the formation.

In the vicinity of the prospect some 400 feet of the formation is present. It crops out on a ridge 8 miles long, in which the rocks strike north-east and dipp 50°-70° north-west. The formation overlies, apparently conformably, red-brown dolomitic siltstone of the Loves Creek member of the Bitter Springs Formation; it is overlain conformably by the Heartbreak Formation.

In a transition zone at the base a red and green chert pebble conglomerate is interbedded with light brown dolomitic siltstone and green dolomitic siltstone. This grades upwards, in 3 - 5 feet, to 40 feet of green dolomitic siltstone with thin interbeds of white dirty sandstone. Overlying the siltstone, forming the crest of the ridge, is a sequence of silicified sandstone and arkose with soil covered intervals.

(2/...)

SURFACE MINERALISATION.

Low concentrations of malachite, azurite, and chalcocite occur along bedding planes in the 4 feet of green dolomitic siltstone immediately overlying the transition zone for over 8 miles along the ridge. Towards the eastern end the siltstone has interbeds of white dirty sandstone which show copper staining. To the east a highly ferruginous bed free of copper mineralization up to 1 feet thick occurs at the base of the mineralization; No evidence of the primary mineralisation was observed.

DRILLING RESULTS.

Two diamond drill holes were put down in 1965/66 by Mines Branch, N.T.A., to examine the occurrence below the weathered zone. The core from both holes is stored at the Mines Branch office, Alice Springs.

Hole No. 1.

Drill hole No. 1. was sited near the western end of the ridge to intersect the mineralized zone perpendicularly at 300 feet. The mineralization was penetrated at 256'. It was decided to drill on to 360' to examine the underlying siltstone.

Core recovery over the main interval of grey green dolomitic siltstone between 220'6" and 256'4" was very low (see drill hole No.1 log). The core covered did show signs of weathering, which may account for the low recovery.

The sulphide present in this section is mainly pyrite. It is fine-grained and generally occurs in the matrix of the thin sandstone interbeds. Assay results (below) indicate that copper is present in the interval 250' - 256'; examination of the few core sections did not reveal any chalcopyrite, but recovery was only 25%.

No further zones of copper mineralization were intersected in the underlying sediments.

Hole No. 2.

Hole No. 2. was originally planned to investigate the eastern end of the ridge. In view of the poor core recovery over the interval of interest in hole No. 1, it was decided to move only 1 mile along strike to the north-east. Hole No. 2, was sited to intersect the mineralized zone at 400'. The zone was penetrated at 379', the hole terminated at 383'. Apart from fault zones, core recovery was good throughout. The angle between bedding and the drill hole was 40° - 45°.

Results from this hole are more encouraging. Fine grained disseminated sulphides, mainly pyrite, occur throughout the zone 329' - 382'6". Chalcopyrite occurs patchily with concentration in small crosscutting veinlets, or in clots along bedding planes. The host rocks are a series of green and grey siltstones, partly dolomitic, gray felspathic sandstone, partly dolomitic and sandy dolomite. Throughout these rocks there are

(3/...)

small streaks and blebs of black graphitic material, and also thin interbeds (0.1mm) of black graphitic shale.

Other intervals of similar rock types were intersected higher in the hole, the thickest being between 244' and 278'. Only pyrite was identified in these sections. These intervals correspond with similar intervals in hole No.1, although the pyrite mineralisation was not observed there, and the siltstones are not so well developed.

The interval 379' - 393', which contains chert pebble conglomerate beds (½" to 1' thick) shows a gradational change from the grey siltstone sequence to the underlying red-brown siltstone. This change was also evident in hole No. 1.

Between 73'6" and 90' in hole No.2, and between 26'6" and 33' in hole No.1, a tuffaceous siltstone was intersected. This is the first recorded occurrence of any form of volcanic material in the Areyonga Formation. The rock does not crop out at the surface.

ASSAY RESULTS.

Surface Mineralization.

The outcrop in the vicinity of diamond drill hole No.1, was sampled. Semi-quantitative spectrographic analysis gave the following:-

Width	Copper	Cobalt	Nickel	Rock Type.
8 feet	150 ppm	30 ppm	40 ppm	Green Siltstone
2	1000	100	50	Cu-stained green siltstone
5	30	5	15	Transition zone to brown siltstone.
10	15	3	5	Brown Siltstone.
10	20	7	40	Brown Siltstone.
10	20	3	3	Brown Siltstone.

Lead values less than 15 ppm and zinc less than 20 ppm.

Hole No.1.

Sludge samples were collected by the driller over 10 feet intervals from 210' to T.D., at 360', and submitted to the Australian Mineral Development Laboratories for semi-quantitative spectrographic analysis for copper, lead, zinc, cobalt and nickel; the results are given in the bore hole log. No samples were submitted for assay.

The results show that copper/cobalt mineralization occurs near the base of the grey-green siltstone sequence (240' - 26 the maximum values being 2500 ppm copper and 100 ppm cobalt.

Samples of the grey-green siltstone from 155'-170', 220'-240', and 250'-256', the brecciated siltstone in the transition zone 256'-259' and the red-brown siltstone from 260'-360' were analysed for potash (K_2O). The results (see log) indicate a potash content of 5.3 - 6% in the grey green siltstone to 256', and 3.6 - 3.8% below 256'.

(4/...)

Hole No.2.

Core from the following intervals, 174' - 179', 224' - 279', and 329' - 362'6" was split and sampled, generally over one foot intervals; the samples sent to Australian Mineral Development Laboratories for semi-quantitative analysis for copper, lead, zinc, cobalt and nickel. The results for both holes are shown in Appendix 1, but were not available at the time of writing.

CONCLUSIONS.

These drilling results show clearly that the Ringwood copper deposit is of the stratiform type. The change of rock type from dominantly green siltstone and sandstone in hole No.1. to the grey siltstone and sandstone in hole No.2, the increase in extend of mineralization, and the presence of other siltstone intervals of a similar type higher in the sequence, are factors that strongly support a recommendation for further investigation along strike higher in the succession. As the Mt. Skinner copper deposits (Youles 1965) are in rocks of the same type and age, the prospects for further discoveries in the Areyonga Formation are excellent.

REFERENCES.

Jones	1954	Unpub. report Res. Geol. Office N.T.A. Alice Springs.
Wells et al	1965	Geology of the North Eastern part of the Adadeus Basin. Aust. Bur. Min. Res. Rec. 1965/108.
Youles	1965 Proposed Diamond Drilling.	Unpub. Report. Res. Geol. Office. N.T.A. Alice Springs.
Youles	1965	Mt. Skinner Copper Deposit Alice Springs. Res. Geol. Office N.T.A. ALICE SPRINGS.

SUMMARY.

Two diamond drill holes penetrated a sequence of green and grey pyritic felspathic dolomitic siltstone and sandstone, arkose, and tuffaceous siltstone, towards the base of the Areyonga Formation.

The green and grey siltstone intervals contain chalcopyrite; secondary copper minerals have been traced at the surface for seven miles along strike.

Spectrographic results give values of up to 2500 ppm copper and up to 120 ppm cobalt in the mineralized intervals.

APPENDIX 1.

Interval	Cu	Pb	Zn	Co	Ni
Diamond Drill Hole No. 1.					
210'-220'	150	30	40	30	40
220'-230'	120	25	30	25	40
230'-240'	200	25	20	15	50
240'-250'	80	20	220	100	50
250'-260'	2500	20	220	50	30

(5/...)

Interval	Cu	Pb	Zn	Co	Ni
260'-270'	300	50	60	12	30
270'-280'	150	10	20	8	15
280'-290'	80	30	20	8	12
290'-300'	200	40	25	15	25
300'-310'	120	15	220	8	20
310'-320'	80	20	25	15	20
320'-330'	70	20	20	12	30
330'-340'	100	15	20	10	25
340'-350'	40	20	220	7	10
350'-360'	60	40	25	8	20
B	20	3		3	3
C	20	10	"	7	40
D	15	5	"	3	5
E	30	6	"	5	15
F	1000	15	"	100	50
G	150	8	"	30	40
Diamond Drill Hole No.2.					
329'-330'	30	20	20	8	8
330'-331'	40	15	"	15	20
331'-322'	40	8	"	7	8
332'-333'	40	10	"	6	8
333'-334'	20	12	"	8	10
334'-335'	50	20	"	8	12
335'-336'	100	20	"	20	15
336'-337'	10	7	"	7	15
337'-338'	20	7	"	7	15
338'-339'	20	7	"	10	15
339'-340'	25	7	"	12	15
340'-341'	20	10	"	12	12
341'-342'	40	8	"	15	15
342'-343'	120	12	"	15	15
343'-344'	100	8	"	15	15
344'-345'	20	10	"	20	15
345'-346'	20	8	"	8	20
346'-347'	15	8	"	10	15
347'-348'	12	7	"	8	10
348'-349'	60	12	"	20	20
349'-350'	60	12	"	40	15
350'-351'	200	10	"	30	15
351'-352'	40	10	"	20	15
352'-353'	80	12	"	30	20
353'-354'	12	5	"	8	15
354'-355'	15	15	"	20	20
355'-356'	15	20	"	50	25
357'-358'	60	15	"	40	20
358'-359'	80	10	"	20	15

(6/...)

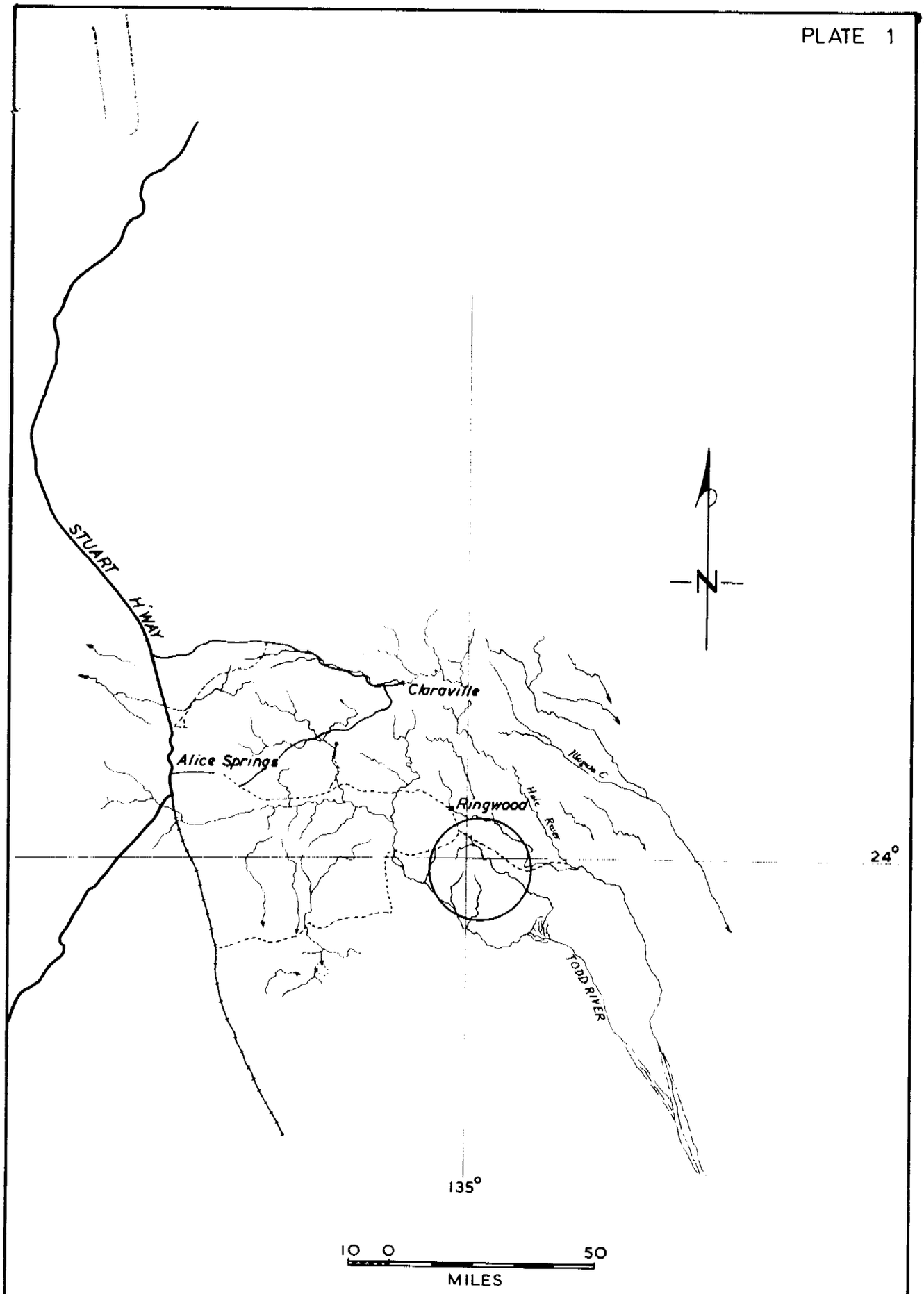
Interval	Cu	Pb	Zn	Co	Ni
359'-360'	80	8	20	20	12
360'-361	60	7	"	25	25
361'-362'	70	15	"	15	10
362'-364'	30	10	"	15	15
364'-365'6"	80	12	"	10	6
365'6"-366'6"	60	8	"	20	10
366'6"-367'6"	80	12	"	20	12
367'6"-368'6"	150	12	"	10	8
368'6"-369'6"	100	8	"	15	20
369'6"-370'6"	250	15	"	5	10
370'6"-371'6"	120	8	"	20	15
371'6"-372'6"	400	7	"	6	10
372'6"-373'6"	120	15	"	40	20
373'6"-374'6"	1000	20	"	6	12
374'6"-375'6"	600	6	"	6	15
375'6"-376'6"	800	8	"	8	12
376'6"-377'6"	1200	8	"	20	30
377'6"-378'6"	1200	7	"	70	40
378'6"-379'6"	70	7	"	120	15
379'6"-380'3"	20	3	"	7	6
380'3"-381'	25	5	"	11	6
381'-381'9"	8	6	"	1	10
381'9"-382'6"	50	[illegible]	"	2	8
				Results in P.P.M.	
174-175	70	25	20	150	5
175-176	50	20	"	200	4
176-177	60	50	"	120	3
177-178	80	50	"	200	4
178-179	120	50	"	80	4
244-246	120	20	"	80	2
246-247	20	20	"	80	2
247-248	150	50	"	250	5
248-249	20	15	"	200	8
249-250	40	8	"	200	5
250-251	15	15	"	150	4
251-252	80	80	"	200	5
252-253	60	20	"	400	6
253-254	25	50	"	400	6
254-255	70	20	"	200	4
255-256	80	50	"	120	2
256-257	120	70	20	200	5
257-258	50	20	"	120	3
258-259	50	25	"	150	3
259-260	40	20	"	200	3
260-261	150	30	"	80	2
261-262	40	70	"	200	4

(7/...)

Interval.	Cu	Pb	Zn	Ni	MO
262-263	25	25	"	300	6
263-264	25	30	"	150	4
264-265	25	30	"	200	5
265-266	120	25	20	120	4
266-267	50	10	"	300	
267-168	50	15	"	200	5
268-169	100	70	"	80	4
269-270	50	25	"	100	3
270-271	100	30	"	150	3
271-272	100	40	"	200	4
272-273	100	20	"	200	4
273-274	100	25	"	200	6
274-275	25	20	"	250	5
275-276	50	15	"	150	4
276-277	70	150	"	200	4
277-278	100	40	"	400	5
278-279	100	50	"	250	4

Results in P.P.M.

PLATE 1



LOCALITY MAP

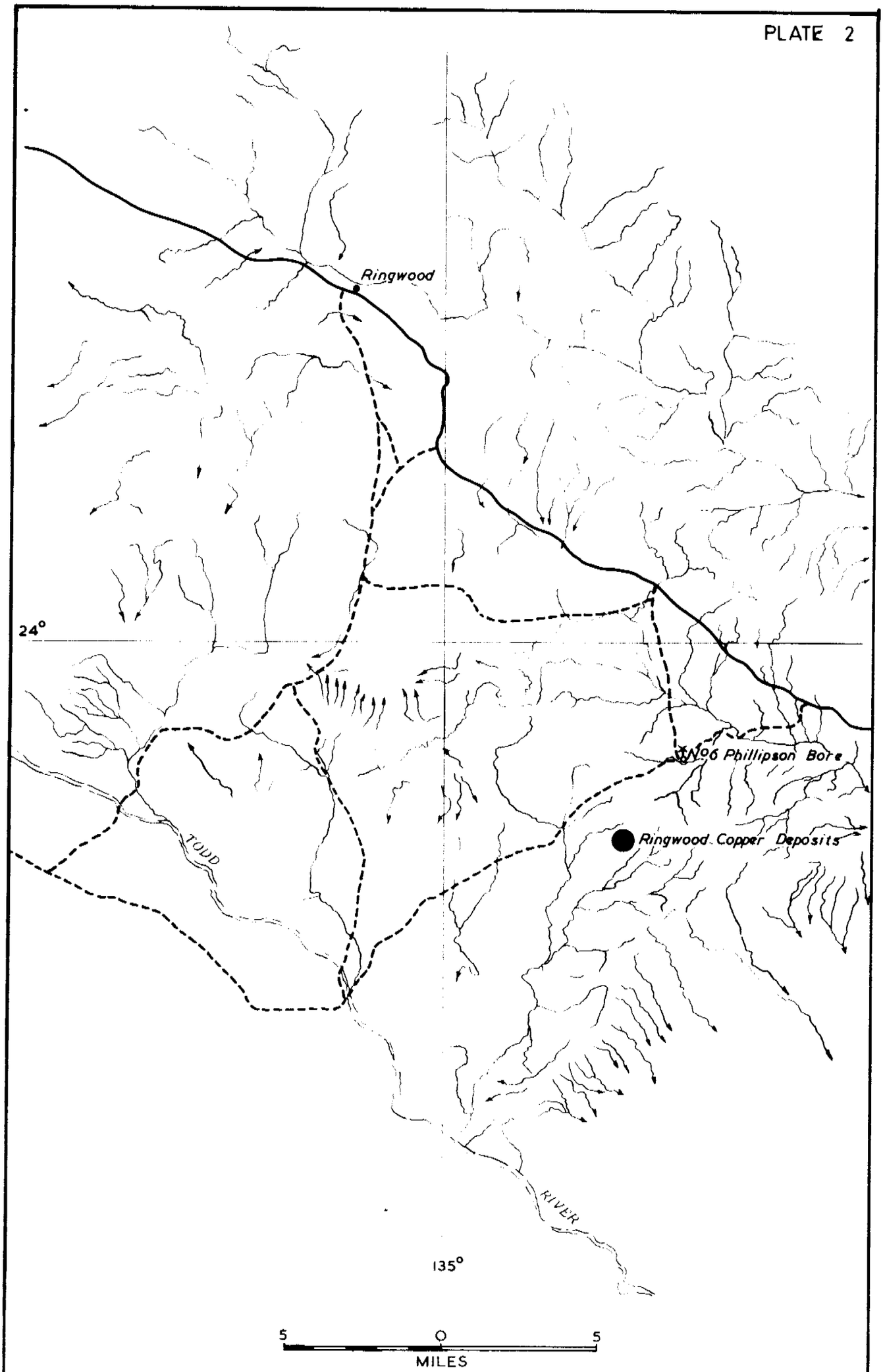
RINGWOOD COPPER PROSPECTS

NORTHERN TERRITORY

COMPILED BY RESIDENT GEOLOGICAL SECTION.
DRAWN BY MINES BRANCH DRAUGHTING OFFICE DARWIN JAN' 1967

G67/6E

PLATE 2



RINGWOOD COPPER PROSPECTS

NORTHERN TERRITORY

COMPILED BY RESIDENT GEOLOGICAL SECTION
DRAWN BY MINES BRANCH DRAUGHTING OFFICE DARWIN JAN' 1967

G67/7E

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

GEOLOGICAL LOG OF DRILL HOLE

PROJECT: RINGWOOD
HOLE No: 1
LOCATION
CO-ORDINATES: 298,600E 1,999,900N
REMARKS
R.L. GROUND
ANGLE FROM HORIZONTAL: 45°
DIRECTION: 325°

DESCRIPTION OF CORE	R.L. / CASING	DEPTH / SIZE OF CORE	LOG	LIFT & CORE RECOVERY %	SAMPLES	REMARKS	ASSAYS
Grey sandy limestone & dolomite		NX		11/37			
				11/46			
Silicified sandstone + siltstone, with some chert				14/58			
				27/64			
		10'		12/33			
Yellow-grey siltstone + mudstone, minor sandstone		BX		37/77			
Sandstone becomes dominant.				36/100			
Badly broken grey micaceous siltstone		20'		48/56			
Green + grey arkosic sandstone with thin green siltstone interbeds. Buff + grey-green tuffaceous siltstone							
Core severely broken		30'		18/23			
Core severely broken yellow + grey sst some grey siltstone				45/75			
Grey + red mudstone - little sandstone		40'		69/96			
Arkose + siltstone				42/100			
Coarse grained silicified Arkose - minor siltstone		50'		54/100			
				30/100			
				36/100			
		60'		84/100			
Partly silicified.		70'		66/61			
Core severely broken		80'		32/38			
				60/100			
Becomes fine grained partly silicified arkose		90'		48/100			
				59/90			
Core broken - Coarse gr. arkose with siltstone		100'		85/89			

DRILL NO: 6
TYPE: EDECO
DRILLER: S. BERGER
COMMENCED: 30-11-65
COMPLETED: 7-1-66

EXPLANATION
CASING IN HOLE DURING DRILLING

REFERENCES

HEAD OFFICE
LOGGED BY: L.P. YOULES
DRAWN BY: L.P. YOULES
CHECKED BY:
SHEET 1 OF 4
DRAWING NO.

GD130

EJ

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

GEOLOGICAL LOG OF DRILL HOLE

PROJECT RINGWOOD
HOLE No 1
LOCATION
CO-ORDINATES 298,600E 1,999,900N
REMARKS
R.L. GROUND
ANGLE FROM HORIZONTAL 45°
DIRECTION 325

DESCRIPTION OF CORE	R.L. CASING	DEPTH SIZE OF CORE	LOG	% CORE RECOVERY	SAMPLES	REMARKS	ASSAYS
Coarse grained Arkose minor siltstone		BX		65/72			
		110'		73/61			
		120'		101/84			
Thinly interbedded mudstone, siltstone + sandstone.							
Severely broken + weathered coarse grained arkose		130'		26/22			
		140'		33/96			
Becomes medium to fine grained				31/37			
		150'		12/22			
		AX		7/11			155'-170' Selected sections of dominantly siltstone assayed 5.96% K_2O
Some grey-green siltstone + Arkose.		160'		7/6			
		170'		6/10			
Medium grained Arkose				33/39			
Coarse grained Arkose		180'		67/66			
		190'		49/41			
		200'					

DRILL NO 6
TYPE EDECO
DRILLER S. BERGER
COMMENCED 30-11-65
COMPLETED 7-1-66

EXPLANATION
CASING IN HOLE DURING DRILLING

REFERENCES

HEAD OFFICE
LOGGED BY L.P. YOUNGS
DRAWN BY IPY
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SHEET 2 OF 4
DRAWING NO

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BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

GEOLOGICAL LOG OF DRILL HOLE

PROJECT RINGWOOD

HOLE No 1

LOCATION

REMARKS

CO-ORDINATES McLean Grid 298,600E, 1,999,900N R.L. GROUND

ANGLE FROM HORIZONTAL 45° DIRECTION 325°

DESCRIPTION OF CORE	R.L. CASING	DEPTH / SIZE OF CORE	LOG	CORE & CORE RECOVERY %	SAMPLES	REMARKS Sludge Samples in p.p.m. Cu	Pb	Zn	Co	Ni	ASSAYS
		AX									
Coarse grained Arkose				10/15							
Core severely broken				4/5							
		210'									
Dark grey Sandstone				4/27							
Grey-green Sandstone Traces Sulphide - as matrix in sandstone				6/8		150	30	40	30	40	
		220'									
Thin interbeds of Grey-green Sandstone + Siltstone dolomitic in part Occasional thin arkosic intervals				9/7		120	25	30	25	40	220'-240' 'Grab' siltstone 5.30% K_2O
		230'		34/29							
Traces sulphide in Sandstone intervals Occassionally concentrated along bedding planes		240'		21/17		200	25	20	15	50	
Traces Sulphide in Sandstone and dissem. in siltstone						80	20	<20	100	50	
		250'									
Trace sulphide in Sandstone, disseminated in siltstone.				18/25							250'-256 'Grab' 5.88% K_2O
Intraformational Breccia of grey-green siltstone + fine sandstone in matrix of coarse sandstone				36/80		2500	20	<20	50	30	256-259 'Grab' 3.58% K_2O
Interbedded grey-green + brown siltstone with red + green chert pebbles		260'		35/83							260'-360' 'Grab' 3.81% K_2O
Mainly brown calc. siltstone - some grey + cream siltstone. Short sporadic veins of calcite, hematite + pyrite.				72/100		300	50	60	12	30	
		270'									
Coarse red-brown Sandstone				114/100							
Mainly brown calc. siltstone - some grey siltstone + occass. sandstone intervals.						150	10	20	8	15	
		280'		114/95							
Sporadic blebs + veins of hematite and pyrite.						80	30	20	8	12	
		290'		44/73							
				96/100		200	40	25	15	25	
		300'									

DRILL No. 6

TYPE BDECO

DRILLER S. BERGER.

COMMENCED 30-11-65

COMPLETED 7-1-66

HEAD OFFICE

LOGGED BY J.P. YOULES.

DRAWN BY J.P.Y.

CHECKED BY

SHEET 3 OF 4

DRAWING NO.

GD130

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

GEOLOGICAL LOG OF DRILL HOLE

PROJECT RINGWOOD
HOLE No. 1
LOCATION

REMARKS
CO-ORDINATES Military Grid 298,600E, 1,999,900N R L GROUND
ANGLE FROM HORIZONTAL 45° DIRECTION 325°

DESCRIPTION OF CORE	R L / CASING	DEPTH / SIZE OF CORE	LOG	LIFT & CORE RECOVERY %	SAMPLES	REMARKS Sludge Samples in p.p.m. Cu	Pb	Zn	Co	Ni	ASSAYS
Mainly brown calcareous siltstone – some grey siltstone + sandstone intervals. Sporadic blebs + veins of hematite + pyrite.		AX		18"/19		120	15	<20	8	20	
		310'		33/92							
				34/81		80	20	25	15	20	
		320'		89/93							
				26/39		70	20	20	12	30	
		330'		39/34							
						100	15	20	10	25	
		340'		59/89							
						40	20	<20	7	10	
Core severely broken				36/46							
		350'									
				120/100		60	40	25	8	20	
		360'									

DRILL NO. 6
TYPE EDECO
DRILLER S. BERGER
COMMENCED 30-11-66
COMPLETED 7-1-66

EXPLANATION
CASING IN HOLE DURING DRILLING

REFERENCES

HEAD OFFICE
LOGGED BY I.P. YOUGES
DRAWN BY I.P.Y.
CHECKED BY
SHEET 4 OF 4
DRAWING NO.

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BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS

GEOLOGICAL LOG OF DRILL HOLE

PROJECT RINGWOOD

HOLE No 2

COORDINATES MILITARY GRID : 299,400E; 2,001,300 N

REMARKS

R.L. GROUND

LOCATION 1 Mile N.E. of Hole No 1

ANGLE FROM HORIZONTAL 70°

DIRECTION 325°

DESCRIPTION OF CORE	R.L. CASING	DEPTH SIZE OF CORE	LOG	CORE RECOVERY %	SAMPLES	REMARKS	ASSAYS
Bedding at 40°-45° to core throughout.		BX		6			
Sandy MUDSTONE becoming coarser				18			
Conglomeratic silty SANDSTONE				19			
with pieces of volcanics + sediments		10'		22			
				10			
SANDSTONE				14			
				20			
				18/100			
Conglomeratic SANDSTONE		20'		34			
with shale bands							
Fine SANDSTONE							
				63/100			
Shale							
Sandstone with conglomerate + mudstone							
Conglomerate + mudstone		30'		35			
Fine grained Sandstone				30			
				20			
				31			
Interbedded Fine Sandstone		40'					
+ Conglomerate				20			
		50'					
Pale brown Sandstone				54			
Pale green Sandstone							
Conglomerate interbedded				44			
with Fine Sandstone		60'					
Grey-green Sandstone + conglomerate				25			
sandy Conglomerate - with		AXT		52			
sub-rounded + euhedral quartz							
grains (? tuffaceous).		70'		52			
Grey Siltstone - minor green mudstone				38			
Tuffaceous Siltstone - grey-green							
+ yellow-grey with angular							
Felspars crystals (up to 4mm long x 2mm)		80'		69/100			
				57			
		90'		18/100			
				15			
Grey-green Arkose + felspathic sandstone.				51			
				51/100			
Offwhite silicified felsp. sandstone							

DRILL NO 6

TYPE EDECO

DRILLER SBERGER

COMMENCED 22-1-66

COMPLETED 30-4-66

EXPLANATION

CASING IN HOLE DURING DRILLING

REFERENCES

HEAD OFFICE

LOGGED BY R. YOUNGS

DRAWN BY PY

CHECKED BY

SHEET 1 OF 4

DRAWING NO

GD130

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BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

GEOLOGICAL LOG OF DRILL HOLE

PROJECT RINGWOOD

HOLE No 2

COORDINATES

REMARKS

R.L. GROUND

LOCATION 1 Mile N.E. of Hole No 1

ANGLE FROM HORIZONTAL 70°

DIRECTION

DESCRIPTION OF CORE	R.L. / CASING	DEPTH / SIZE OF CORE	LOG	% CORE RECOVERY	SAMPLES	REMARKS	ASSAYS
Off-white silicified felsp. sandstone				26			
				45			
Interbedded with conglomerate		110'		20			
				32			
Thinly bedded grey-green siltstone & yellow-grey siltstone + minor arkose				63/100			
Yellowish arkose - silicified, coarse grained to conglomeratic - rare, v. thin grey-green shale bands		120'		57/100			
				65/			
128'8"-10" Band of grey-green shale							
		130'		60/100			
				57/100			
		140'		22			
				48			
				41		Wedge set at 145' after twist off at 313' Coring recommenced 145'4"	
		150'		54/100			
Coarse grained silicified Arkose				43			
		160'		30/100		Acid Survey - 66° (Corr) in deflected hole	
				38/100			
		BX		69/100			
Fine & coarse grained arkose, silicified becoming grey-green in colour		170'		48			
Grades to thinly bedded grey-green Felspathic siltstone + shale - silicified Shallow water deposition Occass v. thin beds black graphitic shale				27/100			
				107			
Some dissem. pyrite. 2" fault breccia & gouge Medium to coarse grained, silicified Arkose		180'					
				54			
		190'					
Grey silic. felsp. siltstone - trace pyrite v. thin beds graphitic shales				49			
White silic. quartz conglomerate							
Much pink felspar		AXT		33			
				12			

DRILL NO 6

TYPE ADECO

DRILLER S. BERGER

COMMENCED

COMPLETED

EXPLANATION

CASING IN HOLE DURING DRILLING

REFERENCES

HEAD OFFICE

LOGGED BY J.P. YOULLES

DRAWN BY LPY

CHECKED BY

SHEET 2 OF 4

DRAWING NO

GD130

EJ

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

GEOLOGICAL LOG OF DRILL HOLE

PROJECT RINGWOOD

HOLE No 2

LOCATION 1 Mile N.E. Hole N° 1

REMARKS

R.L. GROUND

ANGLE FROM HORIZONTAL 70°

DIRECTION

DESCRIPTION OF CORE	R.L. CASING	DEPTH	SIZE OF CORE	% RECOVERY	SAMPLES	REMARKS	ASSAYS
			AXT	55			
Conglomerate interbedded with red mudstone — occass. grey siltstone interbeds. Pyrite on joints & fractures				22			
				51			
Pink, fine grained felsp. silic. sandstone. Thinly bedded green mudstone, & arkose gradation to red mudstone		210'		69/100			
Arkose, minor conglomerate, thin red mudstone intervals				54/100			
Thinly bedded green siltstone & white fine grained Arkose		220'		60/100			
Arkose				54/100			
Arkose with thin interbeds red-brown mudstone		230		39			
Arkose, med to coarse grained, grey				57/100			
" becomes greenish due to high mafic content.				50			
		240		53			
Interbeds green & yellow felsp. siltstone (? tuff.) & fine to med. grained arkose							
Grey spotted felspathic siltstone, with thin beds black graphitic pyritic shales. Trace pyr in siltstone				42			
3" band q.fg. conglom at 251'		250'		33			
also present here dark green sandy mudstone interbedded. beds 1" - ½" thick - becoming dolomitic				32			
				26			
		260'		48			
			BX	4/100			
Coarse grained greenish arkose				45/100			
Black pyritic mudstone - some grey felsp. siltstone		270'		38			
Grey felspathic, pyritic in part, siltstone & sandstone				60/100			
Some thin black pyritic shales becoming more common towards 278'							
Silicified medium to coarse grained arkose		280'		66/100			
				42/100			
				44/100			
		290'					
				40/100			
				24/100			
		300'					

NO. 6

E 2 6 C

CASING IN HOLE DURING DRILLING

EXPLANATION

DRILLER J. BENGER

COMMENCED

COMPLETED

HEAD OFFICE

LOGGED BY I.P. YOUNGS.

DRAWN BY I.P.Y.

CHECKED BY

SHEET 3 OF 4

DRAWING NO.

EJ

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

GEOLOGICAL LOG OF DRILL HOLE

PROJECT RINGWOOD
HOLE No 2
LOCATION 1 Mile NG N°1.
CO-ORDINATES
REMARKS
R L GROUND
ANGLE FROM HORIZONTAL 70°
DIRECTION

DESCRIPTION OF CORE	R L CASING	DEPTH / SIZE OF CORE	LOG	LIFT & CORE RECOVERY %	SAMPLES	REMARKS	ASSAYS
Silicified medium to coarse grained arkose.				60/100			
				60/100		Trust off at 313' Hole wedged at 145'4" + re-drilled.	
		310'		48/100			
		AXT					
				25/60			
Interbedded arkose + siltstone – core badly broken, much iron oxide		320'		20/41		Probable Fault	
Grey, medium grained silicified arkose				58/97			
Dark grey pyritic graphitic shales, grey pyritic siltstone + felspathic sandstone		330'		47/92			
From 333' onwards, shale as very thin (<1mm) beds. Also v. thin graphitic pyritic streaks + blebs in siltstone + sandstone. Pyrite is dissem. + in crosscutting veinlets faulted by slump movements.				57/100			
335–339 Mainly grey-green pyritic siltstone with black graphitic streaks. From 339' Grey-green pyritic siltstone + grey felsp. pyrit. dolomitic sandstone traces chalcopyrite – fine dissem. From 341'8" Interbedded grey pyrit. silts. + green pyrit. silts. + grey sandy dolomite – allwith streaks + blebs + V. thin beds of graphitic shale		340'		60/100			
				59/98			
				49/95			
T. traces chalcopyrite ~~along~~ in dolomite along bedding planes at 349'5" Pyrite is finely dissem, in bedding planes + in small (<2mm) blebs + veinlets. 351'10"–354'4" Sandy dolomite with thin black graphitic pyrit. shales. V. badly broken.		350'		57/100			
Mainly sandy dolomite Grey + green pyritic siltstone + grey sandy dolomite + blebs graphitic shale. Trace fine grained dissem. chalcopyrite.				3/14			
				41/79			
		360'				Acid Survey – Dip 64° (Corr.)	
V. badly broken – fault gouge				23/68			
				3/19			
				5/60			
Dolomitic felspathic pyritic sandstone with grey + green pyritic siltstone and v. thin graphitic shale beds. Trace chalcopyrite along bedding planes.				31/97			
		370'		55/92			
V. thin laminations of green, grey + black pyritic shales and dolomitic felspathic pyritic sandstone – traces chalcopyrite From 373 grey green sandy siltstone with pyrite + chalcopyrite Pyrite is coarsely crystalline cubes.				58/97			
Thin interbeds silty coarse sandstone – grains are rounded red + green chert. Trace pyrite.		380'		53/88			
6" red + green chert pebbles in green siltstone grades to Chert pebble conglomerate with light brown dolomitic siltstone				57/100			
		390'		56/93			
Red brown dolomitic siltstone							

DRILL NO 6	EXPLANATION	HEAD OFFICE
TYPE EDECO	CASING IN HOLE DURING DRILLING	LOGGED BY L. Fowler
DRILLER S. BERGER	REFERENCES	DRAWN BY L.A.Y.
COMMENCED		CHECKED BY
COMPLETED		SHEET 4 OF 4
		DRAWING NO

GD130