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## EL 154

#### PERNATTY LAGOON

# PROGRESS AND FINAL REPORTS TO LICENCE SURRENDER FOR THE PERIOD 5/9/1974 TO 7/7/1975

Submitted by Otter Exploration NL 1975

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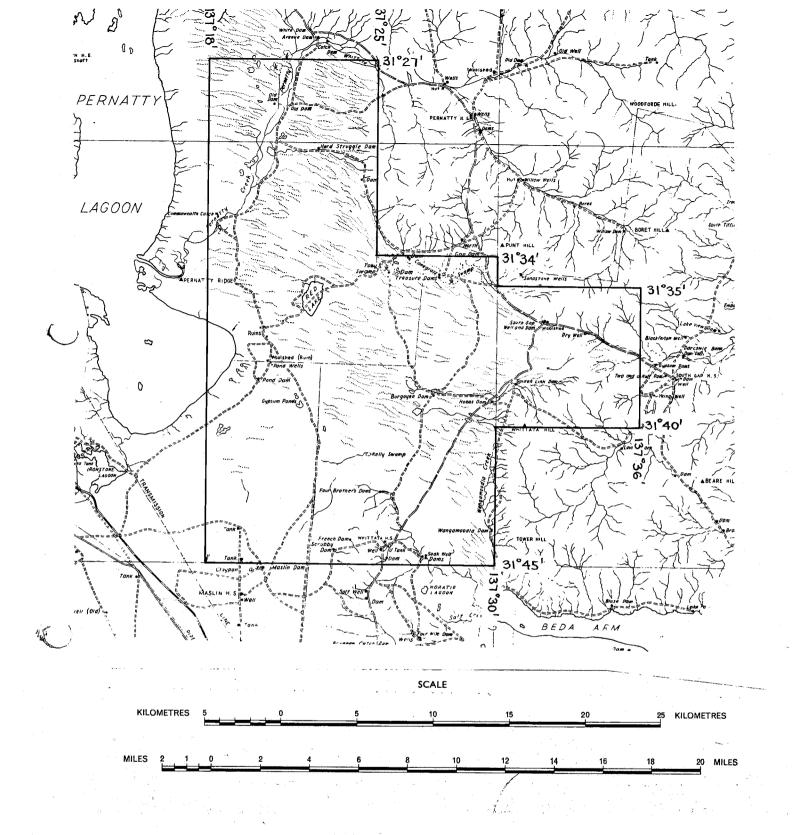
Minerals and Energy Resources

7th Floor

101 Grenfell Street, Adelaide 5000

Telephone: (08) 8463 3000 Facsimile: (08) 8204 1880





OTTER EXPLORATION N.L.

DOCKET 570 174 AREA 616 km²

1:250000 PLANS . TORRENS

LOCALITY PERNATTY LAGOON AREA - APPROX. 60 km S.E. OF WOOMERA
E.L. No. 154

EXPIRY DATE 3-9-75

TENEMENT:

EXPLORATION LICENCE 154

TENEMENT HOLDER:

OTTER EXPLORATION N.L.

#### REPORTS:

KENNEDY, H.D. 1975

RE: Exploration Licence 154

Pernatty. Quarterly report to 5th December 1974

(No Plans) (pgs. 3-4)

KENNEDY, H.D. 1975

RE: Exploration Licence 154

Pernatty Quarterly report to 5th March 1975

(No Plans) (pgs 5-6)

KENNEDY, H.D. 1975

Exploration Licence 154. Pernatty.

Quarterly report to 5th June 1975. (pgs. 7-9)

Plans:

Drill Hole Locations. (pg. 10)

REPORT:

KENNEDY, H.D. 1975

Exploration Licence 154. Pernatty, South
Australia. Final report July 1975 (pgs. 11-71)

Plan:

Figure 1 Pernatty area, gravity plan. (pg. 15)
Plate 1 Compilation Plan. (2484-1)



HDK/PJ

7 February 1975

The Director of Mines, Department of Mines, Box 38, Rundle St. P.O., ADELAIDE S.A.

TELEPHONE 28-2062 CABLES OTTEREX TELEX 22612

Dear Sir,

RE: EXPLORATION LICENCE NO. 154, PERNATTY QUARTERLY REPORT TO 5 DECEMBER 1974

#### FIELD OPERATIONS

No field exploration work was accomplished during the subject quarter. It is expected that field work will commence in early 1975.

#### RESEARCH В.

The exploration model which is assumed for the Pernatty-Mt. Gunson area is that of the Zambian Copperbelt (Garlick, 1964). It is expected that copper mineralization is associated with facies changes within the Proterozoic sediments of the area, and that copper may particularly be concentrated within or near a carbonate rich facies. This implies that a "Sabhka" process may have been operative (Renfro, 1974).

Implicit in the exploration model is control by basement topography of sedimentary deposition, i.e. basement topographic control of facies distribution. Accordingly, to facilitate planning of surface and subsurface exploration the following materials were secured:

ERTS Satellite imagery for the Pernatty area.

All available geological maps.

Published BMR aeromagnetic maps at scales of 1:250,000 and 1:63,360.

L. . Ur MINES SEEJRIA

MEMBER OF THE INTERNATIONAL MOGUL GROUP OF COMPANIES

It was learned from study of the 1:250,000 scale aeromagnetics that the Pernatty-Mt. Gunson district overlies basement having generally "busier" magnetic characteristics than those of surrounding areas. We infer, of course, that this results from compositional differences in the basement, however we believe further that the "busier" area may reflect a basement which is more resistant to erosion -- that basement may be generally shallower and of more rugged "terrain" than that of surrounding areas.

A number of discrete aeromagnetic anomalies, both within the Mt. Gunson area and within EL No. 154, were specified for geophysical interpretation at scale of 1:63,360. The geophysical consultant constructed magnetic profiles for these anomalies and used the profiles to calculate depth to the basement sources of the anomalies.

Data to date indicate that basement is indeed shallower within much of the study area (±500 feet) and deeper in surrounding areas (±1500 feet). Further, the Mt. Gunson deposits may overlie the flanks of specific basement highs.

The southwestern 60% of EL 154 appears to have basement characteristics favourably similar to those of the Mt. Gunson mine area. Field efforts will be directed initially to this portion of the Licence.

### EXPENDITURES - To 5 December, 1974:

Maps, photographs, and supplies Staff research (one man month)	\$ 70.00 2,100.00
Geophysical consultation (six days x \$150) Project overheads at 15%	900.00
Total	\$3,530.00

Respectfully Submitted, OTTER EXPLORATION N.L.

(H.D. Kennedy)
Exploration Manager

#### References:

Garlick, W.G., 1964, Association of Mineralization and Algal Reef Structures on Northern Rhodesian Copperbelt: Econ. Geol., V.59, p.416-427.

Renfro, A.R., 1974, Genesis of Evaporite-Associated Stratiform Metalliferous Deposits -- A Sabhka Process: Econ. Geol. V.69, p.33-45.

**4**)

BANKERS & TRADERS BUILDING, 115 PITT STREET, SYDNEY, N.S.W. 2000, AUSTRALIA TELEPHONE 232-2066 CABLES OTTEREX TELEX 22612

OTTER EXPLORATION N. L.

HDK/PJ

4 April 1975

M

The Director of Mines,
Department of Mines,
Box 38, Rundle Street P.O.,
ADELAIDE S.A. 5000

Dear Sir,

RE: EXPLORATION LICENCE NO. 154, PERNATTY QUARTERLY REPORT TO 5 MARCH 1975



#### A. FIELD OPERATIONS

A senior geologist visited the prospect to determine possible logistical and access problems and to enable planning of appropriate geophysical and drilling approaches.

#### B. RESEARCH

A senior geologist carried out extensive research in Adelaide to determine and secure results of previous exploration in the area and to refine our conception as regards metallogeny.

It is apparent that the significant copper occurrences in the Pernatty-Mt. Gunson area are of remobilized type and that they are spatially related to the unconformity at the top of the Pandurra formation and to absence or near absence of the Woocalla dolomite facies. Furthermore, preservation of the Whyalla sandstone unit in the sedimentary sequence is apparently prerequisite to deposition and preservation of copper sulphides in appreciable amounts.

Results of exploration work completed by a previous investigator (Stuarts Bluff Minerals Ltd.), when combined with newly available published information (Johns, 1974) reinforces our belief that the southwestern 60% of EL No.154 is eminently prospective for deposits of Mt. Gunson type.

These data confirm the presence of Whyalla formation throughout the said area and imply that the Woocalla dolomitic shale is absent beneath the Whyalla in large portions of the area.

#### C. EXPENDITURES

#### December 5, 1974 to March 5, 1975

Staff - three geological man weeks Geophysical consultation (two days x \$150) Vehicle costs (petrol, amortisation,	\$1,550.00 300.00
maintenance)	330.00
Travel and accommodation Maps, photographs, publications, supplies	1,040.00
Overheads at 15%	490.00
Total for period	\$3,740.00
Previously reported	3,530.00
Total Expenditure to date	\$7,270.00

Respectfully Submitted, OTTER EXPLORATION N.L.

(H.D. Kennedy)

Exploration Manager

#### Reference:

Johns, R.K., 1974; Base Metal Mineralization in the Pernatty Lagoon Region; Geological Survey of South Australia Report of Investigations 42 BANKERS & TRADERS BUILDING, 115 PITT STREET, SYDNEY, N.S.W. 2000, AUSTRALIA

TELEPHONE 232-2066 CABLES OTTEREX TELEX 22612



HDK/PJ

7 July 1975

The Director of Mines
Department of Mines
Box 38, Rundle Street P.O.
ADELAIDE S.A. 5000

Dear Sir,

RE: EXPLORATION LICENCE NO. 154, PERNATTY

QUARTERLY REPORT TO 5 JUNE 1975

#### A. FIELD OPERATIONS

Premised upon geological inferences described in the previous quarterly reports a percussion drilling program was planned for the western and southern portions of EL 154. Initial relatively widely spaced drilling was intended to verify in preliminary manner the inferred presence, at reasonable depth, of the Whyalla-Pandurra interface.

Drilling contractor Northbridge Pty. Ltd. provided a T64 Schramm machine equipped with 66 metres of rods. Drilling, under the direction of a geologist commenced 16 May 1975. Twelve vertical rotary/percussion holes were completed in this program which ended 26 May 1975. Drilling depths ranged from 30 to 66 metres and an aggregate of 570 metres was drilled.

#### B. TECHNICAL DISCUSSION

The relevant portion of the Upper Proterozoic stratigraphic column in the Mt. Gunson area is as follows:

TENT HILL FORMATION

(CORRABERRA SANDSTONE MEMBER (TREGOLANA SHALE MEMBER (WHYALLA SANDSTONE MEMBER

WOOCALLA DOLOMITE (locally absent)

PANDURRA FORMATION

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From results of a seismic survey conducted earlier on behalf of Stuarts Bluff Minerals Ltd. it can be inferred that favourable geological circumstances similar to those obtaining at the Mt. Gunson mine also obtain within the northwestern and southwestern portions of EL 154. This mineralized setting is interpreted to involve the interface between the Whyalla sandstone and the underlying Pandurra formation and to require the absence or near-absence of the usually-intermediate Woocalla bolomite.

Our interpretations of published BMR gravity and aeromagnetic data suggested that a topographically positive basement feature should exist beneath much of EL 154 and, thus, that the Whyalla-Pandurra interface could exist within open pit depth (say 35 metres) of surface. Shallow depth to this horizon is a prerequisite because the Mt. Gunson deposit exploration model will not permit of development utilising underground mining methods.

Locations of the twelve completed rotary/percussion drill holes are indicated on the attached plan and results are summarised as follows:-

HOLE NO.	TOTAL DEPTH	BOTTOM OF HOLE ROCK TYPE
OEP-1	48 metres	Whyalla Sandstone
OEP-2	48 "	11 11
OEP-3	48 "	ti ti
OEP-4	42 "	n ù
OEP-5	48 "	Tregolana Shale
OEP-6	48 "	ii ii
OEP-7	42 "	11 11
OEP-8	48 "	я п
OEP-9	30 "	.11
OEP-10	36 "	11 .11
OEP-11	66 "	Whyalla Sandstone
OEP-12	66 "	_ u u

In the northwestern portion of EL 154 none of the five holes drilled succeeded in penetrating the Tregolana Shale member which overlies the Whyalla sandstone; obviously the lower contact of the Whyalla sandstone must be at prohibitive depth.

In the southern portion of EL 154 none of the seven holes drilled succeeded in penetrating the Whyalla sandstone, and one hole bottomed in Tregolana shale. It is also evident that the favourable Whyalla-Pandurra interface is beyond open pit depth in the southern portion of the Licence.

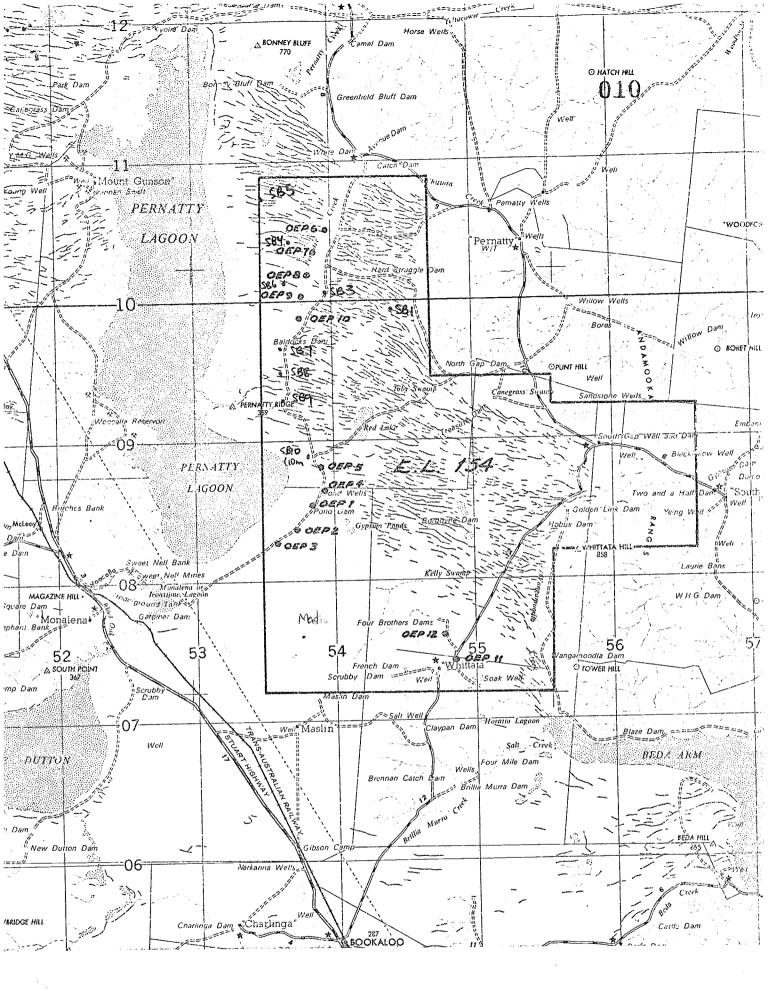
#### C. CONCLUSIONS AND RECOMMENDATIONS

It is concluded that prohibitive depth considerations alone effectively eliminate the possibility that a viable copper deposit exists within EL 154, and it is recommended that no further exploration be undertaken by Otter Exploration N.L.

D.	EXPENDITURES	009
	Drilling costs Field geologist and field labour costs Travel and accommodation Field expenses Staff geological salaries Vehicle costs Maps, photographs, publications	4,659 1,440 681 346 450 362
	and supplies Overheads at 15%	48 1,197
	Total for period Previously reported	9,183 _7,270
	TOTAL EXPENDITURE	\$16,453

Respectfully submitted OTTER EXPLORATION N.L.

(H.D. KENNEDY) Exploration Manager



OTTER EXPLORATION N.L.

DRILL HOLE LOCATIONS. E.L. No. 154
Scale 1:250,000

EXPLORATION LICENCE NO. 154
PERNATTY, SOUTH AUSTRALIA

FINAL EXPLORATION REPORT

JULY, 1975



Otter Exploration N.L.

H.D. KENNEDY (Exploration Manager

# CONTENTS

			Page	
			<u>rage</u>	
INTRODUCTION		A STATE OF THE STA		
REGIONAL GEOI	JOGY			
OPERATIONAL H	YPOTHESES		<b>, 2</b> ,	
AEROMAGNETIC	EVALUATION		2	
PREVIOUS WORK	, · · · · · · · · · · · · · · · · · · ·		<b>3</b>	
OTTER EXPLORA	ATION PROGRAM		4 · ·	
CONCLUSIONS A	AND RECOMMENDATIO	ons	5	
EXPENDITURES			6	
REFERENCES			7	
Figure 1	Gravity Plan of 1:250,000, data	Pernatty Areby BMR -	ea, Scale after page	2
PLATE I	1:100,000 scale	compilation -	of EL 154 at rear of	report
APPENDICES				
I	An Aeromagnetic Windabout, S.A.	Interpretat area by J.L	ion of Pernat . Irvine	ty-
II .	Stuarts Bluff Mi Geochemical Dri		SML 315	
III	Otter Exploration	on N.L. Perc	ussion Drill	e w

#### INTRODUCTION

Exploration Licence No. 154 was granted to Otter Exploration N.L. for a period of one year commencing 5 September 1974. Exploration progress has been described in previous reports for quarters ending 5 December 1974, and 5 March and 5 June 1975.

This Final Report summarises the technical considerations and exploration results, and includes all technical data acquired during the licence term.

The target for exploration in EL 154 was a deposit of Mt. Gunson type i.e., a thin, flag lying, tabular body of relatively high grade copper ore exploitable by open pit methods.

### REGIONAL GEOLOGY

The pertinent sedimentary section, of Upper Proterozoic (Adelaidean) age follows:

TENT HILL FORMATION

Corraberra sandstone member Tregolana Shale member Whyalla sandstone member

WOOCALLA DOLOMITE (locally absent)

PANDURRA FORMATION

The Pandurra formation consists of predominantly red coloured pebbly quartzite, grits and sandstones.

The Woocalla Dolomite comprises dolomitic shales, dolomite and laminated black shales. It rests disconformably upon the Pandurra formation and appears to occupy depressions on the Pandurra surface.

The Whyalla sandstone member of the Tent Hill formation is a strongly cross bedded unit composed of white, well rounded quartz grains. It is believed disconformable upon the Woocalla and upon Pandurra formation where the Woocalla is absent.

The Tregolana (Woomera) shale member of the Tent Hill formation comprises laminated purple, brown and green shales.

Corraberra sandstone is not pertinent to this discussion.

Structurally, it is believed (Johns, 1974) that the base metals deposits situated west of Pernatty Lagoon overlie a topographic high resulting from post-Pandurra erosion. This positive feature has been termed the "Pernatty Culmination". Although

014

post-Pandurra erosion is no doubt the immediate cause of the positive feature, it seems probable that ultimately the Pernatty Culmination is in fact largely caused by "draping" of Pandurra sedimentation over yet older basement topographic features.

In the area of the Culmination the distribution of Woocalla formation and Whyalla and Tregolana member is sporadic. The Mt. Gunson copper deposit is situated at the contact between Pandurra formation and overlying Whyalla sandstone. Thus, the Woocalla dolomite is absent at Mt. Gunson although it is present in the immediate vicinity.

#### OPERATIONAL HYPOTHESES

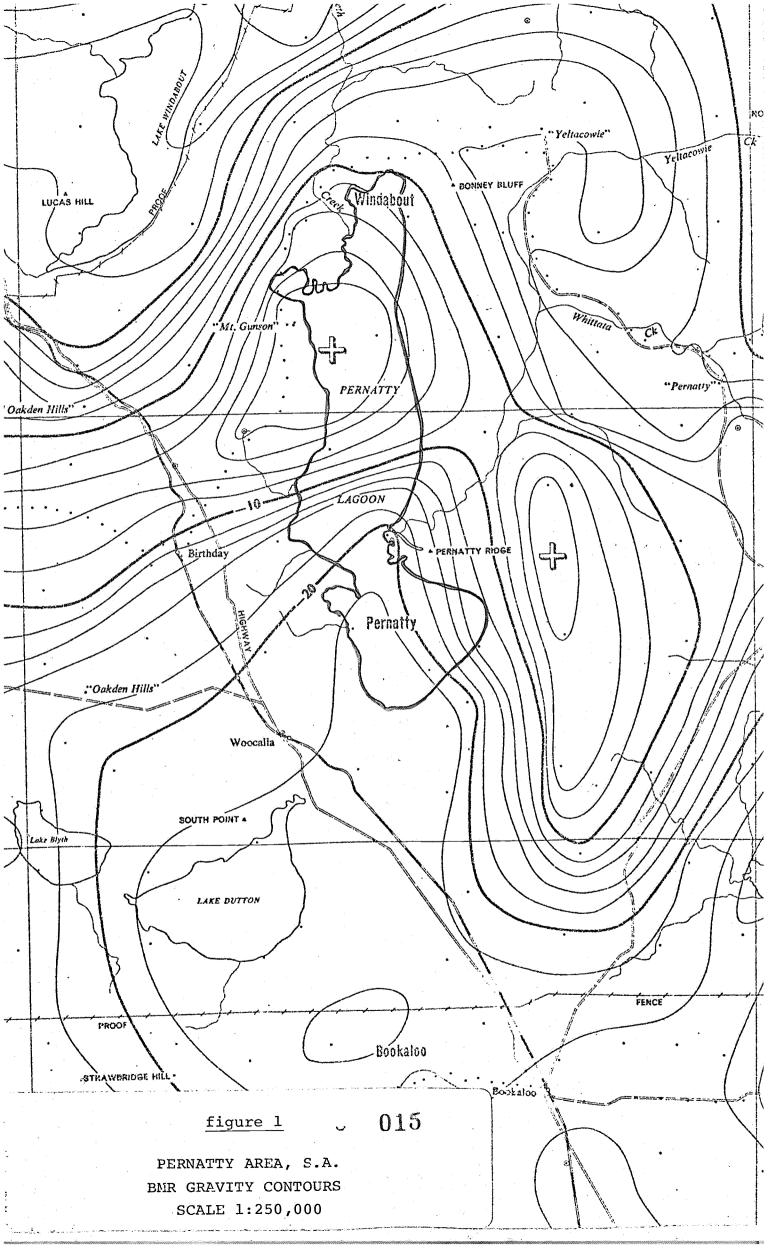
Although mineralization at Mt. Gunson is probably of remobilised type it is believed that primary mineralization is penecontemporaneous with sedimentation, and the exploration model which was assumed for the district is that of the Zambian copperbelt.

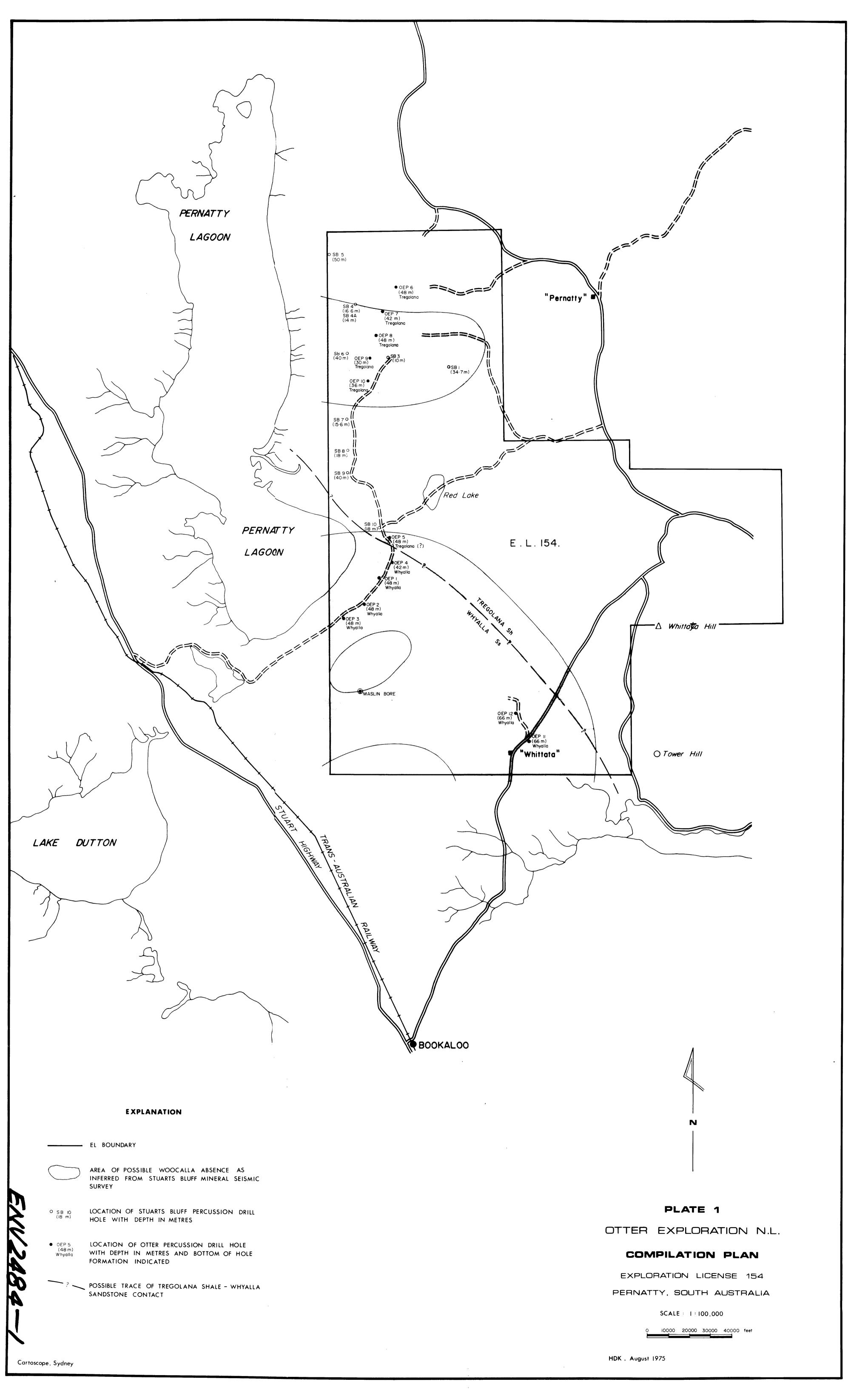
To accord with this model, primary mineralization would have a facies association within the Proterozoic sediments of the area and should particularly be concentrated within, below or near a carbonate rich facies. Garlick (1964) has described the typical copper associated facies in some detail, Whyte and Green (1971) show very well the relationships which such facies can have with buried basement topography, and Renfro (1974) has stated a satisfactory genetic hypothesis.

On the Torrens 1:250,000 scale BMR gravity map it was noted that a pronounced positive gravity anomaly which encompasses the Mt. Gunson mine area and northern Pernatty Lagoon also extends southeasterly therefrom, along the east side of Pernatty Lagoon (figure 1). As this area was not covered by a current Exploration Licence, application was made in the belief that the gravity feature may reflect topographically positive pre Pandurra basement which in turn may control overlying Proterozoic sedimentation i.e., the Pernatty Culmination may extend into this area.

#### AEROMAGNETIC EVALUATION

Coincidentally with evaluation of the gravity data the published 1:250,000 scale aeromagnetic maps for Torrens and surrounding sheets were examined. The immediate vicinity of Pernatty Lagoon was found to be a magnetically active area, surrounded by a region of generally low magnetic "relief". This characteristic suggested that compositional differences in the basement could result in appreciable





basement topographic relief, with implication that depth to source studies of published aeromagnetic data could be rewarding.

Accordingly, a limited depth to source study was commissioned with results as described in Appendix 1. In brief, this evaluation indicated that several magnetic anomalies at Mt. Gunson and elsewhere in the area of interest have relatively shallow depth sources (± 500 feet), and that depths to sources of anomalies in the surrounding region are greater (+ 1000 feet). These results encouraged further investigation.

#### PREVIOUS WORK

Review of Department of Mines records revealed that results of exploration by two previous operators are on open file.

An exploration program by Noranda, which was concentrated southwest of Pernatty Lagoon, is well documented in Departmental files and is summarised in the recently released Geological Survey of South Australia Report of Investigations No. 42.

The Noranda effort was apparently principally aimed at base metal concentrations within the Woocalla Bolomite, and nearly all of the work was concentrated south of Pernatty Lagoon, well outside the area of EL No. 154. However, the Noranda drilling demonstrated a marked increase in geochemical copper content in areas where Woocalla is very thin or essentially absent and a pronounced relative copper deficiency in thicker Woocalla sections. Additionally, the Noranda work demonstrated the pronounced variations in Woocalla thickness which can occur.

In 1969-70, under Special Mining Lease 315, Stuarts Bluff Minerals Ltd. carried out an exploration program within an area which included much of EL 154. The Stuarts Bluff program comprised a refraction seismic survey and limited follow up percussion drilling for geochemical evaluation.

The seismic results led to the inference that Woocalla Bolomite is absent in much of northern EL 154, as well as in most of the southwestern portion of the EL, despite the fact that Woocalla is present in Maslin bore in southwestern EL 154. Isopachs of the inferred Woocalla velocity set do indicate Woocalla to be present in the immediate vicinity of Maslin bore, but suggest that Woocalla may be absent in areas completely surrounding the bore.

Ten percussion holes were drilled by Stuarts Bluff. Of these holes, six were drilled to depths such that adequate tests were provided. Unfortunately there are no geological

017

logs of this drilling and attempts to secure geological information from the Mines Department and from Stuarts Bluff-associated companies met with failure. However, geochemical data (Cu-Pb-Zn) are available for all holes (Appendix II) except that data are not complete for one of the deeper holes. Several holes returned weakly anomalous zinc from limited sections and one (No. 6) encountered significantly anomalous lead, zinc and copper from a 50 feet section.

Further drilling was recommended and apparently planned by Stuarts Bluff however, for reasons unknown, such work was not carried out.

#### OTTER EXPLORATION PROGRAM

Several lines of reasoning thus led to the inference that the "Pernatty Culmination" -- a basement high which has influenced Proterozoic sedimentation at Mt. Gunson -- could extend easterly of Pernatty Lagoon and underlie overburden covered portions of EL 154. Indeed, in the absence of drill log data, it could be inferred that some of the Stuarts Bluff drilling actually intersected the appropriate Whyalla-Pandurra disconformity and that this interface contains anomalous metals content.

Otter staff decided upon an initially limited, widely spaced percussion drilling program with the following aims:

- Determine subsurface geology in the vicinity of earlier Stuarts Bluff drilling.
- Confirm and, if warranted, extend the anomalous geochemistry encountered in Stuarts Bluff drilling.
- Determine subsurface geology in those portions of southern EL 154 where seismic data imply absence of Woocalla colomite; and if possible determine whether a Woocalla-free Whyalla-Pandurra contact exists within open pit distance of surface in southern EL 154.

Drilling contractor Northbridge Pty. Ltd. provided a T64 Schramm machine equipped with 66 metres of rods. Drilling, under the direction of a geologist commenced 16 May 1975. Twelve vertical rotary/percussion holes were completed in this program which ended 26 May 1975. Drilling depths ranged from 30 to 66 metres and an aggregate of 570 metres was drilled.

Locations of the twelve completed rotary/percussion drill holes are indicated on the attached plan, and drill logs with geochemical data comprise Appendix III. Results are summarised as follows:-

HOLE NO.	TOTAL DEPTH	BOTTOM OF HOLE ROCK TYPE
OEP- 1	48 metres	Whyalla Sandstone
OEP- 2	48 "	11 11
OEP- 3	40	TE II
OEP- 4	42	
OEP- 5	48	Tregolana Shale (?) Tregolana Shale
OEP- 6 OEP- 7	48 " 42 "	ii ii
OEP- 7 OEP- 8	48 "	n n
OEP- 9	30 "	n " " " " " " " " " " " " " " " " " " "
OEP-10	36 "	n ti
OEP-11	66 "	Whyalla Sandstone
OEP-12	66 "	The state of the s

In the northwestern portion of EL 154 none of the five holes drilled succeeded in penetrating the Tregolana shale member which overlies the Whyalla sandstone; obviously the lower contact of the Whyalla sandstone must be at prohibitive depth. Those holes drilled near anomalous Stuarts Bluff hole No. 6 did not return anomalous analyses, although Otter did not carry out complete geochemical analysis in view of the unfavourable stratigraphy.

In the southern portion of EL 154 none of the seven holes drilled succeeded in penetrating the Whyalla sandstone, and one hole bottomed in Tregolana shale (?). It is evident that the favourable Whyalla-Pandurra interface is beyond open pit depth in the southern portion of the Licence. None of the samples collected from the southern drill holes returned anomalous base metal values.

#### CONCLUSIONS AND RECOMMENDATIONS

Tregolana shale very extensively underlies overburden in the northeastern 60% of EL 154, and it probably forms the bed of Red Lake, in the centre of the Licence. The Tregolana shale-Whyalla sandstone contact probably strikes northwesterly across the Licence from just east of Whitata homestead to just east of Pernatty Ridge on the east side of Pernatty Lagoon.

It is probable that interpretation placed upon the Stuarts Bluff seismic data is not a valid one, however we cannot claim to have definitely proved this because the Whyalla-Woocalla-Pandurra formations were never intersected.

It is doubtful that the "Pernatty Culmination" extends east of Pernatty Lagoon because of the extensive sections

019

of Tregolana shale and Whyalla sandstone which were intersected. (On the Culmination in the Mt. Gunson area the entire section including Whyalla and Tregolana appears to thin markedly).

It is finally concluded that prohibitive depth considerations alone effectively eliminate the possibility that a viable copper deposit exists within EL 154, and it is recommended that no further exploration be undertaken by Otter Exploration N.L.

#### EXPENDITURES

Drilling costs Geological and technical field costs Travel and accommodation Staff research Vehicle and field expenses Geophysical consultation Maps, photos, supplies	\$ 4,659 2,990 1,721 2,650 1,038 1,200 148
Sub-total	14,406
Overheads and supervision @ 15%	2,161
TOTAL	\$16,567

Respectfully Submitted OTTER EXPLORATION N.L.

H.D. KENNEDY Exploration Manager

#### REFERENCES

- Garlick, W.G. (1964) Association of Mineralization and Algal Reef Structures on Northern Rhodesian Copperbelt: Econ. Geol., V.59, p.416-427.
- Johns, R.K. (1974) Base Metal Mineralization in the Pernatty Lagoon Region, Geol. Survey of S.A. Report of Investigations 42.
- Renfro, A.R. (1974) Genesis of Evaporite-Associated Stratiform Metalliferous Deposits -- a Sabhka Process: Econ. Geol., V.69, p.33-45.
- Whyte, R.J. and Green, M.E. (1971) Geology and Paleogeography of Chibuluma West Orebody, Zambian Copperbelt: Econ. Geol., V.66, p.400-424.

APPENDIX I

AN AEROMAGNETIC INTERPRETATION

OF

PERNATTY-WINDABOUT, S.A. AREA

FOR

OTTER EXPLORATION N.L.

BY

JOHN L. IRVINE, B.Sc. Consulting Geophysicist

#### SUMMARY

A qualitative and quantitative interpretation of a portion of an aeromagnetic survey in South Australia revealed a complex basement structure that appears to be related to the known mineralization. No direct control of the mineralization by the Precambrian is suggested as the known mineralization is believed to be stratigraphically controlled from within the Cambrian sediments. From the minimum amount of quantitative results generated, no distinct basement-surface profile was determined but relative basement highs have been identified.

OF THE

#### PERNATTY-WINDABOUT, S.A. AREA

#### INTRODUCTION

At the request of Mr. D. Kennedy, Exploration Manager for Otter Exploration N.L., the author examined some aeromagnetic data published by the South Australian government in an attempt to:

- I determine the direct magnetic relationship with known mineralization
- II determine the Precambrian basement surface and identify all basement highs within a preselected area.

The aeromagnetic data was collected prior to 1965 and compiled by the South Australian government. The traverses were flown East-West at one mile spacing and a mean terrain clearance of 500 ft. Navigation was visual and aided by an uncontrolled photo-mosaic. The contour interval of the presented data was 10 gammas.

#### GEOLOGY

The geology of the area is poorly known as \*Tertiary cover predominates throughout the survey area. The composition and depth of burial of the Precambrian complex is unknown.

The younger proterozoic rocks overlying the Precambrian exhibit three distinct units; the carbonaceous reef facies, an essentially grit unit overlain by undifferentiated sediments. The mineralization at Mt. Gunson occurs in the grit at the edge of reef facies with an associated basement high.

#### METHOD OF INTERPRETATION

Both qualitative and quantitative techniques were utilised for this presentation. Quantitative methods consisted of theoretical models generated mathematical equations presented by Grant and West - "Interpretation Theory in Applied Geophysics". The generated profile was altered by varying appropriate parameters until a first-order comparison was obtained with the field data. The theoretical profiles were generated on a programmable calculator.

Qualitative methods consisted of comparing published curves and models with the data in order to determine the approximate location of faults and shears plus the approximate location of contacts.

The interpretation derived from qualitative methods is presented on the one mile sheets. Whenever possible, relative movement has been indicated. Also, relative information from the quantitative study was also presented. No attempt has been made to differentiate the various rock units from within the Precambrian complex.

#### DISCUSSION OF RESULTS

Modelling of selected anomalies proved to be difficult as most anomalies were not pure anomalies in that all anomalies suffered from unwanted interference from nearby events. Anomaly A-A<sup>1</sup> was chosen to best represent an intrusive associated with the known mineralization. The profile generated was corrected for the immediate regional gradient and an acceptable model was generated. The discrepancy on the southwest flank is due to the presence of an additional event. An intrusive similar to a dipping prism is indicated. The calculated susceptibility would suggest an acid intrusive. The dip of 70° SW is holding with the other models and a rough calculation from the qualitative results. The calculated depth of 500 ft.

subsurface (1000 ft. subsensor) agrees very well with what

geological information is known from the area.

Zone B-B<sup>1</sup> was chosen in an effort to identify the paramaters of this more basic intrusive. Theoretical results indicate the possibility of a fault within the body. Also, the parameters presented should be considered as a "calculated guess" as further development on this model is required in order that the theoretical results better fit the field results. The indicated depth is too shallow but a decrease in the theoretical thickness seriously alters the symmetry of the response as does an increase. A simple, thick dike geometry therefore cannot be utilised. The calculated susceptibility is of a much different character than the other six events and suggests a basic, rock type composition. The dip of 50° SW is fitting with the general area. The indicated depth of burial as calculated is much greater than that of the other events and as the general strike is

similar to the other events, it could be part of an intrusive complex of the area.

Zone  $C-C^1$ . A sill model best describes this response. Although the comparison is only moderately good, it provides a superior comparison than with a thick dike. Essentially, the sill is infinitely thick and would better be described as a contact. The dip of the edge is  $50^{\circ}$  - flatter than the other events investigated but compatible. Also, the susceptibility is greater than normal, but not as strong as  $B-B^1$ . If  $B-B^1$  comprises part of the Precambrian surface, then  $C-C^1$  presents a relative basement high.

Zone D-D<sup>1</sup>. The profile was chosen in an attempt to determine the parameters of the Precambrian structure which may be related to the Mt. Gunson mine. A poor comparison was obtained by utilising a thick dike model. The calculated depth of 500 ft. compares with the known geology. A dip of 60° to the north was obtained. Due to the possible presence of regional structural events in the immediate area, a "pure" profile was unobtainable. The qualitative interpretation may be more valid than the quantitative interpretation.

Zone  $E-E^1$ . This section is approximately perpendicular to  $D-D^1$  and is specifically directed to a small intrusive that appears to be directly associated with known mineralization. A simple shape such as a simple dike approximates the field results but a limited depth extent is suspected.

Zone  $F-F^1$ . This is one of the shallowest responses identified from within the area of interest. It is also one of the least magnetic. A dip of  $60^{\circ}$  to the SW agrees with the other zones from the area.

Zone G-G<sup>1</sup>. This zone presented extreme problems as no simple body provided a suitable comparison. The response to be analysed suggested a shallow response but the flanks indicate something much deeper than that suggested by the apex. A series of parallel bodies is the most likely source for this response.

Respectfully Submitted,

JOHN L. IRVINE, B.Sc. Consulting Geophysicist



GRADIENT  $\begin{array}{c}
6RADIENT \\
h = 500 \left( SUBSURFACE \right), LAGOON \\
t = 10000 \\
d = 700 \\
k = 550 \times 10^{-6}
\end{array}$ 

108 R

I'= -67.52

To' = 56,4170

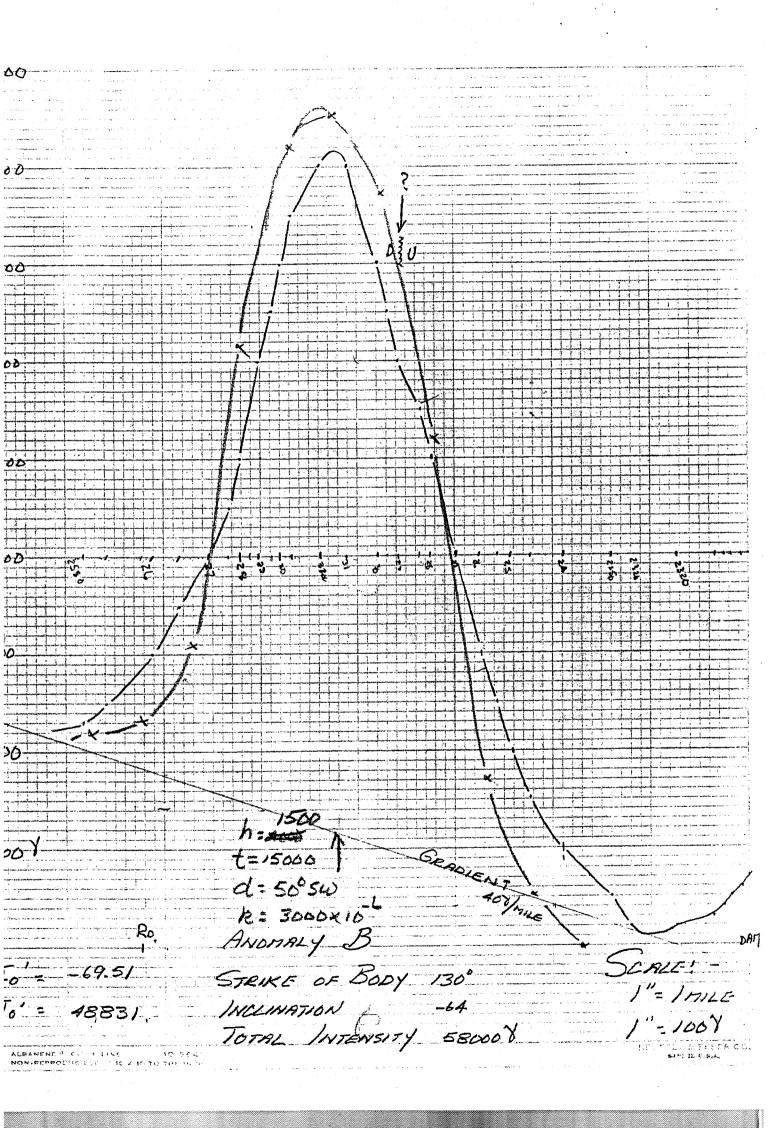
ANOMALY A
STEIRE OF BODY 1220
INCLINATION -640

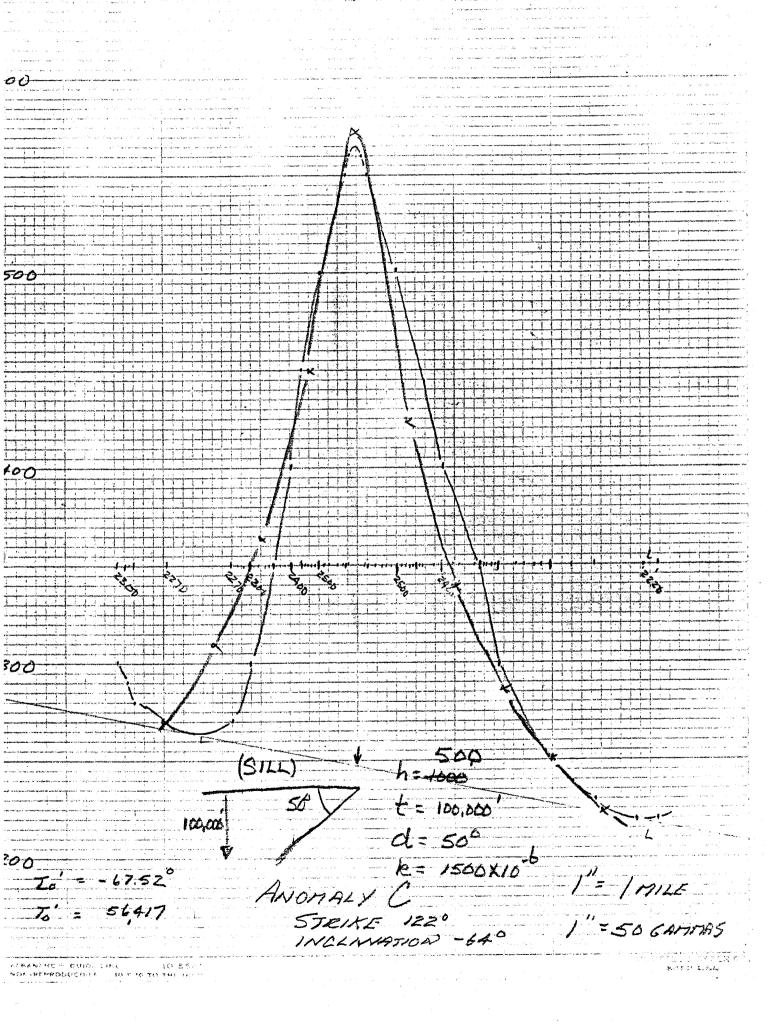
TOTAL INTENSITY 580000

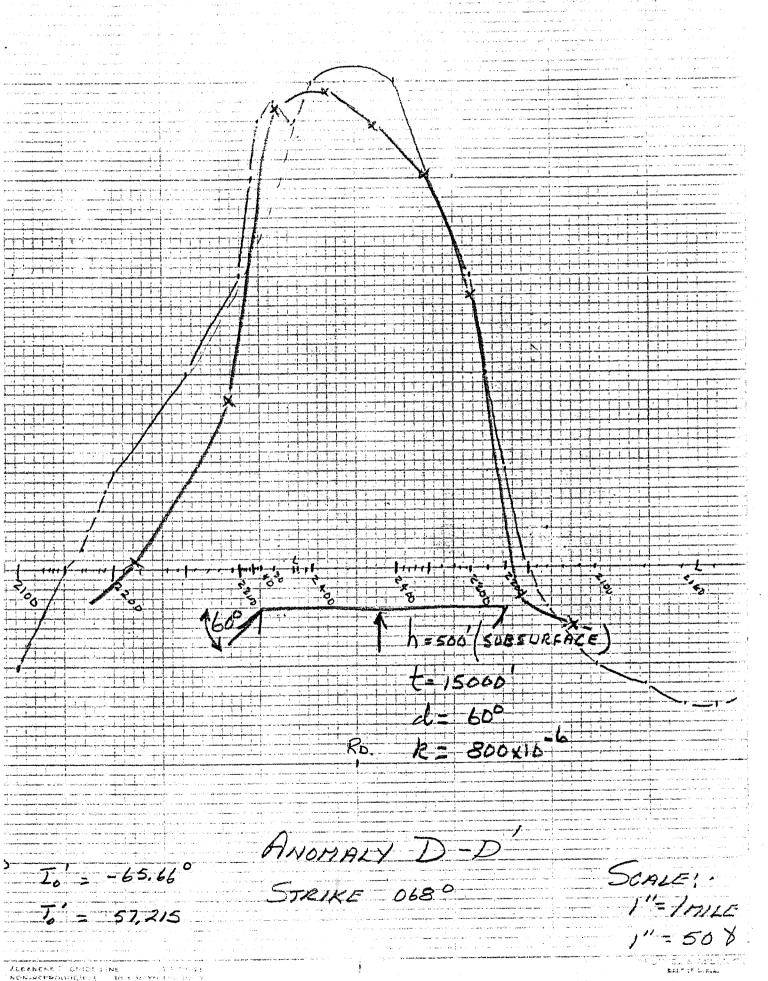
SCALE 1"-1

1"=/MILE

1"= 508 A'







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a samuel Comparint (September Semental) and a samuel for a seminary section of the seminary section of the seminary section (Seminary Seminary Semi	d: 60°		and the properties of the second seco	Commence and the second
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		` <u></u>		and the second s
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	+1-1-1			
1606				
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				train a contra a considera de la composition della composition del
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	and the second s	The first control of the first	and the second s	
<ul> <li>State of the second seco</li></ul>	en e	The first processed we will be a second measure of a second measure of the second measur	en de seu en de la companya de la c La companya de la co	

h=200 (SURSUEFACE) t=7320' d= 600 SW K=300X10-6

ANOMALY F-F'

STRIKE 122°

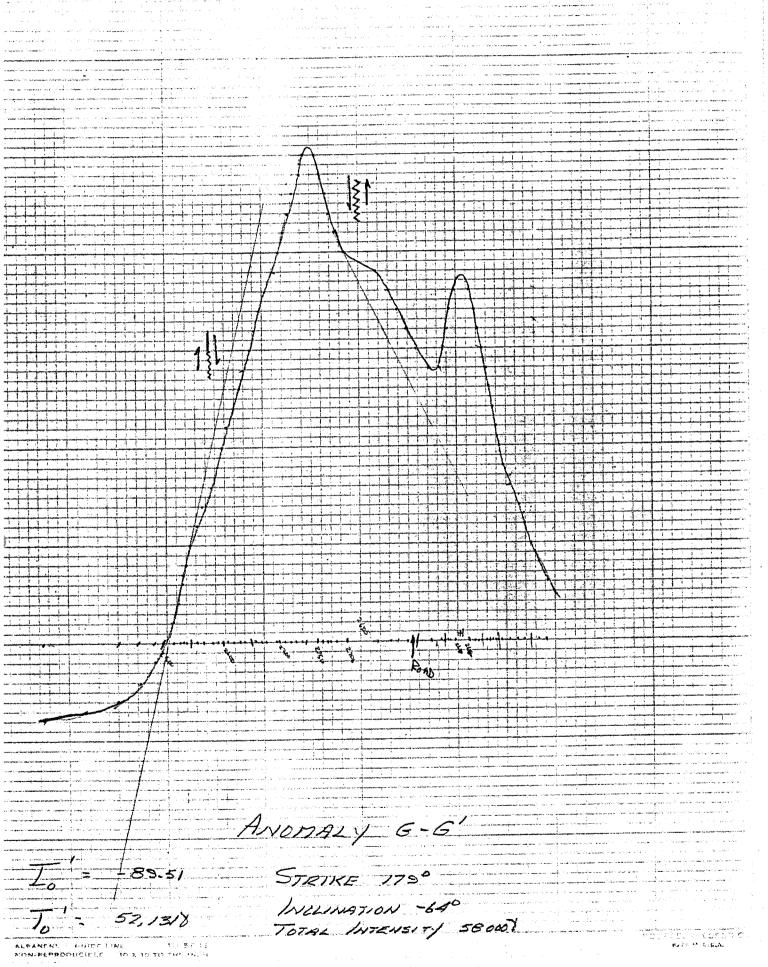
INCLINATION -64°

TOTAL INTENSITY 580001

1"= Jonile 1"= 508

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#### APPENDIX II

Stuarts Bluff Minerals Ltd. SML 315

Geochemical Drilling Data

CORE SAMPLES - FO#

A.A.S. AQUA-NEGIA HOT LEFELH

## 182.60 DOH

W.W.

T.T.	SAMPLE NUMBER	Car	Ph	12m	REMARIES
	5B.1				
	5B1 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5	050585505050	95 20 20 20 20 25 20 25 20	35 70 20 10 5 75 16 15 45 250	ACCALINATION .
14 15 16 19 20 21 22 24 25 25 25 29 29	- 750505050505050505050505050505050505050	03555055555555	25 45 55 55 55 55 55 55 55 55 55 55 55 55	160 65 105 105 105 105 105 105 105 105 105 10	
30 31 32 33 34 35 36 31 38 39	552 - 5 - 5 - 10 - 5 - 15 - 25 - 30 - 35 - 30 - 35	0050555	95 25 20 20 20 20 20	30 20 40 50 55 55	

HOUS NO. 573 2

BATCH NO. 2039

m.w.

1			0:		MCCannils
T.T.	DEPTH	Car	619	2n	NEMBRICS
	35 - 40	5	220	De l	
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3	45 - 50	4.5	420	15	
14	50 - 55	25	<20	50	
5	55 - 60	<b>45</b>	20	175	
6	60 - 65	45	20	30	
7	65 - 70	<5	30	90 11	
8	70 - 75	5	50	155 1	
9	75 - 50	45	30	90	
10	60 - 55	45	30	30	
11	55 - 90	5	30	60	
12	90 - 95	5	30	50	
13	95 - 100	5	30	60	
14-	100 - 105	5	30	3.0	
15	105 - 110	5	30	55	
16	110 - 115	5	30	60	
17	115 - 120	5	30	145	
18	120 - 135	45	30	50	
19	125 - 130	<5	30	55	
50	130 - 135	<5	30	55	
อเ	135 - 140	5	30	60 i05	
වුන	140 - 145	5	50	60	
33	1	<5	30	60	
1 24	1	45	30		
25	155 - 160	25	30	65	
26		<b>45</b>	30	65	
FG		<5	20	60	
25	i	5 <5	30	55	
20		25	30.	56	
30	100	1	60	60	
3	100	5 45	50	50	
3:	1 **	<5 <5	30	60	
37	1	1	1 .	80	
31		5	30	50	* ·
35	1 "	25 25	30	60	
30		1	30	55	1
3	315 - 320	<5 <5	30		1 .
3	•	, , ,			
3'					

HOLE 100. 583/584

BATCH NO. 3

C.M

	· · · · · · · · · · · · · · · · · · ·	(.) <del>(</del> .).			
TT	Н79ЭВ	Cu	610	7.N	REMARICS
	0 - 5	10	30	パラ	
ລ	5 - 10	5	೩೦	15	
3	10 - 15	5	<u> </u>	20	
4	15 - 20	5	935	20	
5	20 - 25	10	25	15	
6	25 - 30	5	इंश	15	
7	30 - 35	5	80	10	
8	35 - 40	5	25	55	
9	140 - 145	<b>&lt;</b> S	90	40	
10	H5 - 50	5	25	140	
, · 11	50 - 55	5	40	145	583
12	55 - 60	5	40	45	* N.B. SEE 120'-140'
13	60 - 65	5	955	50	BELOW
14	65 - 70	5	255	20	
15	70 - 75	5	25	55	
16	75 - 60	5	9.5 9.5	50	
17	90 - 35	5 5	20	50	
18	35 90	1	14.C	50	
19	90 - 95	5 5	90	50	
20	100 - 105	5	25	50	
87		5	20	60	
TJ.	105 - 110	5	25	55	
23	110	<b>E</b>			
<b>୬</b> ୬	0 - 5	10	30	30	
26	5 - 10	10	9.5	30	
27	10 - 15	5	25	60	
26 76	15 - 20	5	25	20	SBH
ર્ગ	20 - 35	5	20	25	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
30	25 - 30	, 's	20	15	
31	30 - 35	5	80	15	
31	35 - HO	5	14()	25	
33	140 - 45	125	20	25	11
34	HS - 50	55	20	25	
35	50 - 55	S	2.5	25	
36	55 -60	5	9.0	20	1
37	125	5	20	15	1
38	125 - 130	5	220	15	\\SB3 \A
39	130 - 135	5	20	25	

041

 $M \cdot M'$ 

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	DEPTH :	1 0	in [	Pb	22	nemarics
T.T.	2.0	1	0	9.0	15	
1		1	0	95	15	
2	3	1	0	40	300	•
3			5	25	25	
4.	1		5	25	30	
56	95 - 30		5	20	25	
•	30 - 35	1	£5°	30	15	
F 8	35 - 340		<b>\$</b> 5	20	20	
9	HO - 1455		<b>登</b> 2	80	15	
10	#5 - 50	1.	<b>5</b>	230	15	
11	50 - 55		65	92	30	
12	55 - 60	1	5	90	20	
13	60 - 65		10	90	10	
14-	65 - 70		10	25	40	
15	70 - 75		10	120	95	
16	75 - 80		10	30	500 15511	
FI	80 - 85		10	30	100	
16			10	30	100	
19	90 - 95		5 5	30	90	
20			10	50	65	
21	100 - 105		S	40	65	
ରୁଞ	1 1 1 1 1 1		5	25	60	
27	- 100		5	30	50	
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Q <sup>r</sup>			5	30	1	
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2	1110		5 5	30		
95	130		5	JiO.	60	
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3 3	1,00		5 5	. 30		
	2 155 - 160		5	30	1	
	105	}	5	30		
	170	1	10	30	L.	- M
•	165 - 175 5 170 - 175		5		0 100	
	6 175 - 150		5	5	0 \$5	
	3.					
				1	1	

HOLE NO. 586

BATCH NO.

042

M.W.

;	146.40	•			
	DEPTH	Cu	6,P	Zn	REMARKS
<u>T.T.</u>	0-5	30	50	70	
1	5 - 10	15	140	35	
	10 - 15	100	160	35	
	15 - 20	10	100	30	
	25: - 25	10	30	25	
	25 - 30	155	30	30	
	30 - 35	10	. 50	20	
1	35 - 40	10	95	35	
	1.0 - 1.5	10	25	15	
•	45 - 50	10	25	30	
	50 - 55	10	25	20	
	55.7 60	10	25	20	
	60 -65	15	25	50	al sund day jefter
	65 - 70	10 10	25	355	En . stay
	70 - 75 _	, 10	25	50	
	75 - 80	10	30	555	
	80 - 90	95		70	
	90 - 96	230	20	65. 75	
	95 -100	305	50	70	
1 1 1	100 - 105	255	30	70	
	105 - 110	60	50	55	_ water
-	110 - 115	75	390	A 1	)
	115 - 120	145	50	i i	15 W 63"
	190 - 195	50	50	i	55 - 27
	125 - 130	H-O	30	1	
•	185 - 140	20	30	4	1
	(3) (3) (3) (4) (4)	35	30		1
	IND IND				
		-			
	•				
• • •	<b>.</b> .				
* * * * * * * * * * * * * * * * * * *					
	•				

### PERNATTY CORE SAMPLES (CONT.)

HOLE NO. 587/8

BHTCH 100.

043

		M.v.			
T.7.	DEPTH	Cu	Pb	2~	REMARKS
7-23456789011911415161781991222225222525333333533333333333333333	05050505050 05050505050 05050505050 05050505050 05050505050 05050505050 05050505050 05050505050	3505505055 3505050505 3505050505 350505050	300000000000000000000000000000000000000	5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	53 7
, , , 0	<u>.</u>	1		1	· 1

# PERNATTY CORE SAMPLES (CONT.)

HOLE NO. 53910

BATCH NO.

	m,w	<b>)</b>	J	044
T.T. DEPTH	Cu	Pb	2n	REMARKS
0-5 10-15 10-25 25-35 25-35 35-35 35-35 35-55 35 35-55 35 35-55 35 35 35 35 35 35 35 35 35 35 35 35 3	000005000000000000000000000000000000000	202020202020203333	35 20 20 0 25 45 50 70 65 95	3B9
5 10 15 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20 50 20	15 15 10 10 10 10 10 10 10 10 10 10 10 10 10	20000000000000000000000000000000000000	40 35 46 65 05 05 7 115 *	SB 1C

HOLE NO. 5B6

ઢવ

045 BATCH NO.

		. W.M.	· .	-80半	* .
	ALL VALUES	in bbw		•	REMARKS
J.T.	DEPTH (FEET)	Cu	<i>₽p</i>	Zn	ICCIVITICE-CO
	55 - 60 55 - 60 55 - 60 65 - 75 60	55000150500655055	2020000443000704340	0 0 4 0 4 0 8 0 8 0 8 0 8 0 8 0 0 0 0 0	Rechect of our orders.

#### APPENDIX III

OTTER EXPLORATION N.L.

Percussion Drill Logs with

Geochemical Data

OLE A	NUMBER_ON_EL AZIMUTH NGLE DEPTH	. 154 	At Pon	anna rama shaka anna gasa anna ba	•				ussion		LHOLE	LOG SH	HEET	3
10M	· 10			RECOVERY %		ROCK	TYPE			STRUCTURE		MINER	ALIZATION	
m)	(m)	(m)	le No	b		<del></del>								
).	1.5				Red bro	wn surf	ace sandy							
1.5	3.0				11	11	11	11		•				
3.0	4.5	Ì	ŀ		11		11	"						
	1				11	11	TT.	11						
4.5	6.0				11	17	. 11	.,11		* *				
6.0	7.5					. ന ന ശര	Dolo ha	own F	ounded fr	costed sil	iceous			
7 5	lan.	ł			Whyalla	122.11	rate or	OMIT 1	Cuitaca II			1		

Pale brown rounded frosty grains Whyalla S.S.?? and

11 6 7

Some gypsum needles.

grains.

brown clay.

Pale grey clay

regain return.

Pale grey clay

Ran 20 ft. casing to

Lost air return. No sample

7.5

9.0

.2.0

16.5

18.0

19.5

21.0

22.5

24.0

25.5

27.0

9.0

10.5

13.5

18.0

19.5

21.0

22.5 24.0

25.5

27.0

28.5

0.5 | 12.0

3.5 | 15.0

15.0 16.5

DATE COMMENCED \_ 16 May 1975 DATE COMPLETED 16 May 1975 Northbridge DRILLED BY \_\_\_\_\_ LOGGED BY\_\_\_\_B.M.\_Cowan

Zn

Page 1 of 2 ANALYSES

Pb

Cu

HOLE NUMBEROEP-1
LOCATION
HOLE AZIMUTH
HOLE ANGLE
CINIAL NEDTU

()"	g. A	III	MAZZAP:	L.CDER.	azz		N.	
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1	<u>N</u>
$\supset$	$\subseteq$
17	77

PERCUSSION

### DRILLHOLE LOG SHEET

Page 2 of 2

					•			Luge	, 2 01			
		1 :12				1111 170 1117 1710			ANAL	YSES		
FROM (m)	TO (m)		p- recovery %	ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn			
30.0		703		Pale brown round frosted sa Occasional lithified fragme	nd grains Whyalla S.S.		5 .	<b>&lt;</b> 5	12			
31.5	33.0	703	37	ti, tr	n n n		5	<b>&lt;</b> 5	10			
33.0	34.5	703	111111111	11	ft tt		5	<b>&lt;</b> 5	12			ŀ
34.5	1	703	39	11	tt tt		5	< 5	,12		-	
36.0	37.5	704	10          0	11 11	u u		8	<b>&lt;</b> 5	15			
37.5	39.0	704	1	li ii	III .		5	<b>&lt;</b> 5	15			
39.0	40.5	704	12	11 11	<b>11</b>		5	<.5	12			
40.5	42.0	704	13	Pale brown frosted rounded	quartz grains. Whyalla S.S.		5	<b>〈</b> 5	12			
42:0	43.5	704	14	n n	ti ti		5	<5	15			
43.5	45.0	704	15	11	n n		8	<b>&lt;</b> 5	12			
45.0	46.5	704	16	n n			8	<b>&lt;</b> 5	10			
46.5	48.0	704	47	Pale brown frosted rounded	quartz grains. Whyalla S.S.		8	₹5	10			
										-		
· .	n											
					ЕОН							
-								\$				
}							1					

HOLE NUMBER	OEP-2
	ile southwest Pond Dam
	naming stated above stated electric planes delegal above stated above based splanes below hear
HOLE ANGLE	<u>Vertical</u>
COLL SCREET	48.0 metres

OFFEED BEXEPIADERALEADY IN. 1	OFFEED.		CASTICA	FECORE	N.	
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PERCUSSION

## DRILLHOLE LOG SHEET

DATE COMMENCED \_\_\_\_\_\_

DATE COMPLETED \_\_\_\_\_

DRILLED BY \_\_\_\_\_

LOGGED BY \_\_\_\_B.M. Cowan \_\_\_\_\_

Page 1 of 2

					× ·	•		age 1	<u> </u>				
FROM	TO	LOW NOTE C		RECOVERY %	2004 7107	CTOLICTURE	MINERALIZATION			ANALY	'SES		
(m)	(m)		e No		ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn			
0	1.5				Calcrete and light brown same	nd	<b>(</b>						
1.5	3.0				Fine brown angular sand								
3.0	4.5				11		*						
4.5	6.0		٠, ١		11 11		÷			-		i	
6.0	7.5				11 11					. •		•	
7.5	9.0				Brown clay				8				
9.0	10.5	-*			Poorly lithified clayey san grains.	dstone - slightly rounded							
10.5	12.0		•		The second secon	TI II					,		
12.0	13.5				11 11	n n		1					
13.5	15.0				n in the second of the second	11			•		:		
15.0	16.5				н	11							-
	18.0				11	H H							
18.0	19.5				Red clay and rounded frosty	"Whyalla" sand grains					-		
	21.0				n n	n n						: r	
	22.5				n n	n n							
	24.0	7	7019		Yellow brown clay and "Whya	lla" sand grains		10	20	30			1
	25.5	i i	7020 ;		n n	· ·		10	12	25		· •	
	27.0	1	7021		ii.	ti i i i i i i i i i i i i i i i i i i		8	12	12			
	28.5	1	7022		11 11	tt e	•	5	5	10			
28.5	30.0	ļ l	7023		11	11		5	12	10			
	1	j i	7023			11		8	10	15			
20.0	131.3	1 1'	. 024					1 0	1 10	1 13	l		l

HOLE NUMBER	OEP-2
LOCATION_1	mile southwest Pond Dam
HOLE AZIMUTH	name that down the down time have one may what more their still time age.
HOLE ANGLE_	Vertical
CINIAL DECTH	48.0 metres

CPETE		IZZZE				N.	
-------	--	-------	--	--	--	----	--



### DRILLHOLE LOG SHEET

 $\mathbf{U}\mathbf{U}\mathbf{U}$ DATE COMMENCED \_\_\_\_\_ DATE COMPLETED\_\_\_\_\_ DRILLED BY LOGGED BY B.M. Cowan

5 1 11 WAR							•		Pag	e 2 of				
FROM	ТО	ADVANCE	Samn-	RECOVERY	2	DOCK TYPE	STRUCTURE	MINERALIZATION			ANALY	/SES	وخر بقيميسونوسونوس	-
(m)	(m)	(m)	le No	0	, ()	ROCK TYPE	SINOCIONE	MINICIALIZATION	Cu	Pb :	Zn			<u> </u>
31.5	33.0		7025			Yellow brown clay and "Whya	alla" sand grains		5	10	8		, i	
33.0	34.5	<u>.</u>	7026			H H	ff.		2	5	8	-	I	
34.5	36.0		7027			ti ti	11		5	10	10		ŀ	
36.0	37.5	! !	7028			11 11	11		5	10	12		: 	1
37.5	39.0	<u>.</u>	7029			11	11		5	5	.10		1	
39.0	40.5		7030			"Whyalla" sand grains and c	alay		2	5	12		: !	
40.5	42.0		7031			ii ii ii	· ·		<2	<5	10	•	· 	
42.0	43.5		7032			TI II	"		2	<b>&lt;</b> 5	8		İ	
43.5	45.0		7033			Control of the second	n e e e e e e e e e e e e e e e e e e e		2	< 5	8		İ	
45.0	46.5		7034			H H	The state of the s		2	< 5	10		-	
46.5	48.0		7035			"Whyalla" sand grains and c	clay		< 2	<b>₹</b> 5	10			
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HOLE N	UMBER	OEP	-3	محاد البناء الماد المدود	
				Pond Dam	
HOLE AZ	HTUMIS				
HOLE AN	NGLE	<u>Ver</u>	t <u>ical</u>		
FINAL DE	PTH	48.	0 metres	<u> </u>	

#### OTTTEER EZZEPLOERALICDI N. I.



PERCUSSION

DRILLHOLE LOG SHEET

DATE COMMENCED \_\_\_\_\_\_

DATE COMPLETED \_\_\_\_\_

DRILLED BY \_\_\_\_\_

LOGGED BY \_\_\_ B.M. Cowan \_\_\_\_\_

Page 1 of 2 pages

FROM	то	IADVANCE	Samp-	DE	COVE	:py (	3/	DOCK TYPE	CTOLICTUDE	MINERALIZATION			ANAL'	YSES	,	
(m)	(m)	(m)	le No	0		-151	00	ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn	<del></del>		<del></del>
0	1.5							Clayey sand								
1.5	3.0	1						Fine angular sand						, , , , , , , , , , , , , , , , , , ,		
3.0	4.5						1	u (u						į ·		
4.5	6.0				!			H H							.	1
6.0	7.5							u u					•			
7.5	9.0	1						11								
1	10.5							H , M ,						.•		
10.5	4							11								
12.0								Brown clayey sand some round	ded grains							
13.5	15.0							11 11	11			<b>\</b> .			. 1	
15.0								H H	n .							
16.5	1							Whyalla sand grains						ļ		
18.0	19.5							11 11								
19.5	ł* .							tt tt		,	1					
21.0	22.5		7001					Whyalla sand grains and cla			10	<.5	15			
22.5	24.0		7002					11 11			10	< 5	15			
24.0	25.5		7003					H .tt		•	25	8	10			
25.5	27.0		7004					11	· .		10	8	18			
27.0	28.5		7005					11			12	<b>&lt;</b> 5	22			
28.5	30.0		7006					11			15	15	25			
30.0	31.5		7007					11			12	5	18			

4			•	052
HOLE NUMBEROEP-3	OHUER I	TEXTPLODERAMICON	No II.	DATE COMMENCED
LOCATION 2 miles southwest Pond Dam	All the course and the course are a second to the course of the course o			DATE COMPLETED
HOLE AZIMUTH	$\mathcal{N}$	CD1111101E 100	~ ~	DRILLED BY
HOLE ANGLEVertical	PERC	CUSSION DRILLHOLE LOC	J SHEET	LOGGED BY B.M. Cowan
48.0 metres	UU			

Page 2 of 2 pages

								1 450 2			<del></del>	<del></del>
FROM	то	ADVANCE	Samo-	RECOVERY %	DOCK TYPE	CTDUCTURE	MINERALIZATION			ANAL	YSES	
(m)	(m)	(m)	le No	) <u> </u>	ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn		
33.0		1	7009		Whyalla sand grains and clay		•	10	12	15		
34.5	36.0		7010		11			65	5	15		
36.0	1		7011		n n			10	< 5	12		
37.5	•		7012		n n		to the second of	8	10	12	1	*
39.0	1		7013		11			5	10	, 8	,	• .
40.5	l l		7014		n n			. 5	<b>&lt;</b> 5	8		
42.0	1		7015		n n			5	10	12		
43.5	1		7016		11			5	8	12	!	
45.0			7017		n, n			5	<b>&lt;</b> 5	8		
46.5	}		7018		11			5	< 5	8	1	
			.									
					ЕОН							
											-	
					This hole caved at about 26	m.						
										1		
											1	
			1									
		1										
												1
		1	1		11	1		}	1	]	1	١ .

OCATION 1 mile NE along track from Pond Dam

HOLE NUMBER OEP-4

0.0 31.5

7058

HOLE AZIMUTH

DRILLED BY Northbridge LOGGED BY B.M. Cowan

DRILLHOLE LOG SHEET PERCUSSION OLE ANGLE\_\_\_\_\_Vertical\_\_\_\_ INAL DEPTH\_\_\_\_42.0\_metres\_\_\_\_ Page 1 of 2 pages **ANALYSES** ROM TO ADVANCE Samp-RECOVERY % ROCK TYPE STRUCTURE MINERALIZATION (m) (m) le Nob 1.5 Brown clayey sand 3.0 4.5 Clayey calcrete 3.0 4.5 6.0 Brown clayey sand 6.0 9.0 Off white clayey "Whyalla" sand 10.5 12.0 13.5 15.0 Clayey "Whyalla" sand 16.5 7048 15 10 18.0 7049 **<**5 15 19.5 7050 10 21.0 7051 < 5 15 22.5 7052 10 15 24.0 7053 <5 15 25.5 7054 18 27.0 7055 28.5 7056 10 30.0 7057

HOLE .	ION_1_mi AZIMUTH ANGLE	OEP-4 le NE along Vertica 42.0 me	. 1 . 1	om Pond Dam	DESCRIPTION DRILLHOLE	ON N. I E LOG SHEET	DATE COADRILLED B	MPLETED		محدد منبق منبق منبق منبق منبق معدد منبقة معنه منبع منبع منب
FROM	10	ADVANCE Samp-	1	ROCK TYPE	STRUCTURE	MINERALIZATION	Con		ANALYSES	<del></del>
(m)	(m)	(m) le No	) (0 	5				Pb Zr		-
33.0 34.5	34.5	7060		Clayey "Whyalla" sand			5.		15 20	
36.0	37.5	7061		H H			8		22	
37.5	39.0	7063		n n			10		25	
39.0	40.5	7064		n n			8		22	•
40.5		7065		u u			8		20	
	<u></u>			EOH  Hole caved, unable to change	rod.					

HOLE NUMBER_	0EP-5
LOCATION_2_1	miles NE Pond Dam
HOLE AZIMUTH	many many many thing whose place many many data arises made have depth during the
HOLE ANGLE	Vertical
FINAL DEPTH	48.0 metres

EZZPACEZAZYON N. I.

DRILLED BY

DATE COMMENCED \_\_\_

LOGGED BY B.M. Cowan

DATE COMPLETED\_\_\_\_\_

PERCUSSION

DRILLHOLE LOG SHEET

		~~~	· · · · · · · · · · · · · · · · · · ·				I	Page 1 o	f 2 pages	
	FROM	TO	ADVANCE Sa	mp- RECOVERY		STRUCTURE	MINERALIZATION			ALYSES
L	(m)	(m)	(m) le	No o	001	0.11007012	THI TELO CLEANION	Cu	Pb Zn	
	0	1.5			Pale brown clayey sand					
	1.5	3.0			i ii			1		
	3.0	4.5	1		Brown clayey sand					
	4.5	6.0			11 11			1		
	6.0	7.5			11					
	7.5	9.0				 + mica??				
		1				T Micarr		1 1		
	9.0	10.5								
11		12.0		.	11 11	11				
	12.0	13.5	1		11	H .				
	13.5	15.0		Wet	11 11	ti .				
	15.0	16.5			11 11	n ·				
	16.5	18.0			11 11	tt				
	18.0	19.5			1 11 11 11	11				
1		21.0			tr tr	11				
}		22.5	70	066		red clay	•	8	<i>(</i>	
i		24.0	{	067	oray by may arra sand grains	in ted Clay			<b>(5)</b> 18	1 1
]		1	1 1		,,	11		5	<b>〈</b> 5 <b>20</b>	
Ť	24.0	4		068				8	₹5 32	
		27.0		069	Clayey Whyalla sand grains	and gypsum + red clay		5	₹5 22	
	27.0	28.5	70	70	11 11	H H H H H H H H H H H H H H H H H H H		5	<b>〈</b> 5   38	
	28.5	30.0	70	)71	11	n n		8	<b>〈</b> 5   32	
-	30.0	31.5	70	)72	tt tt	tt.		8	5 40	

HOLE NUMBER_	OEP-5
LOCATION_2	miles NE Pond Dam
HOLE AZIMUTH	many make along mile large hand man yang many anga mang mile mile mile mile mile mile mile mile
HOLE ANGLE	Vertical
FINAL DEPTH	48.0 metres

#### OTTEER EESEPLOERATION N. L.



PERCUSSION

### DRILLHOLE LOG SHEET

DATE COMMENCED \_\_\_\_\_\_

DATE COMPLETED \_\_\_\_\_

DRILLED BY \_\_\_\_\_

LOGGED BY \_\_ B.M. Cowan \_\_\_\_\_

. FINAL [	DEPTH	4	8.0 me	<u>tres</u>					P	age 2	of 2 p	ages			•
		Υ	<del> </del>	1		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			<del></del>	<u> </u>		ANAL	<b>YSES</b>		
FROM (m)	TO (m)	ADVANCI	Samp- le No	•	/ % 2	ROCK TYPE	STRUCTURE	MINERALIZATION		Cu	Pb	Zn			
33.0	34.5		7074			Clayey Whyalla sand grains some dark green chips poss	and gypsum + red clay + basic			5.	<b>&lt;</b> 5	35			
34.5	36.0		7075			Clayey Whyalla sand and gy	osum and dark green chips			5	10	42	·		
36.0	37.5		7076			п	n n			5	20	45		-	
37.5	39.0		7077			tt tt	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			5	12	35			
39.0	40.5		7078			Gypsum, green chips and ch	ocolate clay shale			5	₹ 5	32			
40.5	42.0		7079			11	rt .			5	8	45			
42.0	43.5		7080			Chocolate shale and gypsum		;		5	22	.50			
43.5	45.0		7081			H H				5	10	45			
45.0	46.5		7082			31 11				5	. 20	42			
46.5			7083			Chocolate shale and gypsum				5	15	45			
<b>PARTICIPATION</b>												•			
TO DESCRIPTION OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY						ЕОН			<b>.</b>						
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						clay and shale + gypsum is	possibly an ancient lake sur	face and may correlate		•					
						with the Woomera shales?	of hole OEP-6.		,						
-	1							•							
nesocorocoo															
nama constanta												<u> </u>			

OEP-6

LOCATION At Ruins - Cattle yard Dam North Area

HOLE ANGLE\_\_\_\_Vertical\_\_\_\_\_

. FINAL DEPTH\_\_\_\_38.0 metres\_\_\_\_

HOLE NUMBER\_

HOLE AZIMUTH \_

FROM

HEXIPI. CHRANII (CHR

PERCUSSION

DRILLHOLE LOG SHEET

DATE COMPLETED\_\_\_\_ DRILLED BY \_\_\_\_\_ LOGGED BY\_\_B.M\_\_Cowan\_ Page 1 of 2 pages ANIAIVEEC

DATE COMMENCED\_

FROM (m)	(m)	ADVANCE	Samp-	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION		***************************************	ANAI	YSES	······································	
0	1.5	<del>  \\ \\ \</del>	le No		D		MINERALIZATION	Cu	Pb	Zn			
1.5	1				Brown sandy clay								-
	3.0	1			11								
3.0	4.5	1			Fine brown sand					· .			**
4.5	6.0				Magnesite and sand								
6.0	7.5				Fine brown sand								
7.5	9.0				Fine brown sand and magnesi	e e				,		, 1	
9.0	10.5				Chocolate shale								
10.5	12.0				11 11								
2.0	13.5				Grey silty shale			J		a.			ļ
3.5	15.0				11			1		:			on the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the
5.0	16.5				11 11		*	1				}-	
6.5	18.0				11 11					1			
	19.5				tt tt								
					11 11								the second second
									,		-		
	24.0				Chocolate and pale blue shal	.e		. 1					
1								1	•	•			
					II II				1				
1	27.0		-		11 11	•		] ]	• 1				
i	28.5				tt.				:		1		
	30.0				tt tt		•					}	
0.0	31.5		. ]		41		*	1 1					

S. I. FELDERALED SEELEN.

OEP-6

LOCATION At ruins - Cattleyard Dam
North area

HOLE ANGLE\_\_\_\_Vertical\_\_\_\_

HOLE NUMBER

HOLE AZIMUTH

PERCUSSION

DRILLHOLE LOG SHEET

DATE COMMENCED \_\_\_\_\_\_

DATE COMPLETED \_\_\_\_\_

DRILLED BY \_\_\_\_\_

LOGGED BY \_\_\_\_ B \_M\_\_ Cowan \_\_\_\_\_

Page 2 of 2 pages

FINAL I	DEPTH	48.0_	metre	es					Page 2	of 2	pages		0.10.0000000000000000000000000000000000
FROM	TO	ADVANCE S	Samp-	RECOV	ERY %	ROCK TYPE	STRUCTURE	MINERALIZATION			ANALY	'SES	
<u>(m)</u>	(m)	(m) ]	le No	0	<del></del>	NO CK TTL	JACCIONE	MINERALIZATION	Cu	Pb	Zn		200
33.0	34.5					Chocolate and pale blue shale						,	855365000
34.5	36.0								_				
36.0	37.5			1111		11.							***************************************
37.5	39.0					n n							
39.0	40.5					11						-	
40.5	42.0					11 11							
42.0	43.5		į			tt tt							
43.5	45.0			1111		11							
45.0	46.5		7084			ii ii		: · · · · · · · · · · · · · · · · · · ·	2	10	42		
	48.0		7085			11 11			2	5	38		
	e e				!	*			-				
				1111		Drag bit kept plugging up with	clay. Unable to change			1			
						rod. Hole abandoned.			1				
			į			ЕОН .						•	
	•								ļ				
			1			This rock is the Woomera shale	i.e. area is stratigraphi	cally above	1				
			1	111		the Whyalla Sandstone.							
			-		1       .			•.		1	,		
			]										
				<u>    </u>				· · · · · · · · · · · · · · · · · · ·					

HOLE NUMBEROEP-7
LOCATION 1 Mile south of Old Pernatty
HOLE AZIMUTH (1m south of OEP-6)
HOLE ANGLEVertical
FINAL DEPTH 42.0 metres

CD'EFEFEE	IZZZZ	MADIBA	VICELLA	M.	II.o



PERCUSSION

## DRILLHOLE LOG SHEET

DATE COMME	VCED	
DATE COMPLE	red	
DRILLED BY	and many taken made and anne where where where were a vice above ready to the	
LOGGED BY	B.M. Cowan	

Page 1 of 2 pages

FROM	то	ADVANCE Samp - RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION		<del></del>	ANALYSE	S
(m)	(m)	(m) le No 8	ROCKTITE	STROCTORE	7/III VEIO/VEIZ/III/O/V	_Cu	Pb	Zn	
0	1.5		Brown clay and sand						
1.5	3.0								
3.0	4.5		Rounded and angular sand						
4.5	6.0		n n						
6.0	7.5		Brown clay and sand						
7.5	9.0		11						
9.0	10.5		11		• •				
10.5	12		Chocolate clay and green sh	ale					
12.0	13.5		n n						
13.5	15.0		n n						
15.0	16.5		n n						
16.5	18.0		Chocolate clay						
18.0	19.5		Chcolate clay and green sha	le					
19.5	21.0		n n	1 / Z		1			
21.0	22.5		n n				i .		
22.5	24.0		u u						
24.0	25.5		· tt						
25.5	27.0		ti ti	•					
27.0	28.5		Chcolate clay and blue-gree	n shale					
28.5	30.0		Chocolate clay and shale an	d blue-green shale					
30.0	31.5		11 11	n a transfer of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of			}		

HOLE N	NUMBER_	OEP-7	of Old Pen	natty	IEZZEPI. OZELATEE	OII II. II.	DATE CO	OMPLETED	n mang and state riped annual finish date furth after the	
HOLE A	ZIMUTH	(1m south Vertical	of OEP-6)	- (1)	CUSSION DRILLHOLE	E LOG SHEET	LOGGE	D BYB.M.		ميند بير
. FINAL D	DEPTH	42.0 met		ـــ الشيسيسية			Page	2 of 2 pag		
FROM	TO	ADVANCE Samp		ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb Zn	NALYSES 1	<u></u>
(m) 33.0	(m) 34.5	(m) le N		Chocolate clay and shale an	d blue-green shale					
34.5	36.0			t in the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	H. Z					
36.0	37.5			<b>"</b>	11					
37.5	39.0			, u	11 1		5	10 ,6	60	
39.0	40.5	7086		11 11 11 11 11 11			5	5 5	55	
40.5	42.0	708	7	Chocolate clay and shale ar	d Dide-green share				•	
				Woomera shales.						
3 <b>4</b>										

VOIE N	ITAADEO	OEP-8		Correctives.	eesipuoeeaee	ON N. A.			CED		, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,
IOCATIO	omber 1	south of Old Perna	tty ruins	S with the distribution of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the	tid and find the same and the s				D			
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HOLE A	ZIMUIH	Vertical	nun dules (MI)4	PER	cussion DRILLHOLE	LOG SHEET	LOGGE	D BY	B.M. Co	wan		سر سب جا
HOLE A	NGLE	48.0 metres	<del></del>	507							* .	
FINAL D	EPTH	منت جين ميش بنيد بنيد جين جين جيد بين عبد بين عبد عبد		bear minimum to the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of th			Page	1 of 2	pages	VCEC		<del></del>
FROM	то	ADVANCE Samp - RECOVERY	(%)	ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn	1353	<del></del>	Γ
(m)	(m)	(m) le No o	<u> </u>				- Cu	110	-			
0	1.5		Brown	n angular sand			•		1			
1.5	3.0		Off	white angular sand					!	i		
3.0	4.5		111	tr tr								1
4.5	6.0			u u							,	
6.0	7.5		Clay	ey brown sand angular								
7.5	9.0			$\mathbf{u} = \left[ \mathbf{v}_{i} \right]^{2}$			,					
9.0	10.5		Red	and off white clay								
	12.0			u tt,								
12.0			     Grey	shale						1		
13.5				11								
15.0			Choc	colate brown silty clay	ey rock flour - after fine -g	grained sed.						
16.5	ļ			n n	tt tt				ļ			
18.0				11 11	ti ti							
19.5	1			n n	11 11					-		
21.0	ŀ			colate brown - purple s e grained sed.	ity clayey rock flour after							
22 E	24.0		11111	e - purple clay								
22.5	}			wn - purple clay								
24.0	1			11 11		· ·						
	27.0			11		•						
	28.5			11 11								***************************************
28 5	30.0			••				1	1	l	İ	ı

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HOLE I	NUMBER_		OEP-8.			<u>a</u> .	() PET		6	IZZS:	PIAC	DIR.A.	MIR	M	M	. I.a.	• •	DATE CO		ED				
LOCAT	ION_2_	L sout	h_of_01	Ld_Pe	rnatt	y ruins	(22.2.2.2.3)			• • • • • • • • • • • • • • • • • • • •								DATE COMPLETED						
HOLE	AZIMUTH	سه سپ ښدرسيد	، خند نمخ شمار میخ			•	W	•			_	. בו נוסר		100	~ CI		<b>.</b>	DRILLED BY						
HOLE A	NGLE	<u>Ver</u>	ti <u>cal</u> .	ه, هنجر جينوا سيم			1505	I	PERC	CUSSION	1 L	RILLF			J 31			LOGGED	BY	B <u>.M.</u> _C	owan_			
. FINAL	DEPTH	48.	0 metre	es			-77 1/								•	4				. `				
	<u> </u>	<del>,</del>	T			1	-				41		<del></del>	<del></del>			<del></del>	Page	2 of	<u>2 page</u> ANAL		<del></del>		
FROM (m)	(m)		Samp- le No		ERY %	2	ROCK TY	'PE			STRUC	TURE			MINER	RALIZATIO	)N	Cu	Pb	Zn				
33.0				ĬIII		Brown -	purple o	lay															A BUILD STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF T	
34.5	36.0							11																
36.0	37.5		7088			Purple	and blue	shale	-							*		5	5	60		Į		
37.5	39.0		7089			11					·					-	* [	.5	12	65		Į~		
39.0	40.5		7090			11		11			,		4	-				5	5	-50	,			
40.5	42.0		7091			11	•	17							•			- 5	₹5	50				
42.0	43.5		7092			11						•	,			•		5	<5	18		!		
43.5	45.0		7093			17			,						•			5	,5	20				
45.0	46.5		7094			11		11										5	5	32				
46.5	48.0		7095			"		<b>t</b> ;		11	•							8	. 22	40	[ ]	•		
							T.)	1 1			•											ļ		
	,					EOH -	Woomera	snale													·		-	
						Bit be	came plu	gged, una	able	to char	ige rod	•	, a								-			
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HOLE NUMBER	OEP-O
LOCATION 3 m south	Old Pernatty ruins
HOLE AZIMUTH	
HOLE ANGLE	Vertical
FINAL DEPTH	30.0 metres

#### OTTEED EXIPTORELATED IN. L.



PERCUSSION

DRILLHOLE LOG SHEET

DATE COMMENCED
DATE COMPLETED
DRILLED BY
LOGGED BY B.M. Cowan

Page 1 of 1

FROM	то	ADVANCE	Samp-	RECOVERY	%	ROCK TYPE STRUCTURE MINERALIZATION				ANAL	YSES					
(m)	(m)	(m)	le No	)	8						Cu	Pb	Zn			
0	1.5					Sandy cla	*		•			. 🛊				
1.5	3.0					Brown rou	unded and angular s	and grains								
3.0	4.5					11	11							1		
4.5	6.0		1			Ħ	ii i	11	200							
6.0	7.5					11	* * * * * * * * * * * * * * * * * * *	11								
7.5	9.0					11	H	17					'			
9.0	10.5					Purple b	rown and grey shale	and ·clay								
10.5	12.0					17 11	ti .	11		•						
12.0	13.5		.			11	tt	11			1				٠.	
13.5	15.0					71	u	11	•				-			
15.0	16.5					Purple b	rown and blue shale	and clay								
16.5	18.0					.11	11	11								
18.0	19.5					f1	U	11							:	
21.0	22.5					11	u	11								
22.5	24.0		7096			11	H	tir	<b>/</b>		5	.   !	65			
24.0	25.5		7097			tt	, u	11	e e e e e e e e e e e e e e e e e e e		10	4	5 42			
25.5	27.0		7098			91	11	1,1			5	1	2 35			
27.0	28.5		7099			, , tr	<b>""</b>	11			5		8 45			
28.5	30.0		7100			11	<b>!!</b>	11			5	1	55			
•	· ,						ЕОН			•			-			
						Unable t	o change rod.									
	1	1	1 . 1					1	•	1		-		1 1		1 .

HOLE N	UMBER_	UE	~U			•
LOCATIO	N_4_	miles s	south o	of 01d	Perr	atty
HOLE A	ZIMUTH					
HOLE AT	NGLE	عبد بيدرمند بندر	rtical			
FINAL D	EPTH	36	.0 met	res 		
FROM	ТО	ADVANCE	Samp-	RECOVERY	%	, , ,

PERCUSSION

DRILLHOLE LOG SHEET

DATE CO	OMPLETED	<del></del> .	 	 	. ــــ	
DRILLED	BY	ه معنى بينه عبير بيني	 	 		
LOGGED	BY_B.M.	Cowan	 	 		

Page 1 of 2 pages ANALYSES

FROM	TO	ADVANCE Samp-	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn		
(m)	(m)	(m) le No	)			,					
0	1.5			Clayey brown rounded an	d angular sand					:	
1.5	3.0			ti ti	_ + <b>11</b>						
3.0	4.5			n ti	<b>"</b>				1		
4.5	6.0			at the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of th	11				, 1		
6.0	7.5			n n	11						
7.5	9.0			n n	11 .					•	
9.0	10.5	1		Blue grey and brown shale							
10.5	12.0			11							
12.0	13.5			H 11				1.			
13.5	15.0			11 11							
15.0	16.5			H			1				
16.5	18.0			***************************************							
18.0	19.5			11						-	
19.5	21.0			n u					1,	1	
21.0	22.5			11 11							
22.5	24.0			11							
24.0	25.5			nt tt	144		. 5				
25.5	27.0			11							
27.0	28.5			<b>11</b>							
28.5	30.0			11 11				•			
	i	1 1	11111111	41			1	ł	1 "	1	.

HOLE NUMBER_	OEP-10
	miles south of Old Pernatty
HOLE AZIMUTH	
HOLE ANGLE	Vertical
FINAL DEPTH	36.0 metres

CHETTE INSTRUCTION No. IL.



PERCUSSION

DRILLHOLE LOG SHEET

DATE CO	WWEL	ACED -	iu			-				•••	
DATE CO	MPLE	red		<del></del> -		<u></u> -	<del></del> -	 <u></u> -	_		_
DRILLED I	3Y	-			<del>-</del>			 . <del></del>	ښد		
LOGGED	BY	В.М.	<u> </u>	OW	an			 	حبد	. مب	<u></u>

Page 2 of 2 pages

FROM	TO	ADVANCE	Same	OSCOVERY OF	DOCK TYPE	CTD! ICT! IDE	MINERALIZATION		A	NALYSES	
(m)	TO (m)	(m)	le No	RECOVERY %	ROCK TYPE	STRUCTURE	MIINERALIZATION	Cu	Pb Zn		-
33.0	34.5		7101	1   1   1   1   1   1   1   1   1   1	Blue grey and brown shale			5.	10 5	50	
34.5	1		7102		H .	- Woomera shale		5	10 5	50	
					Bit plugged EOH			•	, and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second		
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HOLE	NUMBER_	0	EP-11	ments courts dynamy adjustic against against against	
LOCAT	ION 12 m	le no	rth-ea	st "Whitata	" H.S.
HOLE A	AZIMUTH			print make their time, despertance begins	
HOLE A	NGLE	<u>V</u> e	ertica	<u> </u>	
FINAL I	DEPTH	66	<u>6.0 me</u>	tres	
FROM	то	ADVANCE	Samp-	RECOVERY %	<del></del>

ORTER EXPEDITAGERATION N. E.

DRILLHOLF LOG SHEET

		vertical	PERC	CUSSION DRILLINGLE	IUG SHEET	LOGGED BYB_M_ Cowan
FINAL	DEPTH	66.0 metres				Page 2 of 3 pages
FROM (m)	TO (m)	ADVANCE Samp- RECOVERY % (m) le No 0 8	, ROCK TYPE	STRUCTURE	MINERALIZATION	ANALYSES
. 0	1.5		Parada I Constantin			- Cu Pb Zn
1.5	3.0		Rounded frosty Whyalla sands			
3.0	4.5		11	· · · · · · · · · · · · · · · · · · ·		
4.5	6.0		TT TT			
6.0	7.5		ff grant fr	· ·		
7.5	9.0		11.			
9.0	10.5		rt tt	<b></b>		
10.5	12.0		tt tt	11		
12.0	13.5		n n	u j	*	
13.5	15.0		11	11		
15.0	16.5		11 11	11	·	
	18.0		n n	11		
	19.5		m , u	11	·	
19.5	1		11			
	22.5		<u> </u>	e y v		
			TI III	11		
	24.0		11	11	•	
	25.5		.11	11	•	
	27.0		11	111		
27.0	28.5		H s H	n de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	·	
28.5	30.0		11	TT.		
30 .0	31.5		of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of th	**		

HOLE NUMBER	OEP-11		*
LOCATION 12 mil	e north-east	"Whitata"	H.S.

Vertical

66.0 metres

HOLE AZIMUTH .

60.0

61.5

61 E 62 N

7158

7159

HOLE ANGLE\_

FINAL DEPTH\_

OTTIELS

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Page 1 of 3 pages

DRILLED BY \_\_\_

LOGGED BY B.M. Cowan

88

PERCUSSION

DRILLHOLE LOG SHEET

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FROM (m)	TO (m)		Samp- le No	RECOVERY	ROCK TYPE	STRUCTURE	MINERALIZATION			ANAL	YSES.		
33.0	<del>                                     </del>		16 10	'\ <u>\</u>	Rounded frosty Whyalla sa			Cu	Pb	Zn			
34.5	36.0				Rounded Hosty Whyalia sa	inds Lone		•					
36.0	37.5		7143		11	<b>1</b>							16
37.5	39.0	. :	7144			1		2	<b>&lt;</b> 5	.8			
39.0	40.5		7145	111111	11			2	8	.5	)		
40.5	42.0		7146		11	n in the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second		<b>&lt;</b> 2	<b>&lt;</b> 5	, 2			
42.0	43.5		7147		1 11	n.		5	< 5	.5	ĺ		
43.5	1		7148					2	5	.5	•		
43.3	45.0		/140		and filling fractures	ndstone with pyrite encasing g	rains	-		·-			
45.0	46.5		7149		n n	11		5	5	5			
46.5	48.0	,	7150		11 19	n n		5	12	18			
48.0	49.5		7151		11	11		2	· <5	10			
49.5	51.0		7152		n in	11		2	<b>&lt;</b> 5	10		!	
51.0	52.5		7153		Mostly fine grained Whyal	la Sandstone, red and grey with		< 2	5	10			
					disseminated fine steely	coloured grains		2	<b>&lt;</b> 5	12	-		
52.5	.54.0		7154		, n	tt tt		2	₹5	. 10			
54.0	55.5		7155		11 11	H H	•	2	<b>&lt;</b> 5	12	, ,		
55.5	57.0		7156		tr tr	tt II		2	<b>\</b> 5	10			-
57.0	58.5		7157		tt tt	'11		< 2	. 5	12			

HOLE	NUMBER	<u>OEP-11</u>	
rocy.	TION ½ mile	<u>north-east "Whitat</u> a"	H.S.
HOLE	AZIMUTH	anns and man their anns alon must come their back gives been held	
HOLE	ANGLE	<u>Vertical</u>	
FINAL	DEPTH	66.0 metres	

OTTEER EXPLOSEATION N. L.

PERCUSSION

DRILLHOLE LOG SHEET

DATE COMMENCED \_\_\_\_\_\_

DATE COMPLETED \_\_\_\_\_

DRILLED BY \_\_\_\_\_

LOGGED BY \_\_\_\_\_\_
B.M. Cowan

Sheet 3 of 3 sheets

Y	1	<del>1</del>	<del></del>	T			MAIST ALIZATION!			ANAL	/SES	
FROM (m)	TO (m)	ADVANO	ESamp-	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION	-Gu-	Pb	Zn		
1	64.5	<del>                                     </del>	7161	ĬIIIIIII	Fine red and grev Whyalla S	S. with disseminated steely	coloured grains	2	5	15		
1 1	66.0		7162		11 11	11		5	38	25		
04.3	00.0		7102									
-												
					ЕОН					ï		
4					(No more rods)		•					
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### OTTEER EXPLOSION N. N.



PERCUSSION

DRILLHOLE LOG SHEET

DATE COMMENCED \_\_\_\_\_\_\_

DATE COMPLETED \_\_\_\_\_\_

DRILLED BY \_\_\_\_\_

LOGGED BY \_\_\_\_B\_M\_\_Cowan \_\_\_\_\_

FINAL	DEPIR	man area man anna anna anna anna anna anna an	alesiainen iraka kan kun kun kun kun kun kun kun kun kun ku	Non-principal de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de			Page 1	of 3				
FROM	то	ADVANCE Samp- RE	ECOVERY %	ROCK TYPE	ROCK TYPE STRUCTURE		ANALYSES					
<u>(m)</u>	(m)	(m) le Noo	<u>8</u> 11111111			MINERALIZATION	Cu	Pb	Zn			
. 0	1.5			Brown sand and clay						·		
1.5	3.0			Gypsum and cream sandy clay								
3.0	4.5			Cream sandy clay and gypsum			-					
4.5	6.0			11								
6.0	7.5	7103		Whyalla Sand grains and dis	seminated pyrite = 1%		12	< 5	' 5			
7.5	9.0	7104			n u	·	5	< 5	2			
9.0	10.5	7105		H H	11		5	ζ5	< 2			
10.5	12.0	7106		Whyalla Sandstone with <1%	disseminated pyrite		18	< 5	2			
12.0	13.5	7107		u.	11		8	<5	2			
13.5	15.0	7108		11	11		8	₹5	8		, -	
15.0	16.5	7109	111111	" with trac	e pyrite		10	<5	5			
16.5	18.0	7110		11 11	. 11		10	<b>₹</b> 5	5			
18.0	19.5	7111		11	tt en en en en en en en en en en en en en		18	<5	.8			
19.5	21.0	7112		11 11	11		22	<b>₹</b> 5	5	•		
21.0	22.5	7113		11	TI TI		12	<b>∢</b> 5	5			
22.5	24.0	7114		, H	n in the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second		12	<5	5			
24.0	25.5	7115		II II	11		. 5	< 5.	2			
25.5	27.0	7116		ii ii	11		2	<b>&lt;</b> 5	5			
27.0	28.5	7117		n ii e ii e ii	· · · · · · · · · · · · · · · · · · ·		2	< 5	5			
28.5	30.0	7118		u u	ii .		<2	<b>&lt;</b> 5	12			
30.0	31.5	7119		Whyalla Sandstone with occa	sional trace pyrite		2	<b>&lt;</b> 5	8			

SI 6	SHEE	משמו	OEP-12													
שונ	NON	IDEK					,			_		-			_	•
		- 1		٠	-	_		_		1_	147	٦	٠		_	7

<u>Vertical</u>

66.0 metres

HOLE AZIMUTH

HOLE ANGLE\_

FINAL DEPTH\_\_

CHEFERO

EXIPICDERATECINI N.

PERCUSSION

DRILLHOLE LOG SHEET

DATE COMMENCED		•		•
DATE COMPLETED		. همچه	****	-
DRILLED BY	÷	بسن		٠
LOGGED BY_B.M.Cowan		د مب	·-	

Page 2 of 3 pages

						_		1		ANAL	/SES	·	·
=ROM (m)	TO (m)	ADVANCE (m)	Samp- 1e No		ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn			-
33.0	34.5		7121		Whyalla sandstone with occa	sional trace pyrite		2 ·	₹5	2			
34.5	36.0		7122		in the second second	<b>1</b>		2	<5	.5		•	
36.0	37.5		7123		н н	<b>H</b>		2	₹5	.5			
37.5	39.0		7124					2	₹5	2			
39.0	40.5		7125		11	w .		2	<b>&lt;</b> 5	' 2			
	42.0		7126		п	11		2	<5	2			
12.0	43.5		7127			mal specks of pyrite		2	<b>&lt;</b> 5	8	•		
	45.0		7128		THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE S	n n		< 2	< 5	5		ı	
45.0	46.5		7129		n n	tt tt		5	<b>45</b>	5			
46.5	48.0		7130		ti ii	11		5	< 5	5			
48.0	49.5		7131		11 tt	11		8	< 5	5			
	51.0		7132		11	n n		8	5	5			
	52.5		7133		tt tt	n n		5	< 5	5			
	54.0		7134		11	11 11 11 11 11 11 11 11 11 11 11 11 11		2	< 5	5	-		
	4		7135		n,a ti	n n		10	₹.5	8			
54.0	55.5				1	tt i i i i i i i i i i i i i i i i i i		2	<b>&lt;</b> 5	5			
55.5	57.0		7136	- 1   1   1   1   1   1	,, ,,	11		2	5.	5			
57.0	58.5		7137	- 1 1 1 1 1 1 1 1 1	11	· in		5	5	1 .			
58.5	60.0		7138	_1	" "	11		5	45	1		*	1
60.0	61.5		7139					2	8				
61.5	63.0		7140										
												4	

LE NUMBER	UEY-12
:ATION $1\frac{1}{2}$	niles north Whitata H.S
LE AZIMUTH .	to deal from once show plant plant wine more much purch bean back their little allers.
E ANGLE	Vertical
AL DEPTH	66.0 metres

IEZZPIADEZANIKOM M. I..

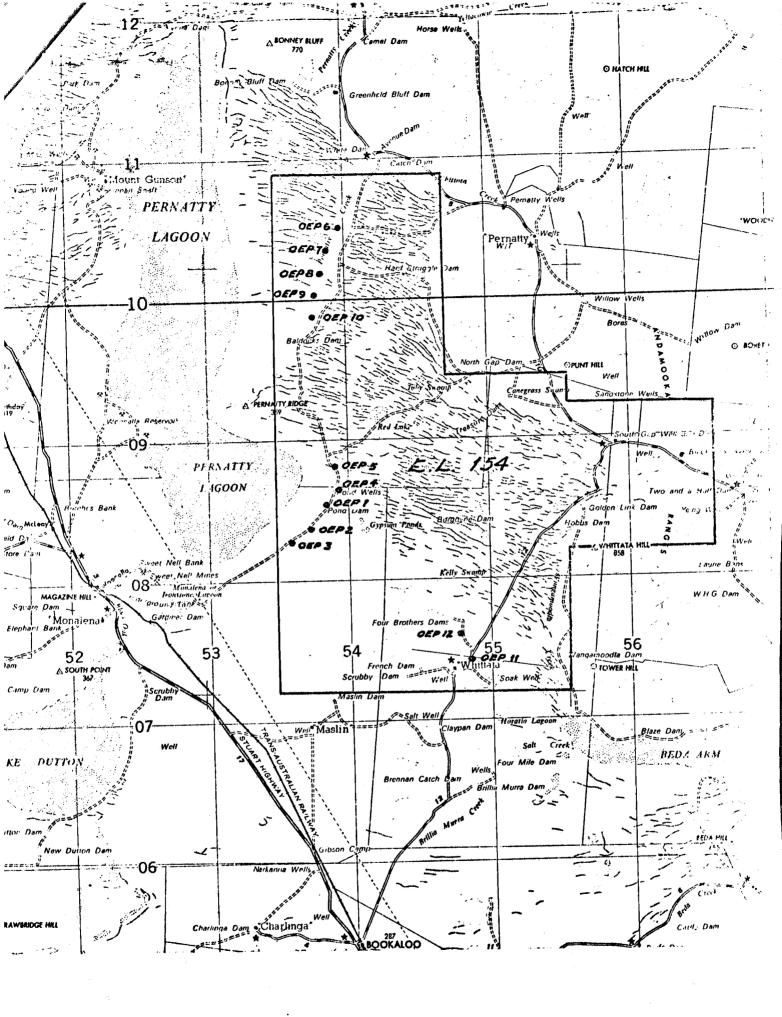
PERCUSSION

DRILLHOLE LOG SHEET

DATE COMMENCED \_\_\_\_ DATE COMPLETED\_\_\_\_ DRILLED BY \_\_\_\_\_ LOGGED BY B.M. Cowan

Page 3 of 3 pages

M TO ADVANCE Samp - RECOVERY %					<del></del>	1		LUNIED ALLT ATION	ANALYSES						
M	(m)	ADVANCE (m)	Samp- le No	RECOVERY	/ % S	, ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn				
0	64.5	\	7141		$\prod_{i=1}^{n}$	Whyalla sandstone with 3%	pyrite		8	₹5	8	-			
5	66.0		7142						2	<b>₹</b> 5	8				
						ЕОН					,				
						Limit of rods									
	1,54	,	,			1	nes finer down the hole. The	1							
						veins and fractures and wr	ans around the rounded frosty	Whyalla grains.							
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n.											-:				



OTTER EXPLORATION N.L.

DRILL HOLE LOCATIONS. E.L. No. 154

ENV 2484 OPEN FILE

Scale 1:250,000

	154 At Pond Dam
HOLE AZIMUTH	
HOLE ANGLE	<u>Vertical</u>
FINAL DEPTH	48.0 metres



# DRILLHOLE LOG SHEET

FINAL [	JEPTH	40.0	mo c1			06	P-1		. •		<u> </u>	Pa	ge 1 o	
FROM	TO	ADVANCE ST	ımı.	RECOVERY %	DOCK TYPE			STRUC	TURE		MINERALIZATION		1	ANALY
(m)	(m)	(m) le	No	)	ROCK TYPE			31NOC	I ONL		THE SECONDARY SECONDARY	Cu	Pb	Zn
0.	1.5				Red brown surface san	dy clay					•		ļ	
1.5	3.0				11 11	11		•			* w	1		
3.0	4.5				11 11 11	"	. •		*			}		
4.5	6.0				11 11 11			•		į	•			
6.0	7.5				11 11 11	11	•		•		<b>V</b> .			
7.5	9.0				Whyalla S.S.?? Pale to grains. Some gypsum	rown. R	ounded	l frosted	siliceo	us				
9.0	10.5		j		11 11 11	11	11	41	".	,				
10.5	12.0				11 11 11	"	~ H	11	9,9					
12.0	13.5				11 11 11	11	11	11	. 11					
13.5	15.0				Pale brown rounded from clay.	rosty gi	ains V	Vhyalla S	.S.?? and	<b>d</b>			ŀ	
15.0	16.5				11 11 11	11	11	11	11	•		~ ~		
16.5	ł					· 11	11	tt.	11					
18.0	1				11 11 11	11 (	11	. 11	11 - 2					
	21.0				Pale grey clay				Λ.					1.
21.0	1				Pale grey clay						•		İ	1
22.5	į.					comple					•		Ì	
	25.5				Lost air return. No		·	•					ĺ	
	27.0				Ran 20 ft. casing to	).					•			
27.0	28.5				regain return.		İ		•					
	Į.							•			• • • • • • • • • • • • • • • • • • •			
28.5	30.0													

ENU 2484

OPEN FILE

LUCA	11014	· — — —	-	######################################	National Property	 ting consists on	energia Terresi
HOLE	AZIMUTH			<u> </u>	<u> </u>	 	
HOLE	ANGLE				<u>,</u>	 	
FINAL	DEPTH			<b></b> -	<del></del>	 	

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2	)	$\subseteq$
17	<b>.</b> .	V

### DRILLHOLE LOG SHEET

LOGGED						1	12	
Da.uto	C.	_	_	***	***	_	***	
demonstration of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the	en annual de la	980,6855	30 30 60	acies.	S. Marie	1000	11.00	×

							·			Page	2 of
FROM	TO	ADVANCE	Samp-	RECOVERY S	<b>%</b>	ROCK TYPE	STRUCTURE	MINERALIZATION			ANA
(m)	(m)	(m)	le No	0	<u>8</u>	ROCK TIPE	SINOCIONE	MINEMALIZATION	Cu	Pb	Zn
30.0	31.5		7036			Pale brown round frosted same	nd grains Whyalla S.S.	*	5 .	<5	12
31.5	33.0		7037			y	11 11 11		5	<b>&lt;</b> 5	10
33.0	34.5		7038			ín u	11		5	<b>&lt;</b> 5	12
34.5	36.0		7039			.H	• • • •		5	<5	,12
36.0	37.5	į	7040						8	<b>&lt;</b> 5	15
37.5	39.0		7041			i n	11 -		5	<b>&lt;</b> 5	15
39.0	40.5		7042			11 11	"		5	<5	12
40.5	42.0		7043			Pale brown frosted rounded	quartz grains. Whyalla S.S.		5	₹5	12
	43.5	ŀ	7044			11 11	11		5	<5	15
43.5	45.0		7045			11.			8	· <b>&lt;</b> 5	12
45.0	46.5		7046			11 . 11	11		8	<b>&lt;</b> 5	10
46.5	48.0		7047			Pale brown frosted rounded	quartz grains. Whyalla S.S.		8	<b>\</b> 5	10
						•					
							ЕОН				
									44		
								er vije i			And the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t

ιœ	ATION :	11	mile.	Southu	iest. o	f. Aond	Pam
L 0:	E 47114	1.47					

Vertical

48.0 metres



PERCUSSION

#### DRILLHOLE LOG SHEET

Page 1 of 2

FINAL	DEPTH			· Commenterated	0EP - 2	·	Page 1	of 2	
52011	**	ADVANCE Samp-	RECOVERY %	DOCK TVDE	STRUCTURE	MINERALIZATION			ANAL
FROM (m)	TO (m)	(m) le No	0 8	ROCK TYPE	SIRUCIURE	MILITERATION	Cu	Pb	Zn
0	1.5			Calcrete and light brown sa	nd				
1.5	3.0			Fine brown angular sand					
3.0	4.5			11				* .	
4.5	6.0			- 11 U					
6.0	7.5			11 11					•
7.5	9.0			Brown clay					
9.0	10.5			Poorly lithified clayey sar grains.		•			
10.5	12.0			11 11	11				
12.0	13.5			11 11	11				
13.5	15.0			u to u	11				
15.0	16.5			tt. U	11				
16.5	18.0			11 !!	11 11	·			
18.0	19.5			Red clay and rounded frost	. 🛊				
19.5	21.0			11	" "				
21.0	22.5			ti II	11		1.0	20	30
22.5	24.0	7019		Yellow brown clay and "Why	alla" sand grains		10	12	25
24.0	25.5	7020		11 11	•	•	10	12	12
25.5	27.0	7021		n Ü	11.			5	10
27.0	28.5	7022		11	11	•	5	12	10
28.5	30.0	7023		11 11	ll ll				
30.0	31.5	7024		11	1		8	10	15

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OPEN FILE .

Vertical 48.0 metres



PERCUESION

#### DRILLHOLE LOG SHEET.

	·	1	<del>,</del>	,	•		<u> </u>	Page	2 of	2
FROM	10	ADVANCE	Samp-		ROCK TYPE	STRUCTURE	MINERALIZATION			AN
(m)	(m)	(m)	le No	'b	3			Cu		Zn
31.5	I.		7025		Yellow brown clay and "Whya			5	10	8
33.0	į.		7026		11 11			2	5	3
34.5	36.0		7027		11 11	••	·	5	10	10
36.0	37.5		7028		" "	u		5	10	12
37.5	39.0		7029		11	n .		5	5	,10
39.0	40.5		7030		"Whyalla" sand grains and c	ay		2	5	12
40.5	42.0		7031		i i	**	•	<2	<5	10
42.0	43.5		7032		11 11	11	**	2	< 5	8
43.5	45.0		7033		11 11	11	• ,	2	< 5	8
45.0	46.5		7034		ii n	11	•	2	< 5	10
46.5	48.0		7035		"Whyalla" sand grains and c	ay		<2	₹5	10
						EOH			<b>.</b>	

2 miles southwest fond from

HOLE ANGLE\_\_\_\_Vertical\_

FINAL DEPTH 48.0 metres



#### PERCUSSION

# DRILLHOLE LOG SHEET

DRILLED BY \_\_\_\_\_ LOGGED BY\_\_\_B.M

						OEP - 3		Page 1	l of 2	page:
FROM	70	ADVANCE	Samp-	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION			AN
(m)	(m)	(m)	le No	<u> </u>	•			Cu_	Pb	Zn_
0	1.5				Clayey sand					
1.5	3.0				Fine angular sand					
3.0	4.5				" "					
4.5	6.0				11 11					
6.0	7.5				u n *					•
7.5	9.0				n n			ļ		
9.0	10.5				11 11		•	ŀ		
10.5	12.5				11 11					
12.0	13.5				Brown clayey sand some roun	ded grains				
13.5	15.0				n n	11	•			
15.0	16.5				n u	11			·	
	18.0				Whyalla sand grains					
	19.5				11 11					
	21.0				11 11					
	22.5		7001					10	ا عر	15
22.5	24.0		7002		" " "			10	<b>₹</b> 5 <b>₹</b> 5	15
24.0	25.5		7003		" "			25	8	}
25.5	27.0		7004		., .,			1	1	10
	ł				11		•	10	8	18
27.0	28.5		7005					12	<b>&lt;</b> 5	22
	30.0		7006					15	15	25
	31.5		7007		11			12	5	18
31.5	33.0	I	7008		1] " "	l	ax 5.8°; 3.1°	10	30	18

HOLE AZIMUTH	
HOLE ANGLE	Vertical
CINIAL DEDTU	48.0 metres



# DRILLHOLE LOG SHEET

						•		Page 2	of 2	
FROM	то	ADVANCE	Samp-	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION			ANAI
(m)	(m)	(m)	le No	0 <u>E</u>				Cu	Pb	Zn
33.0	34.5		7009		Whyalla sand grains and clay		•	10	12	15
34.5	36.0		7010		" . "			65	5	15
36.0	37.5		7011		11 11			10	< 5	12
37.5	39.0		7012		11 11			8	10	12
39.0	40.5		7013		" "	of the second second		5	10	, 8
40.5	42.0		7014		n n			5	<b>&lt;</b> 5	8
42.0	43.5		7015		0 0		•	5	10	12
43.5	45.0		7016		" "			5	8	12
45.0	46.5		7017		11 11			5	<5	8
46.5	48.0		7018		" "			5	<b>&lt;</b> 5	8
									ŀ	
			Ì		ЕОН					
					• 4					
			ľ		This hole caved at about 26	<b>m</b> .	•			
	•	ŀ			inis note cavea at about 20	•••			<b>:</b>	
							•	1		
	!				·		•	-]		
						•		l		1
*		Ì								
						•		1		
•					1 .		<u></u>	<b>[</b> .		

I muse ME along track from fond Dann HOLE AZIMUTH

HOLE ANGLE\_\_\_\_Vertical

FINAL DEPTH\_\_\_\_42\_0\_metres

PERCUSSION

### DRILLHOLE LOG SHEET

LOGGED BY B.M. Co

<del></del> -	<del></del>	<del>,                                     </del>	<del></del>	<del>}                                    </del>	0EP -4	· · · · · · · · · · · · · · · · · · ·	Page 1	of 2	pages
FROM (m).	TO (m)	ADVANCE Samp- (m) le No	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION			ANA
	1	1 Ic Ro					Cu	Pb	Zn_
.0	1.5			Brown clayey sand					
1.5	3.0			11 11					
3.0	4.5			Clayey calcrete			1		
4.5	6.0			Brown clayey sand		· ·			
6.0	7.5			n n		• • • • • • • • • • • • • • • • • • •			,
7.5	9.0			Off white clayey "Whyalla"	and				
9.0	10.5			11	<b>"</b>	· · · · · · · · · · · · · · · · · · ·			
10.5	12.0			u u	n .				
12.0	13.5			11 11	- <b>-1</b>				
13.5	15.0		Wert	Clayey "Whyalla" sand			-		
15.0	16.5	7048		11				•	
16.5	18.0	7049		11			15	10	28
18.0	19.5	7050		11 11			8	<b>&lt;</b> 5	15
19.5	21.0	7051					8	<5	10
	22.5	7052		11 11		<b>♦</b>	8	<b>₹</b> 5	15
1	24.0	7053		0, 11			10	<b>(</b> 5	. 15
- 1	25.5	7054		11		•	8	<b>₹</b> 5	. 15
	27.0	7055		11 11		•	8	<5	18
1	28.5	7056		11 11		·	5	<5	25
	30.0	7057				•	10	<b>₹</b> 5	22
30.0				**			8	<b>₹</b> 5	25
f		7058		11		. <b>4</b> 0 (10) 3	8	<b>&lt;</b> 5	18
31.5	33.0	7059	11111111	" "	•		5	<b>〈</b> 5	18

FINAL DEPTH.

HOLE ANGLE\_

Vertical 42.0 metres



PERCUSSION

# DRILLHOLE LOG SHEET

LOGGED BY\_\_B.M. COV

			=,			·	· · · · · · · · · · · · · · · · · · ·	Page	2 01	z pages
FROM	TO	ADVANCE	Samp-	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION		1 22	ANALY
(m)	(m)	(m)	le No	0 5	8 NOOK 1712			Cu	Pb·	Zn
53.0	34.5		7060		Clayey "Whyalla" sand	A 1		5.	<b>&lt;</b> 5	15
34.5	36.0		7061		11 11	•		8	<b>45</b>	20
36.0	37.5		7062					8	<5	22
37.5	39.0	-	7063		n ·		•	10	<b>&lt;</b> 5	25
39.0	40.5		7064		11 11			8	< 5	.22
	42.0		7065		u, the second			8	₹5	20
			ŀ							
	i i		ļ		ЕОН					
			,							
•					Hole caved, unable to change	rod.				
•	•									
•	,							]		
	ŀ									
.,								ŀ		
						•				1 • 1
							•			
								4.5		
			-			*	· · · · · · · · · · · · · · · · · · ·			
	1	1	1		F1	•	1	1	L	l i

		e i ru	 ence o	2	MAN.	185-	_AJ	E	. R	nd.	QQ.	M	•
,	_		 										

Vertical

48.0 metres



# DRILLHOLE LOG SHEET

B.M. Co

		28 2			DEP -5	•	Pag	e 1 (	of 2 p	ages
FROM	то	ADVANCE Samp- RECOVE	XY %	ROCK TYPE	STRUCTURE	MINERALIZATION				ANALY
(m)	(m)	(m) le Noo	٤	NOCK TITE.		Citis and the contract of the	C	u	Pb	Zn
0	1.5			Pale brown clayey sand	A			. ]		
1.5	3.0			n n						
3.0	4.5			Brown clayey sand						
4.5	6.0			11 11						ŀ
6.0	7.5			11 11		<b>.</b>				,
7.5	9.0			Clayey Whyalla sand grains	mica??			·		
9.0	10.5			11 11	n ·					
10.5	12.0			n * ,	<b>11</b>					
12.0	13.5			H H	II.					
13.5	15.0		,t	11 11	, <u>.</u> #	1. 1. 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.				
15.0	16.5			11 11	<b>u</b>				•	
16.5	18.0			11 11	<b>11</b>					
18.0	19.5			n n	•					
19.5	21.0			11	11					
21.0	22.5	7066		Clayey Whyalla sand grains	red clay			8	₹5	18
22.5	24.0	7067		11 11	11			5	<b>&lt;</b> 5	20
24.0	25.5	7068		11 11	in the second of the second	•		8	< 5	32
25.5	27.0	7069		Clayey Whyalla sand grains	nd gypsum + red clay			5	< 5	22
27.0	28.5	7070		11 17	11 11			5	₹5	38
28.5	30.0	7071		11	11			8	< 5	32
30.0	31.5	7072		" "	11 . 11	•		8	5	40
31.5	33.0	7073			11 11	• • • • • • • • • • • • • • • • • • •		5	12	42

Pond	Dum

OLE AZIMUTH

OLE ANGLE \_\_\_\_ Vertical \_\_\_\_

VALUE DEPTH 48.0 metres \_\_\_\_



#### PERCUSSION

# DRILLHOLE LOG SHEET

DRILLED BY \_\_\_\_\_

	EPTH	48.0 metres		•		age 2	of 2 r	ages ANAL
ROM	то	ADVANCE Samp - RECOVERY %	ROCK TYPE	STRUCTURE M	INERALIZATION	Cu	Pb	Zn
m)	(m)	(m) le Noo			<del></del>		1	
3.0	34.5	7074	Clayey Whyalla sand grains some dark green chips poss	and gypsum + red clay +	·	5.	<b>&lt;</b> 5	
4.5	36.0	7075	Clayey Whyalla sand and gyp			5	10	42
6.0	37.5	7076	n n	u u	,	5	20	45
7.5	39.0	7077	**	n n	· ·	5	12	35
9.0	40.5	7078	Gypsum, green chips and cho	colate clay shale		5	< 5	32
0.5	42.0	7079	n n		•	5	8	ţ
2.0	43.5	7080	Chocolate shale and gypsum			5	22	i
3.5	45.0	7081	11 11		<u>.</u>	5	10	1
15.0	46.5	7082	11 11		•	5	. 20	1
16.5	48.0	7083	Chocolate shale and gypsum			5	15	45
	` .				•		*	
			ЕОН					
					•			
			The "Whyalla" sand in upper	part of this hole may be retransport	ted. The chocolate			
				possibly an ancient lake surface and				
			with the Woomera shales? of	•	•			
			.,		*			
						- 04	ł	
					Mit in die w	1	ı	I

HOLE AZIMUTH	Ruins - Cattleyard Ram
	Crutest



### DRILLHOLE LOG SHEET

LOGGED BY \_\_\_\_\_

Page 1 of 2 pages

FINAL D	DEPTH	38.0 metr	es				Page 1	of 2	pages
					0EP-6	AAA ISS ALIZATIONI			ANAL
FROM (m)	TO (m)	ADVANCE Samp- (m) le No	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn
0	1.5			Brown sandy clay		•			
1.5	3.0	*.		. H w					
3.0	4.5			Fine brown sand					
4.5	6.0			Magnesite and sand		*		•	
6.0	7.5			Fine brown sand					
7.5	9.0			Fine brown sand and magnesi	e				
9.0	10.5			Chocolate shale					
10.5	12.0			11					
12.0	13.5			Grey silty shale					
13.5	15.0	1		" "			_		
15.0	16.5			11					
16.5	18.0	1		W 11					
18.0	19.5			₩ 11					
19.5	21.0			<b>11</b>		· And a second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s			
21.0	22.5			Chocclate and pale blue sha	ile				
22.5	24.0			11		•			
24.0	25.5			pt 11		• • • • • • • • • • • • • • • • • • • •			·
25.5	27.0			M1 11		•			
27.0	28.5			191 13		•			
28.5	30.0			pt 11					
30.0	31.5			eti tt	•	· ************************************			
31.5	33.0			11 11			}.	1	.1

Not the waren	
HOLE AZIMUTH	
HOLE ANGLEVertical	
FINAL DEPTH 48.0 metres	



# DRILLHOLE LOG SHEET

LOGGED BY\_\_\_B\_M\_

Page 2 of 2 pages

FINAL	UEP (R		Marie	e <del>e sumé music à placé</del>	•	· .			
FROM	то	ADVANCE Samp-	RECOVERY %	DOCK TYPE	STRUCTURE	MINERALIZATION		-	ANA
(m)	(m)	(m) le No	08	ROCK, TYPE	SINUCIURE	MINERALIZATION	Cu	Pb	Zn
33.0	34.5			Chocolate and pale blue sha	le ,				
34.5	36.0			3 <sup>1</sup> 11					
36.0	37.5			n n					
	39.0			11		•			
39.0	40.5			"		*		ŀ	4
	42.0			. 11	:				
42.0	43.5			n n					
43.5	45.0			11 11					
45.0	46.5	7084		11		;	2	10	42
	48.0	7085		11 11			2	5	38
40.5	70.0	1,005					1	ŀ	
	-			Drag bit kept plugging up w	th clay. Unable to change				
				rod. Hole abandoned.				1	
								ŀ	
				ЕОН		•			
				This rock is the Woomera sh	   ale i.e. area is stratigraph:	ically above			
		<u> </u>		the Whyalla Sandstone.					
	1				•			ł	
	ł					1			
					•	· · · · · · · · · · · · · · · · · · ·			
	1					•		ł	

HOLE AZIMUTH (Im south of OEP-6)
HOLE ANGLE Vertical
FINAL DEPTH 42.0 metres



#### PERCUSSION

# DRILLHOLE LOG SHEET

DRILLED BY \_\_\_\_\_\_\_
LOGGED BY \_\_\_\_ B.M. Cov

Page 1 of 2 pages

				0EP -7		Page 1	01 2			
MOR:				SECOVEDY OF	2001 7105		MINERALIZATION		<del>,</del>	ANALY
-ROM (m)	(m)				ROCK TYPE	STRUCTURE	MUNICIALIZATION	_  Cu_	Pb	Zn
0	1.5			M	Brown clay and sand					
1.5	3.0				11.					
3.0	4.5				Rounded and angular sand					
4.5	6.0				. 11					
6.0	7.5				Brown clay and sand					,
7.5	9.0				n n	The following the first of			,	
9.0	10.5				11 11		•			
10.5	12		1;		Chocolate clay and green sh	nale				
	13.5				11, .11					
	15.0	1			. 11					
	16.5		ŀ		n n				Ì	
	18.0				Chocolate clay			-		
18.0	19.5	1			Chcolate clay and green sh	a <b>le</b>				
	21.0	1			11 11					
	22.5				11 11				*	
	24.0				11 11		*			
	25.5				11 11			-		1
25.5	3				u u	1.				
27.0	4		ŀ		Chcolate clay and blue-gre	•		v 50.		
28.5	30.0	1			Chocolate clay and shale a	nd blue-green shale	44.56.27		İ	
30.0	31.5				11 11	11				
	33.0	1	Į.		" "	· [ ]	l l	1	1	. 1

HOLE AZIMUTH (1m south of OEP-6)

Vertical HOLE ANGLE\_

42.0 metres



PERCUSSION

# DRILLHOLE LOG SHEET

FINAL D	EPTH	42.			<u>.</u>	•		Page 2	of 2	
				PECONIEN OF	DOCK TYPE	STRUCTURE	MINERALIZATION			ANALY
FROM (m)	TO (m)	ADVANCE (m)	Samp-	RECOVERY %	ROCK TYPE	STRUCTURE	7111 (2.0)	Cu	Pb	Zn
	34.5				Chocolate clay and shale an	d blue-green shale	•			
34.5	36.0				11	u				
36.0	37.5				11	"				
37.5	39.0					"	*	_		60
39.0	40.5	1	7086		n n	•		5	10	1 1
40.5	42.0		7087		Chocolate clay and shale an	d blue-green shale		. 5	5	55
					Woomera shales.					•
									÷	
٠							ar (S)	A <sup>2</sup>		

LOCATION_21	south of Old Pernetty
HOLE AZIMUTH	
HOLE ANGLE	Vertical
	40.0



# DRILLHOLE LOG SHEET

			4	OEP-8				Page 1 of 2 pag			
FROM	TO	ADVANCE Samp-	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION		1	ANAL'		
(m)	(m)	(m) le No	0 8				Cu	Pb	Zn		
0	1.5			Brown angular sand							
1.5	3.0			Off white angular sand	·		1				
3.0	4.5			11.							
4.5	6.0			m n							
6.0	7.5			Clayey brown sand angular							
7.5	9.0			n n							
9.0	10.5			Red and off white clay		•					
10.5	12.0			11 11 °	* .						
12.0	13.5			Grey shale							
13.5	15.0			n e e e e e e e e e e e e e e e e e e e							
15.0	1			Chocolate brown silty claye	rock flour - after fine -g	grained sed.					
16.5	1 .			11 11	n n						
18.0	i				n n			1			
19.5	1				n n			ŀ			
21.0	22.5			Chocolate brown - purple si fine grained sed.	ty clayey rock flour after		•				
22.5	24.0			Blue - purple clay		A		1			
24.0	25.5			Brown - purple clay			1				
25.5	27.0			11 11					-		
27.0	28.5					•			Í		
28.5	30.0			n, n				Ì			
30.0	31.5			11 11							
	33.0	1		1 11			1	1	1.		

LOCATION\_ 2\_m smith of Old Pernatty ruins

HOLE AZIMUTH

HOLE ANGLE\_\_\_\_Vertical\_\_\_\_

FINAL DEPTH\_\_\_\_48.0 metres\_



#### PERCUSSION

### DRILLHOLE LOG SHEET

DRILLED BY \_\_\_\_\_B\_M.

Page 2 of 2 page

					Page 2 of 2 p					
FROM	то	ADVANCE Samp	- RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION			ANA	
(m)	(m)	(m) le N	00	ROCK THE	STROCTORE	77.1. 12.10 (2.2.2)	Cu	РЪ	Zn_	
33.0	34.5			Brown - purple clay		•				
34.5	36.0			11 11			1			
36.0	37.5	7088		Purple and blue shale		·	5	5	60	
37.5	39.0	7089		n n			5	12	65	
39.0	40.5	7090		11			5	5	·50	
40.5	42.0	7091		11			5	<b>\( \( \)</b>	50	
42.0	43.5	7092		11			5	<5	18	
43.5	45.0	7093		11	•		5	5	20	
45.0	46.5	7094		11			5	5	32	
46.5	48.0	7095		11	•		8	. 22	40	
,				EOH - Woomera shale  Bit became plugged, unable	to change rod.		~			
								٠		

HOLE AZIMUTH \_ Vertical

HOLE ANGLE\_

30.0 metres FINAL DEPTH\_



#### PERCUSSION

### DRILLHOLE LOG SHEET

Page 1 of 1

0EP -9									Page 1 or 1		
EPOM.	ROM TO ADVANCE Samp- RECOVERY %			DOCK TYPE		MINERALIZATION		AN.			
(m)	(m)	(m) le No		ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn		
0	1.5			Sandy clay							
1.5	3.0			Brown rounded and angular s	and grains						
3.0	4.5			11	11						
4.5	6.0			11	ıı .						
6.0	7.5			' " "	11						
7.5	t .			u u	n :						
9.0	10.5			Purple brown and grey shale	and clay						
10.5	12.0			n n	11		1	į			
	13.5			11 11	in the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of th						
13.5	1 .				**************************************						
15.0	<u>1</u> .			Purple brown and blue shale	and clay			ŀ			
16.5	3			11 11	n constant						
18.0	·i			n n	n e		-		† 		
	22.5			n n	n						
	24.0	7096		n n	ii .		5.	5	65		
	25.5	7097		n n	<b>*</b>		10	5	42		
25.5	Į.	7098		11			5	12	35		
27.0	t	7099	-1111111111	n n	n		5	8	45		
28.5	1	7100	111111111	11 17	'n		5	10	55		
				ЕОН		•					
				Unable to change rod.							
		1 1		11		1	i	I.	i		

ENU 2484 . OPEN FILE

LOCAT	10N_4_	m1165_50	55,F 5*		<u> </u>
HOLE /	AZIMUTH			<u></u>	
HOLE	NGLE	Verti	ical		
			metres		



# DRILLHOLE LOG SHEET

FINAL D	EPTH	36.0 met			• • • • • • • • • • • • • • • • • • • •		Page 1	of 2	pages
			<u></u>		0GP-10 ·	NO IED ALIZATION			ANAL
FROM	то			ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	РЪ	Zn
(m)	(m)	(m) le No				•			1
0	1.5			Clayey brown rounded ar					
1.5	3.0			11	• <b>11</b>				
3.0	4.5			n n	11	4			1
4.5	6.0			11 11	11	4	1		1.
6.0	7.5			11	•				
7.5	9.0			11	***				
	10.5			Blue grey and brown shale					
10.5	12.0			11				İ	
12.0	1			11				<b> </b> .	
	15.0			n n					
	16.5			n T				1	
	•			11			-		
	18.0			11					
	19.5			n n					,  .
	4 .			11 11					
	22.5			11				1	
	24.0			11 11				1	1
	25.5			11		,			
	27.0			11					
27.0	1			" "					
28.5	30.0				•				
30.0	31.5			11			ì	•	•

31.5 33.0

ENU 2484

OPEN FILE

LOCATION 4 miles south of Old Fernatty

36.0 metres

PERCUSSION

# DRILLHOLE LOG SHEET

DRILLED BY \_\_\_\_\_\_ LOGGED BY B.M. C

Page 2 of 2 page

FINAL	DEPTH			•		Page	2 of 2	
FROM	10	ADVANCE Samp- RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	AN/ Zn
(m) 33.0	(m) 34.5	7101	Blue grey and brown shale	*		5.	10 10	Į.
34.5	1	7102	11	- Woomera shale				
			Bit plugged EOH				,	
						*		

LOCATION.	13 m1	1es_	north_	Nh1	tata	Hrz
TOCALION"						

HOLE AZIMUTH \_\_\_\_\_

HOLE ANGLE\_\_\_\_\_Vertical\_\_\_\_\_

FINAL DEPTH 66.0 metres

ENV 2484



OPEN FILE .

#### PERCUSSION

# DRILLHOLE LOG SHEET

DRILLED BY \_\_\_\_\_\_.

LOGGED BY \_\_\_\_ B.M.\_(

FINAL D	EPTH	66.0 meti	res	. Land	•		Page 1	of 3 r	nages
				OEP	-12.	(	l age x		ANAI
FROM (m)	TO (m)	ADVANCE Samp- (m) le No		ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn_
0	1.5			Brown sand and clay			•		
1.5	3.0	)		Gypsum and cream sandy clay					
3.0	4.5			Cream sandy clay and gypsur	n				
4.5	6.0			11 11					
6.0	7.5	7103		Whyalla Sand grains and dis	sseminated pyrite = 1%		12	<b>&lt;</b> 5	• 5
7.5	9.0	7104		11 11	n u	•	5	< 5	2
	10.5	7105		11	n n	•	5	ζ5	<2
	12.0	7106		Whyalla Sandstone with <1%	disseminated pyrite		18	< 5	2
12.0		7107		11	1 11		8	₹5	2
	15.0	7108	<del>   </del>	11	11		8	<b>₹</b> 5	8
	16.5	7109		" with tra	ce pyrite		10	<b>&lt;</b> 5	5
	18.0	7110		n			10	<5	5
16.5	l:	7111		11			18	<5	8
	19.5	1 1			11	•	22	<5	5
19.5	21.0	7112		11	"	• •	12	₹5	5
21.0	22.5	7113			**		12	<5	5
22.5	24.0	7114					5	<b>(5</b>	2
24.0	25.5	7115		11 11			2	<5	5
25.5	27.0	7116		"			2	<5	5
27.0	28.5	7117		"	11			<b>\ \ \ \ \ \ \ \ \</b>	12
28.5	30.0	7118		" "		40 NG 3	<2		li l
30.0	31.5	7119		Whyalla Sandstone with occ	casional trace pyrite		2	<b>5</b>	8 5
ł.	33.0	7120		11 11	111	. 1	1 2	1 3	, ,

LOCATION_151	miles north Whitata	н.s.
HOLE AZIMUTH _		_
HOLE ANGLE	<u>Vertical</u>	-
FINAL DEPTH	66.0 metres	_



# DRILLHOLE LOG SHEET

LOGGED BY B.M. Cow

FINAL	DEPTH		772	• · · · · · · · · · · · · · · · · · · ·	ا <del>لشاهد، جنسبا</del> :			•	·			Page 2	2 of 3 j		
FROM	TO	ADVANCE Samp-	RECOVERY %		ROCK TYPE			STRUCTURE		MINERALIZATION			ANA		
(m)	(m)	(m) le No	0	<u> </u>	NOCK TITE							Cu_	Pb !	Zn	
33.0	34.5	7121		Whyalla	sandstone wit	th occas	ional tra	ze pyrite		•	×	2.	₹5	2	
34.5	36.0	7122		11	39	*	11				A	2	<b>₹</b> 5	5	
36.0	37.5	7123					11	• *		,		2	₹5	5	
37.5	39.0	7124		. "	*1		11			• •	•	2	₹5	2	
39.0	40.5	7125		11	11.		11		]			2	₹5	' 2	
40.5	42.0	7126		"	. 11		ti .	• •	· .	1		2	₹5	2	
42.0	43.5	7127		Whyalla	sandstone - (	occasion	al specks	of pyrit	te		•	2	<b>&lt;</b> 5	8	
43.5	45.0	7128		. "	11		41	11	•		* * *	< 2	< 5	5	
45.0	46.5	7129				المعود معدمات الد ا	11		•			5	45	5	
	48.0	7130		"	31		11	•	•			5	<b>&lt;</b> 5	5	
	49.5	7131		, ·-	11			•1	•			8	<5	5	
	51.0	7132		91	11	•	11	11	•		· ·	8	5	5	
51.0	52.5	7133						•	11.		•	5	< 5	5	
	54.0	7134		11		•	11	<b>y</b>	u ,		•	2	₹5	5	
54.0	55.5	7135		11.;	.11	•	"	•	11			10	₹,5	8	
55.5	57.0	7136			. "		11	- T	ıt .	e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de l	•	2	<b>&lt;</b> 5	5	
	58.5	7137		"	<b>!!</b>		11.	Ť.	11	•	*	. 2	5.	5	
58.5	60.0	7138			11		• 11	Ì				5	5	8	
60.0	61.5	7139		11	11				nt ·			5	45	8	
61.5	63.0	7140			11		111	.9:	H S		ala ti wa 1	2	8	10	
ĺ							•			•	An washing				
i												1	l	i	
1	•														

LOCA	TION_ 15	miles r	orth	What	<u>ata</u>	<u> </u>
HOLE	AZIMUTH					-
HOLE	ANGLE	Verti	cal_			_
FINAL	DEPTH	66.0	metre	s		



# DRILLHOLE LOG SHEET

DRILLED BY

LOGGED BY B.M. Co

Page 3 of 3 pages

					-	•				
FROM	TO	ADVANCE	Sann	RECOVERY %	DOCK TVD5	CTDLICTLIDE	MINERALIZATION			ANA
(m)	(m)	(m)	le No	0	ROCK TYPE	STRUCTURE	MINERALIZATION	Cu	Pb	Zn
	64.5		7141		Whyalla sandstone with 3%	pyrite		8	<b>(</b> 5	8
64.5	66.0		7142		11.			2	<b>₹</b> 5	8
					EOH Limit of rods					
					i e	es finer down the hole. The	1			
·								-		
* .	.,								÷	
							€ 99°;		· · · · · · · · · · · · · · · · · · ·	

LOCATION & mile north-east "Whitata" H.S

HOLE AZIMUTH

HOLE ANGLE\_\_\_\_\_Vertical\_\_\_\_.

FINAL DEPTH\_\_\_\_\_66.0 metres\_\_



PERCUSSION

# DRILLHOLE LOG SHEET

DRILLED BY \_\_\_\_\_

Page 2 cf 3 pages

FINAL	EPTH		). U _IIIC !	F165		OEP -11 .				ANA
FROM	TO	ADVANCE	Samp-	RECOVERY %		STRUCTURE	MINERALIZATION	Cu	Pb	Zn_
(m)	(m)	(m)	le No	6	8					İ
0	1.5				Rounded frosty Whyalla sand	stone				
1.5	3.0				" "					
3.0	4.5				n	•				
4.5	6.0				in the second second	1				
6.0	7.5				11 11	"				
7.5	9.0	Ì			n u		•	·		
9.0	10.5				" "					
10.5	12.0				" "			}		
12.0	13.5				11					
13.5	15.0				11 11		,	1-		
15.0	16.5									
16.5	18.0				"					
18.0	19.5				u u					
19.5	21.0	Ī	Ì		"					
21.0	22.5				11	,,	•			
22.5	24.0				n "	"				
24.0	25.5				"					
25.5	27.0				11 11	11				
27.0	28.5									
28.5	30.0				"	"		**		
30 .0	31.5				11	" "	were the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of t	į	1	
31.5	33.0		1		"	1 "				

ENU 2484 OPEN FILE.

LOCATION 's mile north-east "Whitata" H.S.

HOLE ANGLE Vertical
FINAL DEPTH 66.0 metres



#### PERCUSSION

### DRILLHOLE LOG SHEET

DRILLED BY \_\_\_\_\_\_\_\_ LOGGED BY \_\_\_ B .M.

Page 1 of 3 pages

				•		•		Page I	or 3 p	ages
FROM	то	ADVANC	E Samp-	RECOVERY %	ROCK TYPE	STRUCTURE	MINERALIZATION		,	ΑN
(m)	(m)		le No		S ROCK TIFE	STRUCTURE	MINEMALA	Cu_	Pb	<u> 2n</u>
33.0	34.5				Rounded frosty Whyalla sand	istone	•			
34.5	36.0		,		11 11	H .				
36.0	37.5		7143		H H	11		2	<b>₹</b> 5	8
37.5	39.0		7144		u u	11	•	2	8	5
39.0	40.5		7145		n v	· ·		<2	<b>&lt;</b> 5	. 2
40.5	42.0		7146		n n	10		5	<b>₹</b> 5	5
42.0	43.5	*	7147		11 11	n e		2	5	5
43.5	45.0		7148			stone with pyrite encasing gr	ains		_	
	· .				and filling fractures	1-		5	5	<b>5</b>
45.0	46.5		7149		H H	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		5	12	18
46.5	48.0		7150		<b>11</b>	11		2	. <5	10
48.0	49.5	-	7151		" "	"		2	<b>&lt;</b> 5	10
49.5	51.0		7152		" "	"		<2	5	. 10
51.0	52.5		7153		Mostly fine grained Whyalla disseminated fine steely co	Sandstone, red and grey with ploured grains		2	<b>&lt;</b> 5	12
52.5	54.0		7154		11	11	*-	2	₹.5	. 10
54.0			7155	- 1		11		2	<b>&lt;</b> 5	12
55.5	1		7156	- 1	11 11		•	2	< 5	10
57.0	58.5		7157		11 11 .	"		< 2	. 5	12
58.5	60.0		7158		n ii	11		< 2	<b>\</b> 5	12
60.0	61.5		7159		11 11	" "	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8	65	40
61.5	63.0		7160		u u	" "	** Tany	< 2	<5	15
	ı		1		<b>11</b> .			i	[ ]	l li

LOCATION & mile north-east "Whitela" H.S. HOLE AZIMUTH \_\_\_ DRILLHOLE LOG SHEET LOGGED BY B.M. COW PERCUSSION Vertical HOLE ANGLE\_\_\_\_\_ 66.0 metres FINAL DEPTH\_\_\_ Sheet 3 of 3 sheet ANAL ADVANCE Samp- RECOVERY % (m) 1e No o MINERALIZATION STRUCTURE FROM ROCK TYPE (m) (m) 15 Fine red and grey Whyalla S S. with disseminated steely coloured grains 7161 63.0 64.5 38 25 7162 66.0 64.5 EOH (No more rods)