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INTERNATIONAL MINING CORPORATION N.L.

REPORT ON
EXPLORATION LICENCE 13/69, AVOCA, TASMANIA.

MICROFILMED

HALL, RELPH & ASSOCIATES PTY. LTD.,

MAY 14, 1970.

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ANALYSIS INFORMATION. *3 pages*

HALL, RELPH & ASSOCIATES PTY. LTD.
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14th May, 1970.

INTERNATIONAL MINING CORPORATION N.L.
REPORT ON
EXPLORATION LICENCE 13/69, AVOCA, TASMANIA
MAY 14, 1970.

SUMMARY

The Avoca E.L. 13/69, consists of approximately 35 square miles located in north-eastern Tasmania.

It is a well known tin and tungsten province and uranium was discovered there in 1955.

Work carried out from January to March, 1970, consisted of preliminary geological, geochemical and radiometric surveys.

The areas of Devonian outcrops (and possible lode occurrences) were thoroughly prospected for radioactive minerals during the late 1950's.

As a result of these preliminary investigations it was decided to concentrate the main exploration and drilling programme in the Permian and Triassic outcrop areas. The drillsites for initially 8 drillholes were chosen to provide stratigraphic information in various areas. Subsequently in April, 1970, a total of 1135 feet of 4" diameter hole by percussion drilling was completed.

The programme to date has not revealed any quantity of radioactive minerals.

Previous plan & assays at back 6
SS

Have we finished?

✓

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- 2 -

High c.p.s. readings of chip samples from P.D.H. No. 6 and similar high c.p.s. readings of surface strata near P.D.H. No. 8 indicate that this section warrants the expenditure of additional exploration funds. This programme should consist of further percussion drilling of holes between P.D.H's No. 6 and 8 and along the strike of the Egan Creek fault.

INTRODUCTION

E.L. 13/69 consisting of approximately 35 square miles is located within the County of Cornwall in north-eastern Tasmania, a few miles from the settlements of Rossarden and Avoca.

Approximate co-ordinates of the Exploration Licence are:-

East Longitude - $147^{\circ}40'$ E.
South Latitude - $41^{\circ}45'$ S.

GEOLOGY

Within the area are block-faulted intensely folded Palaeozoic rocks, intruded by granites and overlain by flat or gently dipping Permian and Triassic rocks.

The primary source of uranium in the province is the tin-wolfram-uranium granites of Storey's Creek and Rossarden. Airborne and ground surveys over part of the area have indicated zones of high gamma ray activity with anomalies restricted to fracture zones in the granite and an exposed outcrop of Permian shale.

Uranium mineralization may be classified into two types: lode deposits and stratified deposits. Either type can form commercial developments.

Lode Deposits

There are numerous small primary deposits in or near old tin workings through the province. At the Royal George Mine, south of Avoca, the secondary uranium-copper-phosphate mineral torbernite occurs in greisen lodes carrying cassiterite, and sulphides of iron, copper and zinc. At the Tasmanian United Uranium workings, pitchblende, carnotite and torbernite occur in a sub-horizontal band of sulphides of iron, lead and zinc.

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Picked samples from this mine assayed as much as 4% $U_3 O_8$ (uranium oxide).

Within the licence area at the Hughes prospect, a picked sample assayed 0.19% $U_3 O_8$ but generally the values are low. Small lodes of wolframite and chalcopyrite are reported to contain the uranium minerals uraninite, pitchblende, carnotite and autunite. There are prospects of locating small lode deposits of uranium associated with sulphide-bearing and tin-wolfram bearing greisen.

Stratified Deposits

The search for this type of deposit has been largely neglected in Australia, although they are important in other parts of the world. Deposits in continental sandstones constitute the bulk of United States reserves and production to date. The deposits are derived from basement rocks and were either formed at the time of deposition of the younger rocks or subsequently transported by underground water.

At Avoca, stratiform uranium deposition has been found in Permian sediments. Outside the licence area in the bed of Prospect Creek, analyses showed 0.014% $U_3 O_8$ over four feet in a black siltstone at the base, followed by three feet of black shale containing 0.03% $U_3 O_8$.

Structure

The exposed strata in the property form a block faulted area of highly folded Palaeozoic rocks intruded by granites and overlain by flat or gently dipping Permian and Triassic rocks.

There are four major faults, the Castle Carey, the Gipps Creek, the Egan Creek and the Western Prospect, extending across the property in a north-northwesterly direction.

- 5 -

This faulting occurred after the Permian and Triassic formations were laid down.

EXPLORATION AND RECENT DEVELOPMENTS

The areas of Devonian granite outcrops (and possible lode occurrences) were thoroughly prospected for radioactive minerals during the late 1950's.

Work carried out in January, 1970, consisted of a reconnaissance geological survey. During this survey a scintillation counter (Scintrex Model-BGS-IS) was used to measure background gamma ray emissions along the roads and on geological traverses. Several known uranium mineral occurrences were visited and examined. Also, a photo mosaic of the property was prepared.

During February and March, a geological field party carried out a stream and stream sediment sampling programme of EL 13/69. Also, a reconnaissance radiometric survey was made in an attempt to record areas of high gamma ray emissions.

As a result of these preliminary investigations it was decided to concentrate the main exploration and targets for the drilling programme in the Permian and Triassic outcrop areas. The drill sites for the first 8 holes were chosen to provide stratigraphic information in various areas. During April a total of 1135 feet of 4" diameter percussion drilling was completed.

The drilling programme to date has not intersected visible radioactive minerals.

Due to the high c.p.s. readings (by Scintrex Model-BGS-IS) from 33 chip samples at 10 feet - 20 feet depth in P.D.H. No.6 and similar high c.p.s. readings of surface exposures near P.D.H. No.8 the area warrants the expenditure of additional exploration funds.

This programme should consist of further drilling of holes down to the granite in the area between locations of drill holes P.D.H's 6 and 8.

SCHEDULES

A - Drill record schedule (see drill hole location plan supplied

<u>Hole No.</u>	<u>Depth</u>	<u>Dip</u>	<u>April, 1970.</u>
P.D.H.-1	210	vertical	
P.D.H.-2	230	"	
P.D.H.-3	160	"	
P.D.H.-4	160	"	
P.D.H.-5	225	"	
P.D.H.-6	75	"	
P.D.H.-7	30	"	
P.D.H.-8	45	"	

B - Gamma Ray log schedule (see gamma ray logs).

<u>Hole No.</u>	<u>Depth logger</u>	<u>Top log Inter.</u>	<u>Btm. Log Inter.</u>
P.D.H.-1	199 ft.-Run No.1	6 ft.	199 ft.
P.D.H.-2	/ 187 ft.- " " 1	6 "	187 "
	/ 228 ft.- " " 2	6 "	228 "
	/ 121 ft.- " " 1	6 "	121 "
P.D.H.-3	/ 158 ft.- " " 2	6 "	158 "
	/ 98 ft.- " " 1	6 "	98 "
P.D.H.-4	/ 156 ft.- " " 2	6 "	156 "
	/ 170 ft.- " " 1	6 "	170 "
P.D.H.-5	/ 222 ft.- " " 2	6 "	222 "
	/ 48 ft.- " " 1	6 "	48 "
P.D.H.-6	/ 72 ft.- " " 2	6 "	72 "
P.D.H.-7	30 ft.- " " 1	6 "	30 "
P.D.H.-8	44 ft.- " " 1	6 "	44 "

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C - Sample Record Schedule (see sample log).

CONCLUSIONS

All of the recovered chip samples were visually examined and checked for radioactivity with the Scintrex counter by the writer.

The strata penetrated by the drill holes consist of a thickness of from 30 to 200 feet of Permian (Castle Carey and Aberfoyle formations) sediments overlying the basement granites. These sediments consist of argillaceous mudstone, clay and shale over interbedded sandstones, shales and quartzite grits. Some carbonaceous material was examined in the black shales of P.D.H. No. 2. The darker coloured sandstone may be greywacke and the lighter coloured are arkose.

It will be difficult to correlate the lithology of the strata penetrated by the present drilling programme as no particular marker or mineral was observed in any of the chip samples.

The drilling to date has not intersected any visible radioactive minerals.

High grade uranium mineralization is generally found in zones of intense crushing and faulting of the basement and sedimentary rocks. The deposits are post-fault and may be along the main fault zones or associated cross-faults and fracture zones. The uranium mineralization appears to be in part controlled by the brecciation of the host rock. This brecciation is the result of folding and faulting.

It is recommended that further drilling of the Permian strata be continued. This drilling to be concentrated in the section between P.D.H.'s No. 6 and 8 and along the strike of the Egan Creek fault.

HALL, RELPH & ASSOCIATES PTY. LTD.

ALJ/sp

Gairdner 9311 100

P.D. M. 100
International Minerals Corp. N.I.

EL Tanning

PERMANENT DATUM
LOG WAS USED FROM
DRAINING MEASURED FROM

DATE 7 Apr 70
RUN NO. 1
DEPTH DRILLER 410
DEPTH LOGGERS 199

TOP LOG INTER. 5
TYPE LOG INTER. S.R.

SAVING: P.M. N.C.I.
LEVEL

MAINT. REC. TEMP. F
OPERATING RIG TIME
RECORDED BY W.S.
FINISHED BY M. Thompson

BORE-HOLE RECORD
NO. 311 FROM TO BIRE FOOT FROM TO

LOCATION APPROX	MILES N	OTHER SERVICES
LAT	LONG	
MILES E		

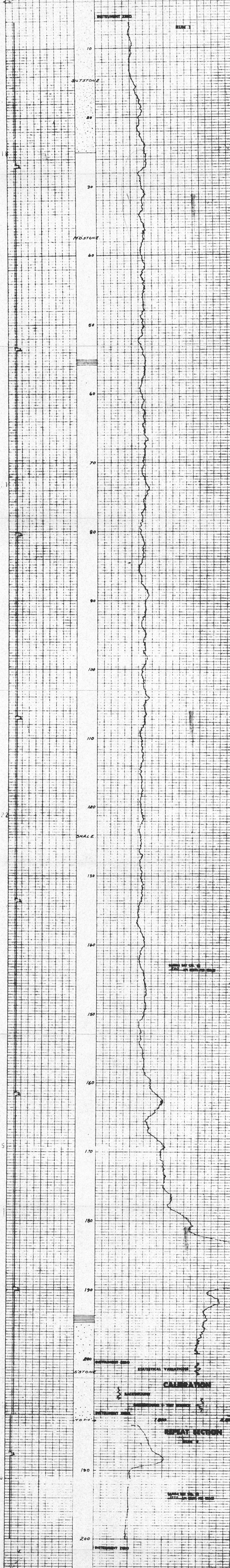
EQUIPMENT DATA

RUN NO.	GAMMA RAY	RUN NO.	NEUTRON
TOOL MODEL NO.	LOG/2P	LOG TYPE	
DIAMETER	1 1/2"	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	
TYPE	S.C.	DETECTOR MODEL NO.	
LENGTH	4'	TYPE	
DISTANCE TO N SOURCE	2'	LENGTH	
		SOURCE MODEL NO.	
		SERIAL NO.	
HOIST TRUCK NO.	2	SPACING	
INSTRUMENT TRUCK NO.		TYPE	
TOOL SERIAL NO.		STRENGTH	

LOGGING DATA

RUN NO.	DEPTH		SPEED FPM	T.C. SEC	SENS. SETTINGS	ZERO DIAL OR A	API CORR	GEOM CORR	COUNTS PER MIN	COUNTS PER LOG INCH	COUNTS PER LOG INCH	COUNTS PER LOG INCH
	FROM	TO										
1	790	0	27	3	7000	0		30				
2	791	182	20	3	5400							

REMARKS



DRILLERS LOG

Gamma Ray Log

PDH #3
 INTERSECTIONAL FILMS CORP. N.L.
 E.L. 741474/4

PERMANENT DATUM: S.L.
 LOCATION: APPROX. MILES N _____ MILES E _____
 LAT. _____ LONG. _____

LOG MEASURED FROM: 0 FT ABOVE PERM. DATUM
 DRILLING MEASURED FROM: S.B.
 DATE: 16 Apr 70
 TIME: 21 Apr 70

DEPTH: 121
 DEPTH LOGGED: 158
 STR. LOG INTER: 151
 TOP LOG INTER: 150
 TYPE FLUID IN HOLE: OIL
 SALINITY: 1.00
 DENSITY: 1.00

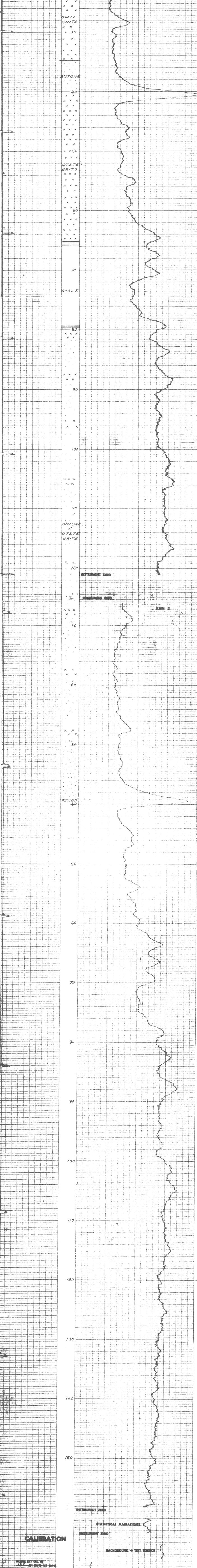
LEVEL	MAINT. REC. TEMP.	OPERATING TIME	RECORDED BY	INTERLEAVED BY	NO. BIT FROM	BORE-HOLE RECORD	CASING RECORD

THIS HEADING AND LOG BASED ON API RP91

GAMMA RAY				NEUTRON			
RUN NO.	TOOL MODEL NO.	DIAMETER	DETECTOR MODEL NO.	RUN NO.	LOG TYPE	TOOL MODEL NO.	DETECTOR MODEL NO.
	CG2724	1 1/4"	S.C.				
GENERAL				GENERAL			
MOIST. TRUCK NO.	INSTRUMENT TRUCK NO.	TOOL SERIAL NO.		MOIST. TRUCK NO.	INSTRUMENT TRUCK NO.	TOOL SERIAL NO.	

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTH	SPEED	LOG	SENS.	SENS.	SENS.	SENS.	SENS.	SENS.	SENS.	SENS.
1	721	121	121	121	121	121	121	121	121	121	121

REMARKS: _____



INSTRUMENT ZERO
 STATISTICAL VARIATIONS
 INSTRUMENT ZERO
 BACKGROUND + TEST SOURCE
 INSTRUMENT ZERO

DRILLERS LOG

004012

DOWN UNDER WELL SERVICES PTY. LTD.

Gamma Ray Log

P D H #6
INTERNATIONAL MINING CORP N.L.
E.L.

LOCATION APPROX
LAT _____ MILES N
LONG _____ MILES E

PERMANENT DATUM, G1
LOG MEASURED FROM _____ FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM _____ FT. B.

DATE	18 Apr 70	21 Apr 70	3
RUN NO.	1	2	
DEPTH DRILLER	50	75	
DEPTH LOGGER	48	72	
B.W. LOG INTER.	4	72	
TOP LOG INTER.	6		
TYPE LOG	G.R.	G.A.	
TYPE FLUID IN HOLE	Water	Cl. br.	
SALINITY, PPM NaCl			
DENSITY			
LEVEL			
MAINT. REC. TEMP. °F			
OPERATING BIG TIME			
RECORDED BY	M. J. ...		
WITNESSED BY	M. J. ...		

BORE-HOLE RECORD
NO. BIT FROM TO SIZE WGT FROM TO

THIS HEADING AND LOG BASED ON API RP31

EQUIPMENT DATA

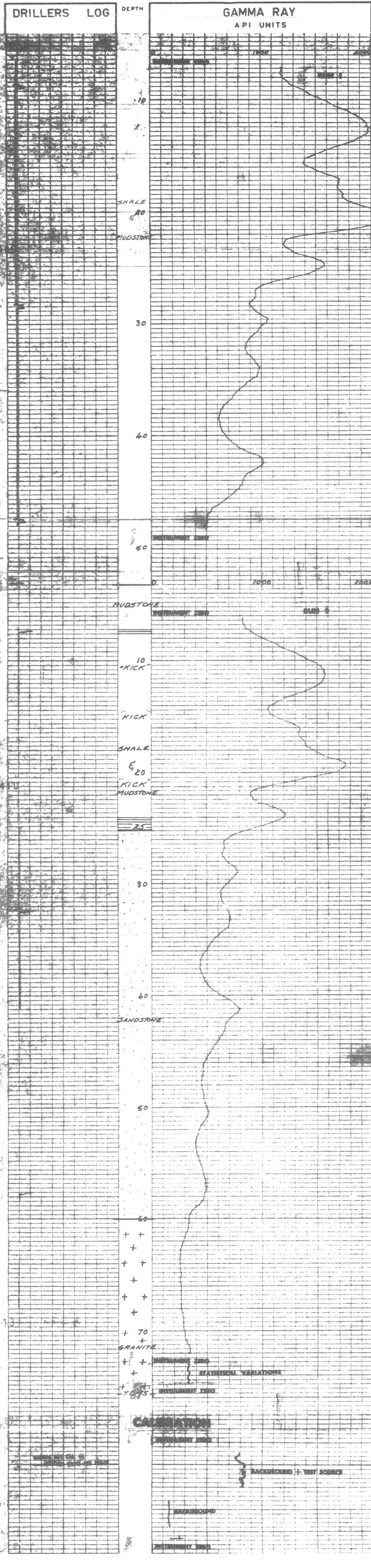
GAMMA RAY				NEUTRON			
RUN NO.	1	2		RUN NO.			
TOOL MODEL NO.	CG27X4C			LOG TYPE			
DIAMETER	1 1/2"			TOOL MODEL NO.			
DETECTOR MODEL NO.				DIAMETER			
TYPE	S.C.			DETECTOR MODEL NO.			
LENGTH	4'			TYPE			
DISTANCE TO N SOURCE				LENGTH			
GENERAL				SOURCE MODEL NO			
HOIST TRUCK NO.				SERIAL NO.			
INSTRUMENT TRUCK NO.				SPACING			
TOOL SERIAL NO.				TYPE			
				STRENGTH			

LOGGING DATA

RUN NO.	GENERAL DEPTHS		SPEED FT/MIN	T.C. SEC	GAMMA RAY			NEUTRON		
	FROM	TO			ZERO DIV. L OR R	API GR. UNITS PER LOG DIV	TC SEC	SENS SETTINGS	ZERO DIV. L OR R	API UNITS PER LOG DIV
1	48	6	19	3	U	10				
2	72	6	26	3						

REFERENCE LITERATURE

REMARKS



DOWN UNDER WELL SERVICES PTY. LTD.

Gamma Ray Log

PDH#8

INTERNATIONAL MINING Corp N.L.

EL

FISHMERE

LOCATION, APPROX

LAT 0 MILES N
LONG 0 MILES E

OTHER SERVICES

ELEV. K B
D F
GL

PERMANENT DATUM, GL

LOG MEASURED FROM 0 FT. ABOVE PERM. DATUM

DRILLING MEASURED FROM

DATE 26 APR 70

RUN NO. 1 2 3

DEPTH DRILLER 45

DEPTH LOGGER 44

BIT. LOG INTER. 44

TOP LOG INTER. 6

TYPE LOG G.R.

TYPE FLUID IN HOLE Water

SALINITY, PPM NaCl

DENSITY

LEVEL

MAX. REC. TEMP. °F

OPERATING BIG TIME

RECORDED BY W.A.D.

WITNESSED BY M.T. CHINA

BORE-HOLE RECORD

NO. BIT FROM TO

SIZE WGT FROM TO

CASING RECORD

THIS HEADING AND LOG BASED ON API RP31

EQUIPMENT DATA

GAMMA RAY			NEUTRON		
RUN NO.	1	2	RUN NO.		
TOOL MODEL NO.	CG27X4D		LOG TYPE		
DIAMETER	1 1/4"		TOOL MODEL NO.		
DETECTOR MODEL NO.			DIAMETER		
TYPE	S.C.		DETECTOR MODEL NO.		
LENGTH	4"		TYPE		
DISTANCE TO N SOURCE	-		LENGTH		
			SOURCE MODEL NO		
GENERAL			SERIAL NO.		
HOIST TRUCK NO.			SPACING		
INSTRUMENT TRUCK NO.			TYPE		
TOOL SERIAL NO.			STRENGTH		

LOGGING DATA

RUN NO.	GENERAL DEPTHS		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED F/MIN	T.C. SEC	SENS. SETTINGS	ZERO DIV. L OR R	API GR. UNITS PER LOG DIV	T.C. SEC	SENS. SETTINGS	ZERO DIV. L OR R	API N UNITS PER LOG DIV
1	44	0	21	3		0	10	-		-	-

REFERENCE LITERATURE

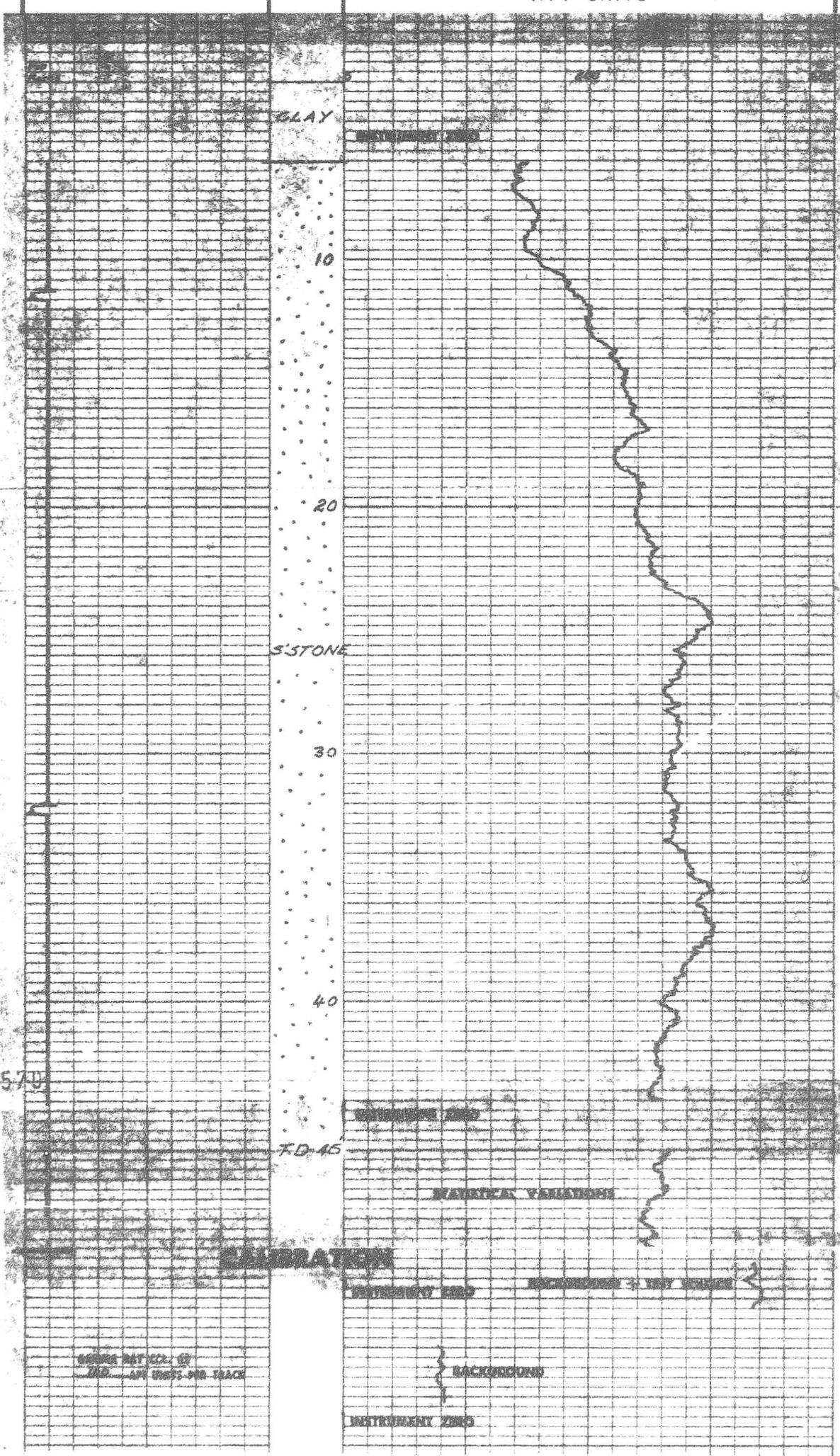
REMARKS

5 cm

DRILLERS LOG

DEPTH

GAMMA RAY API UNITS





LEGEND.

- X Proposed Drill Hole
- Geochemical Sample Location
- p.p.b.w. = parts per billion water
- p.p.m.s.s. = parts per million stream sample
- c.p.s. = counts per second.

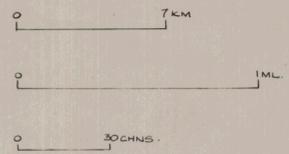
SEDIMENTARY

- CENOZOIC**
- Q Alluvium
 - Δ Dolerite Talus
 - ∇ Granite Talus
- TERTIARY**
- Tg Gravels
- TRIASSIC**
- RF Feldspathic Sandstone & Coal
 - ES Quartz, Sandstone
- PERMIAN**
- Pp Prospect Creek Mudstone
 - Pm Mistletoe Sandstone
 - PL Burnt Gully Limestone
 - Pc Castle Carey Mudstone
 - Pa Abertyle Fm.
- PALAEZOIC**
- Sm Mathinna Beds

IGNEOUS

- TERTIARY**
- TB Basalt
- JURASSIC**
- Jdl Dolerite
- DEVONIAN**
- Dg Granitic Rocks

SCALE



4.1 cm = 7000 m
 1 cm = 1707.3 m
 1 mm = 170.73 m

70-636

INTERNATIONAL MINING CORPORATION N.L.

PROPOSED DRILL HOLE LOCATIONS

E.L. 13/69 TASMANIA

2391

DATE: APRIL, 1970.	SCALE: 30 chains = 1 inch.
GEOLOGY AFTER P. LEGGE, HALL, RELPH & ASSOC. P/L.	

PERCUSSION
~~XXXXXXXX~~ DRILL HOLE RECORD

004019 017

ordinates of Collar
 863500 E 554600
 rted
 ished

Location AVOCA; EL 13/69; TASMANIA
 Direction _____ Inclination Vertical
 Depth _____ Vert. Depth 210ft

Logged by: A.L. Johnston
 Elevation Collar 2710ft
 Casing _____
 Hole No. 1
 Size 4in

EC. %	SECTION		DESCRIPTION	SAMPLE No.	ASSAY	
	From	To			From	To
	Ft.	Ft.				
	0	5	TOPSOIL - siltstone, cream, fine-grained, hard			
	5	10	SILTSTONE - as above			
	10	15	SILTSTONE - as above with some quartzite and some shale			
	15	20	SILTSTONE - as above with some quartzite and some shale			
	20	25	SILTSTONE - as above with some quartzite and some shale			
	25	30	MUDSTONE - grey and some siltstone			
	30	35	MUDSTONE - grey and dark grey shale			
	35	40	MUDSTONE - grey and dark grey shale			
	40	45	MUDSTONE - and shale and siltstone and quartzite pebbles			
	45	50	MUDSTONE - and shale and siltstone and quartzite pebbles			
	50	55	MUDSTONE - and shale and siltstone and quartzite pebbles			
	55	60	SHALE - hard, grey, fine-grained and siltstone and cream pebbles			

PAGE: -2-

REC. %	SECTION		HOLE NO. 1	No.	SAMPLE		ASSAY			
	From	To			From	To				
	Ft.	Ft.								
	60	65	SHALE - hard, grey, fine grained with siltstone and cream pebbles							
	65	70	SHALE - dark grey, hard, fine-grained with siltstone and cream pebbles							
	70	75	SHALE - dark grey as above with siltstone and cream pebbles							
	75	80	SHALE - as above with siltstone and cream pebbles							
	80	85	SHALE - as above with siltstone and cream pebbles							
	85	90	SHALE - dark grey, hard, fine-grained with cream quartzite pebbles							
	90	95	SHALE - dark grey, hard, fine-grained with cream quartzite pebbles							
	95	100	SHALE - dark grey, hard, fine-grained with cream quartzite pebbles							
	100	105	SHALE - as above							
	105	110	SHALE - as above							
	110	115	SHALE - as above							
	115	120	SHALE - as above							
	120	125	SHALE - as above							

REC. %	SECTION		HOLE NO. 1	No.	SAMPLE		ASSAY		
	From	To			From	To			
	Ft.	Ft.							
	125	130	SHALE - dark grey, hard, fine-grained with cream quartzite pebbles						
	130	135	SHALE - as above						
	135	140	SHALE - as above						
	140	145	SHALE - black, fine-grained, hard						
	145	150	SHALE - as above						
	150	155	SHALE - as above						
	155	160	SHALE - as above						
	160	165	SHALE - as above						
	165	170	SHALE - grey-black, hard, fine grained with sandstone, light green, fine-grained with quartzite grits						
	170	175	SHALE - as above						
	175	180	SHALE - as above						
	180	185	SHALE - as above						
	185	190	SHALE - as above						
	190	195	SHALE - as above						

004022

020

REC. %	SECTION		HOLE NO. 1	No.	SAMPLE		ASSAY		
	From	To			From	To			
	Ft.	Ft.	SANDSTONE - light green, medium-grained, sericite with quartzite grits and shale						
	195	200							
	200	205	SANDSTONE - as above						
	205	210	SANDSTONE - as above						

PERCUSSION
~~XXXXXXXX~~ DRILL HOLE RECORD

004023

021

Coordinates of Collar
 863150 E 553125
 Direction
 Depth

Location AVOCA, EL13/69; TASMANIA
 Direction _____ Inclination Vertical
 Depth _____ Vert. Depth 230ft

Logged by: A.L. Johnston Hole No. 2
 Elevation Collar 2700ft Size 4in
 Casing _____

EC. %	SECTION		DESCRIPTION	SAMPLE		ASSAY		
	From	To		No.	From	To		
	Ft.	Ft.						
	0	5	TOPSOIL - mudstone, grey and hard					
	5	10	SHALE - light brown, fine-grained, granular and fine-grained siltstone					
	10	15	SHALE - as above					
	15	20	SHALE - as above					
	20	25	SHALE - dark grey, fine grained, medium-hard					
	25	30	SHALE - light grey, fine grained, medium-hard					
	30	35	SHALE - dark grey, fine grained, medium-hard with fine grained sandstone and quartzite chert and pebbles					
	35	40	SHALE - as above					
	40	45	SHALE - as above					
	45	50	SHALE - as above					
	50	55	SANDSTONE - light green, fine grained, sericite and dark grey shale					
	55	60	SANDSTONE - as above					

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REC. No.	SECTION		HOLE NO. 2	No.	SAMPLE		ASSAY
	From	To			From	To	
	Ft.	Ft.					
	60	65	SANDSTONE - light green, fine grained, sericite				
	65	70	SANDSTONE - as above				
	70	75	SANDSTONE - as above				
	75	80	SANDSTONE - as above				
	80	85	SANDSTONE - as above				
	85	90	SHALE - dark grey, soft with sandstone, fine-grained with quartzite grits and pebbles				
	90	95	SHALE - as above				
	95	100	SANDSTONE - dark grey, fine-grained with dark grey shale with black carboniferous material				
	100	105	SANDSTONE - as above				
	105	110	SANDSTONE - as above				
	110	115	SANDSTONE - as above				
	115	120	SANDSTONE - as above				
	120	125	SANDSTONE - as above				

REC. %	SECTION		HOLE NO. 2	No.	SAMPLE		ASSAY		
	From	To			From	To			
	Ft.	Ft.							
	125	130	SANDSTONE - dark grey, fine-grained with dark grey shale with black carboniferous material						
	130	135	SANDSTONE - as above						
	135	140	SANDSTONE - as above						
	140	145	SANDSTONE - as above						
	145	150	SANDSTONE - dark green, fine-grained, sericite						
	150	155	SANDSTONE - as above						
	155	160	SANDSTONE - as above in 140-145						
	160	165	SANDSTONE - as above in 145-150						
	165	170	SANDSTONE - as above in 145-150						
	170	175	SANDSTONE - as above in 145-150						
	175	180	SANDSTONE - as above in 145-150						
	180	185	SANDSTONE - light green, medium-grained, sericite						
	185	190	SANDSTONE - light green, medium-grained, sericite with quartzite grits and pebbles						
	190	195	SANDSTONE - as above						

REC. %	SECTION		HOLE NO. 2	No.	SAMPLE		ASSAY		
	From	To			From	To			
	Ft.	Ft.							
	195	200	SANDSTONE - light green, medium-grained, sericite with quartzite grits and pebbles						
	200	205	SANDSTONE - as above						
	205	210	SANDSTONE - light green, medium-grained, sericite with quartzite grits and arkose						
	210	215	SANDSTONE - as above						
	215	220	SANDSTONE - as above						
	220	225	SANDSTONE - as above						
	225	230	SANDSTONE - as above						

REG. %	SECTION		HOLE NO. 3	No.	SAMPLE		ASSAY
	From	To			From	To	
	Ft.	Ft.					
	55	60	QUARTZITE - grits and pebbles, light grey, fine-grained with light grey shale				
	60	65	QUARTZITE - as above				
	65	70	QUARTZITE - grits and pebbles, light grey, fine-grained with dark grey shale				
	70	75	QUARTZITE - as above				
	75	80	QUARTZITE - as above				
	95	100	SANDSTONE - coarse-grained, light grey with quartzite grits and pebbles				
	110	115	SANDSTONE - as above				
	125	130	SANDSTONE - coarse-grained, light grey (may be arkose?) with quartzite grits and grey shale				
	130	135	SANDSTONE - as above				
	135	140	SANDSTONE - as above				
	140	145	SANDSTONE - coarse-grained, light grey (may be arkose?) with quartzite grits and yellow clay				
	145	150	SANDSTONE - as above				

HOLE NO. 3

REC. %	SECTION From To			No.	SAMPLE From To		ASSAY		
	Ft.	Ft.	SANDSTONE - coarse-grained, light grey (may be arkose?) with quartzite grits and yellow clay						
	150	155							
	155	160	SANDSTONE - as above						

PERCUSSION
~~XXXXXXXX~~ DRILL HOLE RECORD

004030 028

ordinates of Collar
 868500 E 551700

Location AVOCA; EL 13/69; TASMANIA

Logged by: A.L. Johnston

Hole No. 4

ted
 ished

Direction _____ Inclination Vertical
 Depth _____ Vert. Depth 160ft

Elevation Collar 2700ft

Size 4in

Casing _____

SEC.	SECTION		DESCRIPTION	No.	SAMPLE		ASSAY	
	From	To			From	To		
	Ft.	Ft.						
	0	5	TOPSOIL - shale, light grey to light brown, soft, fine-grained					
	5	10	SHALE - as above					
	10	15	SHALE - light grey, soft, fine-grained					
	15	20	SHALE - light grey, soft, fine-grained with brown mudstone					
	20	25	SHALE - light grey, fine-grained, medium-hard					
	25	30	SHALE - light grey, fine-grained, medium-hard with grey mudstone					
	30	35	SHALE - as above					
	35	40	SHALE - as above					
	40	45	SHALE - as above					
	45	50	SHALE - light grey, fine grained, medium-hard					
	50	55	SHALE - as above					
	55	60	SHALE - as above					

REC. %	SECTION		HOLE NO. 4	No.	SAMPLE		ASSAY		
	From	To			From	To			
	Ft.	Ft.							
	60	65	SHALE - light grey, fine-grained, medium-hard with interbedded mudstone, fine-grained sandstone with quartzite grits						
	65	70	SHALE - as above						
	70	75	SHALE - as above						
	75	80	SHALE - as above						
	80	85	SHALE - as above						
	85	90	SHALE - as above						
	90	95	SHALE - light grey, fine-grained, medium-hard with interbedded mudstone, fine-grained sandstone with quartzite grits						
	95	100	SHALE - light grey, fine-grained, medium-hard with interbedded mudstone, fine-grained sandstone with quartzite grits and arkose						
	100	105	SHALE - light grey, fine-grained, medium-hard with interbedded mudstone, fine-grained sandstone with quartzite grits and mudstone						

PAGE: 3

REC. %	SECTION		HOLE NO. 4	No.	SAMPLE		ASSAY		
	From	To			From	To			
	Ft.	Ft.							
	105	110	SANDSTONE - light green, fine-grained, sericite and shale, light grey and quartzite grits						
	110	115	SANDSTONE - light grey with interbedded quartzite grits with some slate and mica						
	115	120	SANDSTONE - as above						
	120	125	SANDSTONE - as above						
	125	130	SANDSTONE - as above						
	130	135	SANDSTONE - as above						
	135	137	SANDSTONE - as above						
	137	140	GRANITE - at 137ft depth = quartz, felspar, mica and hornblende						
	140	145	GRANITE - as above						
	145	150	GRANITE - as above						
	150	155	GRANITE - as above						
	155	160	GRANITE - as above						

~~XXXXXXXX~~ DRILL HOLE RECORD

004033

031

Coordinates of Collar
869900 E 552450
Depth
Direction

Location AVOCA; EL 13/69; TASMANIA
Direction _____ Inclination Vertical
Depth _____ Vert. Depth 225ft

Logged by: A.L. Johnston Hole No. 5
Elevation Collar 2600ft Size 4in
Casing _____

EC. %	SECTION		DESCRIPTION	SAMPLE			ASSAY		
	From	To		No.	From	To			
	Ft.	Ft.							
	0	5	TOPSOIL - mudstone, soft, fine-grained, siliceous with grey shale fragments						
	5	10	MUDSTONE AND SHALE - mixed, soft, fine-grained, siliceous with grey shale fragments						
	10	15	MUDSTONE AND SHALE - as above						
	15	20	MUDSTONE AND SHALE - as above						
	20	25	SHALE - grey, fine-grained, soft						
	25	30	MUDSTONE AND SHALE - mixed, soft, fine-grained, siliceous with grey shale fragments						
	30	35	SHALE - grey, fine-grained, soft						
	35	40	MUDSTONE AND SHALE - mixed, soft, fine-grained, siliceous with grey shale fragments						
	40	45	SHALE - grey, fine-grained, soft						

REC. %	SECTION		HOLE NO. 5	No.	SAMPLE		ASSAY		
	From	To			From	To			
	Ft.	Ft.							
	45	50	MUDSTONE AND SHALE - mixed, soft, fine-grained, siliceous with grey shale fragments						
	50	55	SHALE - grey, fine-grained, soft						
	55	60	MUDSTONE AND SHALE - mixed, soft, fine-grained, siliceous with grey shale fragments						
	60	65	MUDSTONE AND SHALE - as above						
	65	70	SHALE - dark grey, fine-grained, soft and some granular mudstone						
	70	75	SHALE - as above						
	75	80	SHALE - as above						
	80	85	SHALE - as above						
	85	90	SHALE - as above						
	90	95	SHALE - as above						
	95	100	SHALE - dark grey, fine-grained, soft and some granular mudstone with quartzite grits						
	100	105	SHALE - as above						

REC. No.	SECTION		HOLE NO. 5	No.	SAMPLE		ASSAY	
	From	To			From	To		
	Ft.	Ft.						
	105	110	SANDSTONE - grey, medium-grained with quartzite grits and some dark grey shale fragments					
	110	115	SANDSTONE - as above					
	115	120	SANDSTONE - as above					
	120	125	SANDSTONE - as above					
	125	130	SHALE - dark grey, fine-grained, soft					
	130	135	SANDSTONE - grey with quartzite grits and some dark grey shale fragments					
	135	140	SANDSTONE - as above					
	140	145	SANDSTONE - as above					
	145	150	SANDSTONE - as above					
	150	155	SANDSTONE - as above					
	155	160	SANDSTONE - as above					
	160	165	SANDSTONE - as above					
	165	170	SANDSTONE - as above					
	170	175	SANDSTONE - as above					

REG. %	SECTION		HOLE NO. 5	No.	SAMPLE		ASSAY	
	From	To			From	To		
	Ft.	Ft.						
	175	180	SHALE - with some quartzite grits and some sandstone					
	180	185	SHALE - as above					
	185	190	SANDSTONE - with quartzite grits and dark grey shale fragments					
	190	195	SANDSTONE - as above					
	195	200	SANDSTONE - as above					
	200	205	GRANITE - (quartzite and felspar and mica)					
	205	210	GRANITE - as above					
	210	215	GRANITE - as above					
	215	220	GRANITE - as above					
	220	225	GRANITE - as above					

PERCUSSION
~~XXXXXXXXXX~~ DRILL HOLE RECORD

004037 035

Coordinates of Collar
 867800 E 555200
 orted
 nished

Location AVOCA; EL 13/69; TASMANIA
 Direction _____ Inclination Vertical
 Depth _____ Vert. Depth 75ft

Logged by: A.L. Johnston Hole No. 6
 Elevation Collar 2650ft Size 4in.
 Casing _____

REC. %	SECTION		DESCRIPTION	SAMPLE		ASSAY	
	From	To		No.	From	To	
	Ft.	Ft.					
	0	5	TOPSOIL - mudstone, medium grey, soft				
	5	10	SHALE - light grey, soft				
	10	15	SHALE AND MUDSTONE - mixed, soft, medium grey, 60 c.p.s. by Scintrex				
	15	20	SHALE AND MUDSTONE - mixed, soft, medium grey, 55 c.p.s. by Scintrex				
	20	25	SHALE AND MUDSTONE - mixed, quartzite grits and sericite, 60 c.p.s. by Scintrex				
	25	30	SANDSTONE - light green, fine-grained, medium-hard, some sericite, few quartzite grits and pebbles				
	30	35	SANDSTONE - as above				
	35	40	SANDSTONE - as above				
	40	45	SANDSTONE - as above				
	45	50	SANDSTONE - as above				
	50	55	SANDSTONE - as above				
	55	60	SANDSTONE - as above				

REC. %	SECTION From To		HOLE NO. 6	No.	SAMPLE From To		ASSAY		
	Ft.	Ft.							
	60	65	GRANITE - quartz, felspar, mica and hornblende						
	65	70	GRANITE - as above						
	70	75	GRANITE - as above						

039

THE AUSTRALIAN MINERAL DEVELOPMENT LABORATORIES

004041

PLEASE ADDRESS ALL CORRESPONDENCE TO THE DIRECTOR.

OUR REFERENCE: AN3/414/0

2949/70

YOUR REFERENCE:

27th February, 1970.

Mr J. Whiting,
Hall, Relph and Associates Pty Ltd,
36-38 Clarence Street,
SYDNEY NSW 2000.

Letter dated 16.2.70

REPORT AN2949/70

YOUR REFERENCE:

Letter dated 16.2.70

IDENTIFICATION:

As Listed

DATE RECEIVED:

17.2.70

Enquiries quoting AN2949/70 to Officer in Charge please.

Analysis by: G.R. Holden and D.L. James

Officer in Charge, Analytical Section:

A.B. Timms

A.B.T.

for N. Draper
Director.

pkm

040

AN2949/70

004042

2.

ANALYSIS
Parts per billion

Sample Mark	Uranium
	U

Stream Waters

GC	1	<5
	2	<5
	3	<5
	4	<5
	5	<5
	6	<5
	7	<5
EC	1	<5
	2	<5
	3	<5
BB	1	<5
	2	15
	3	5
	4	<5
	5	<5
CCC	1	<5
	2	<5
	3	20
	4	<5
	5	<5

041

AN2949/70

004043_{3.}

ANALYSIS

Parts per million

Sample Mark	Uranium U	Tin Sn
Stream sediments		
GC 1	<5	10
2	<5	40
3	<5	30
4	<5	40
5	<5	10
6	<5	80
7	<5	60
CCC 1	<5	10
2	5	<10
3	5	<10
4	15	<10
5	30	<10