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GEOPHOTO MINERALS REPORT 1971/43

Q41

E.L. 6/68 - NORTH EAST TASMANIA

CONSTABLE'S CREEK PROJECT
DIAMOND DRILLING

PREPARED BY

GEOPHOTO RESOURCES CONSULTANTS

FOR

TEXINS DEVELOPMENT PTY. LIMITED

I.R. MORTIMORE
DECEMBER, 1971

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- (a) Constable's Creek D.D.H. 4 Core and Sludge Samples
- (b) Constable's Creek D.D.H. 5 Core and Sludge Samples

DRAWINGS

Drawing No. 1/120 Constable's Creek Geological Map
(updated)

INTRODUCTION

This report should be read in conjunction with, and as a following on from, Geophoto Minerals Report 1970/3, which recommended further drilling on geochemical anomalies, located during a soil survey and situated in the contact zones close to Constable's Creek D.D.H.3.

This report deals with that drilling.

CONSTABLE'S CREEK D.D.H.4

Co-ordinates of Collar: Grid point 04E + 06S

Bearing: 185° Depression: 45°

Projected Depth: 400ft.

Constable's Creek D.D.H.4 was drilled to test molybdenum anomalies (to 90 p.p.m.) located close to the granite/metasediment contact of this denuded cupola of Devonian 'tin' granites. The area shows no evidence of molybdenum mineralisation although it carried a number of quartz and mica greisen veins of a late pneumatolytic or hydrothermal phase with the granites greisenised to varying degrees. The veins strike between 90° and 110° and dip steeply northwards.

A medium to coarse grained biotite granite, with a typical hypidiomorphic granular texture, was encountered over the total 381'10" to which the hole was drilled. Within the upper levels there is considerable alteration of the feldspar and ferromagnesian mineral contents with secondary kaolinite, chlorite, muscovite and iron compounds. Chlorite was apparent throughout the core in varying proportions.

Individual intervals, generally less than 3 feet in width, show a variety in rock type with feldspathised, siliceous, chloritic, pegmatitic and greisenised forms common.

Only trace mineralisation was observed with bismuthinite and molybdenite in greisenised zones over the upper 40 feet and minor pyrite and/or chalcopyrite associated with joint planes or loosely disseminated through the matrix at various intervals throughout the core.

A more comprehensive description of the core is to be found in the report covering the drill records.

A total of 100'10" of core was analysed for Mo, W and Sn with 30 sludge samples analysed for Mo, W, Bi and Sn.

As expected, after megascopic examination, the assays were poor with values to 40 p.p.m. Mo only being recorded in the core analysis.

The sludge samples also yielded only weak values to 30 p.p.m. Mo, 20 p.p.m. Bi and 0.08% Sn.

CONSTABLE'S CREEK D.D.H.5

Co-ordinates of Collar: 138 feet on bearing 134° from grid point
04E+24S

Bearing: 007° Depression: 45°

Projected Depth: 400 feet

The drilling of D.D.H.5 was designed to test the contact zone of the granites which had, in previous exploration work, shown evidence of Mo/Bi/W/Sn mineralisation associated with a number of quartz, quartz-greisen and mica greisen veins developed in granites which themselves display signs of alteration and greisenisation.

Cobra rock drilling of the veins visible in the creek bed yielded tungsten and bismuth values (to 0.65% W and 0.18% Bi) and a later soil geochemical programme revealed a broad zone of moderate molybdenum values (to 80 p.p.m.) coinciding with this vein system.

Constable's Creek D.D.H.3, drilled some 400 feet to the north, had encountered a shallow zone of marginal tungsten values (0.05%) and minor bismuth values (to 400 p.p.m.).

D.D.H.5 was collared in metasediments of the Silurian Mathinna Beds. These consisted of spotted shales and siltstones, locally altered to hornfels. They are generally micaceous and carry pyrite which has been oxidised causing considerable staining of the core.

At 30'2" a sharp contact between the hornfels and granitic rocks is observed. Over the upper 15" the granites are basically fine grained, highly siliceous with aggregates of ferromagnesian minerals, possible xenoliths, and occasional large feldspar phenocrysts.

Below these depths biotite granites and/or adamellites are encountered, continuing to the final depth with similar textures and composition to those seen in the previous holes. Small variations in composition are noted over limited sections with changes in the ferromagnesian content and secondary chlorite content the most conspicuous of these.

Sections of mica (biotite-muscovite) greisen and quartz greisen are common at certain depths varying in width to 4'8". These greisens and individual quartz veins (to 3" width) carry trace mineralisation over the upper 170 feet of granites. Molybdenite, wolframite, chalcopryrite, pyrite and arsenopyrite are all apparent in trace amounts.

The greisen and quartz veins are conspicuous to a depth of 332 feet but less so below this level.

The hole was terminated at 403'3".

A total of 132'11" of core and 33 sludge samples were analysed for Mo, Bi, W and Sn.

Again the results failed to yield values of interest. Peak values were 70 p.p.m. Mo and 0.08% Sn.

CONCLUSIONS

The geochemical laboratory reports virtually speak for themselves in any evaluation of this prospect area. No further information of economic significance was obtained from Constable's Creek D.D.H.4 and D.D.H.5 which can be used to add substance to the data and conclusions of Geophoto Minerals Report 1970/3.

From the results of the 5 diamond drill holes which have now been drilled to depths between 203 ft and 415 ft within the contact zones of this denuded granitic cupola, it must be concluded that no mineralised vein system exists, which may present a sufficient tonnage and grade economically exploitable in any mining operation.

No further expenditure is warranted on exploratory work on this prospect area of Constable's Creek.

I.R. MORTIMORE,
December, 1971.

APPENDIX

Geochemical Laboratory Reports:

- (a) Constable's Creek D.D.H. 4 Core Samples Lab. Sheet 695/1
Constable's Creek D.D.H. 4 Sludge Samples Lab. Sheet 695/2
- (b) Constable's Creek D.D.H. 5 Core Samples Lab. Sheets 716/1-2
Constable's Creek D.D.H. 5 Sludge Samples Lab. Sheets 738/1-2

GEOCHEMICAL LABORATORY REPORT 810008

FIELD SHEET No. 006423-28 PROJECT No. EL.6/68 - CONSTABLES CREEK D.D.H. 4

LAB. SHEET No. 695/1 SAMPLE TYPE D.D.H. CORE DATE 28th July, 1971.

SAMPLE No.	LAB. No.	Mo ppm	W %	Sn %				
24'0"- 28'0"	71-G-55	10	BLD	BLD				
28'0"- 34'0"	71-G-56	10	BLD	BLD				
34'0"- 39'0"	71-G-57	BLD	BLD	BLD				
39'0"- 44'0"	71-G-58	BLD	BLD	BLD				
74'6"- 77'3"	71-G-59	BLD	BLD	BLD				
77'3"- 81'6"	71-G-60	40	BLD	BLD				
95'0"- 98'0"	71-G-61	BLD	BLD	BLD				
98'0"-104'6"	71-G-62	BLD	BLD	BLD				
124'6"-129'6"	71-G-63	BLD	BLD	BLD				
129'6"-134'6"	71-G-64	BLD	BLD	BLD				
144'6"-149'6"	71-G-65	BLD	BLD	BLD				
149'6"-154'6"	71-G-66	BLD	BLD	BLD				
154'6"-157'0"	71-G-67	BLD	BLD	BLD				
157'0"-159'0"	71-G-68	BLD	BLD	BLD				
159'0"-162'0"	71-G-69	BLD	BLD	BLD				
172'0"-175'0"	71-G-70	BLD	BLD	BLD				
266'0"-270'0"	71-G-71	BLD	BLD	BLD				
308'0"-313'0"	71-G-72	BLD	BLD	BLD				
313'0"-318'0"	71-G-73	BLD	BLD	BLD				
318'0"-321'0"	71-G-74	BLD	BLD	BLD				
365'0"-370'0"	71-G-75	BLD	BLD	BLD				
370'0"-375'0"	71-G-76	BLD	BLD	BLD				
375'0"-381'10"	71-G-77	BLD	BLD	BLD				

METHODS:

This laboratory is registered by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of registration.

Mo by G.R.C. No. 102

W by G.R.C. No. 104

Sn by G.R.C. No. 105

B.L.D. = Below Limit of Detection

(Limit of Detection = Sn 0.01%/W 0.05%)



Chief Chemist

Ray
W. J. [Signature]

GEOCHEMICAL LABORATORY REPORT 810009

FIELD SHEET No. 006429 PROJECT No. EL.6/68 - CONSTABLES CREEK D.D.H. 4

LAB. SHEET No. 695/2 SAMPLE TYPE DDH SLUDGE DATE 28th July, 1971.

SAMPLE No.	LAB. No.	Mo ppm	Bi ppm	W ppm	Sn %
0'0"- 13'6"	71-G-78	5	BLD	BLD	BLD
13'6"- 34'0"	71-G-79	15	BLD	BLD	0.03
34'0"- 44'0"	71-G-80	15	20	BLD	0.03
55'0"- 65'0"	71-G-81	15	BLD	BLD	0.03
65'0"- 75'0"	71-G-82	5	BLD	BLD	0.04
75'0"- 84'6"	71-G-83	5	BLD	BLD	0.04
84'6"- 94'6"	71-G-84	5	BLD	BLD	0.04
94'6"-104'6"	71-G-85	5	BLD	BLD	0.02
104'6"-114'0"	71-G-86	5	BLD	BLD	0.03
114'0"-124'0"	71-G-87	5	BLD	BLD	0.04
124'0"-134'0"	71-G-88	5	BLD	BLD	0.03
134'0"-144'0"	71-G-89	5	BLD	BLD	0.04
144'0"-154'0"	71-G-90	5	BLD	BLD	BLD
154'0"-165'0"	71-G-91	5	BLD	BLD	0.05
165'0"-175'0"	71-G-92	5	BLD	BLD	0.03
195'0"-205'0"	71-G-93	30	BLD	BLD	0.02
205'0"-215'0"	71-G-94	20	BLD	BLD	BLD
215'0"-225'0"	71-G-95	20	BLD	BLD	BLD
225'0"-235'0"	71-G-96	15	BLD	BLD	0.03
235'0"-245'0"	71-G-97	15	BLD	BLD	BLD
245'0"-255'0"	71-G-98	20	BLD	BLD	0.02
255'0"-275'0"	71-G-99	15	BLD	BLD	0.03
275'0"-285'0"	71-G-100	5	BLD	BLD	0.03
285'0"-295'0"	71-G-101	5	BLD	BLD	0.08
295'0"-305'0"	71-G-102	5	BLD	BLD	0.02
305'0"-315'0"	71-G-103	5	BLD	BLD	0.04
315'0"-325'0"	71-G-104	5	BLD	BLD	0.03
325'0"-345'0"	71-G-105	10	BLD	BLD	0.02
345'0"-355'0"	71-G-106	10	BLD	BLD	0.03
355'0"-365'0"	71-G-107	5	BLD	BLD	0.03

METHODS:

This laboratory is registered by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of registration.

Mo, Bi by G.R.C. No. 2

W by G.R.C. No. 4

Sn by G.R.C. No. 5

B.L.D. = Below Limit of Detection



Chief Chemist

W. J. [Signature]

FIELD SHEET No.: 006430-34 PROJECT No.: EL.6/68 - CONSTABLES CREEK - D.D.H. 5

LAB. SHEET No.: 716/1 SAMPLE TYPE: CORE DATE: 20th August, 1971.

SAMPLE No.	LAB. No.	Mo ppm	W %	Sn %					
26'0" - 27'6"	71-H-45	10	BLD	0.02					
27'6" - 30'2"	71-H-46	5	BLD	0.05					
30'2" - 31'0"	71-H-47	BLD	BLD	0.01					
31'0" - 34'0"	71-H-48	BLD	BLD	BLD					
34'0" - 39'0"	71-H-49	BLD	BLD	0.02					
43'0" - 47'4"	71-H-50	70	BLD	0.05					
47'4" - 52'6"	71-H-51	5	BLD	0.01					
79'0" - 82'2"	71-H-52	5	BLD	0.05					
88'0" - 90'0"	71-H-53	5	BLD	0.04					
90'0" - 92'6"	71-H-54	5	BLD	BLD					
92'6" - 98'0"	71-H-55	10	BLD	0.01					
98'0" - 101'3"	71-H-56	BLD	BLD	0.02					
101'3" - 107'0"	71-H-57	BLD	BLD	BLD					
110'6" - 114'6"	71-H-58	BLD	BLD	BLD					
138'0" - 142'6"	71-H-59	5	BLD	BLD					
155'0" - 157'0"	71-H-60	BLD	BLD	BLD					
160'0" - 162'6"	71-H-61	5	BLD	BLD					
162'6" - 167'0"	71-H-62	10	BLD	BLD					
167'0" - 170'0"	71-H-63	5	BLD	BLD					
170'0" - 175'0"	71-H-64	10	BLD	BLD					
175'0" - 177'0"	71-H-65	BLD	BLD	BLD					
177'0" - 182'0"	71-H-66	50	BLD	BLD					
207'0" - 209'0"	71-H-67	BLD	BLD	BLD					
217'0" - 220'0"	71-H-68	BLD	BLD	BLD					
225'6" - 230'6"	71-H-69	10	BLD	BLD					
237'6" - 239'0"	71-H-70	10	BLD	BLD					
247'0" - 249'0"	71-H-71	5	BLD	BLD					

006430

006431

006432

006433

006434

METHODS:

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Mo by G.R.C. No. 102

W by G.R.C. NO. 104

Sn by G.R.C. No. 105

B.L.D. = Below Limit of Detection



ARW ✓

Chief Chemist

Ray W. G. Jones

FIELD SHEET No.: 006430-36 PROJECT No.: EL.6/68 - CONSTABLES CREEK - D.D.H. 5

LAB. SHEET No.: 716/2 SAMPLE TYPE: CORE DATE: 20th August, 1971.

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006434

006435

006436

SAMPLE No.	LAB. No.	Mo ppm	W %	Sn %					
280'6"-283'6"	71-H-72	5	BLD	BLD					
298'0"-304'0"	71-H-73	5	BLD	BLD					
305'0"-310'6"	71-H-74	BLD	BLD	BLD					
318'0"-321'6"	71-H-75	5	BLD	BLD					
324'6"-329'0"	71-H-76	BLD	BLD	BLD					
329'0"-332'3"	71-H-77	5	BLD	BLD					
332'3"-337'0"	71-H-78	BLD	BLD	BLD					
337'0"-339'0"	71-H-79	5	BLD	0.07					
388'9"-390'0"	71-H-80	BLD	BLD	BLD					
394'9"-399'0"	71-H-81	5	BLD	BLD					
399'0"-403'3"	71-J-82	BLD	BLD	BLD					

METHODS:



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Chief Chemist

Ray W. Gledhill

GEOCHEMICAL LABORATORY REPORT

810012

FIELD SHEET No.: 006437 PROJECT No.: EL.6/68 - CONSTABLES CREEK D.D.H. 5

LAB. SHEET No.: 738/1 SAMPLE TYPE: SLUDGE DATE: 2nd September, 1971.

SAMPLE No.	LAB. No.	Mo ppm	Bi ppm	Sn %	W ppm			
0' - 7'	71-H-83	15	10	0.03	BLD			
7' - 13'	71-H-84	10	5	0.03	BLD			
13' - 19'	71-H-85	10	5	0.04	BLD			
19' - 23'6"	71-H-86	10	5	0.03	BLD			
23'6" - 34'	71-H-87	10	10	0.03	BLD			
34' - 43'	71-H-88	10	10	0.04	BLD			
43' - 52'	71-H-89	20	55	0.02	BLD			
52' - 63'	71-H-90	15	30	0.04	BLD			
63' - 73'	71-H-91	10	10	0.03	BLD			
73' - 79'	71-H-92	BLD	10	0.03	BLD			
79' - 82'	71-H-93	10	60	0.04	BLD			
82' - 98'	71-H-94	10	25	0.02	BLD			
98' - 118'	71-H-95	20	40	0.03	BLD			
118' - 128'	71-H-96	20	25	BLD	BLD			
128' - 138'	71-H-97	20	75	0.02	BLD			
138' - 147'	71-H-98	15	15	0.03	BLD			
147' - 159'	71-H-99	10	5	0.04	BLD			
159' - 169'	71-H-100	10	10	0.03	BLD			
169' - 177'	71-H-101	15	30	0.03	BLD			
177' - 187'	71-H-102	10	5	0.03	BLD			
187' - 207'	71-H-103	10	5	0.03	BLD			
207' - 219'	71-H-104	10	10	0.04	BLD			
219' - 231'	71-H-105	BLD	5	0.04	BLD			
231' - 250'	71-H-106	10	10	0.02	BLD			
250' - 264'	71-H-107	10	5	0.03	BLD			
283' - 298'	71-H-108	BLD	5	0.06	BLD			
298' - 315'	71-H-109	10	5	0.03	BLD			
315' - 337'	71-H-110	10	BLD	0.03	BLD			
337' - 357'	71-H-111	10	BLD	0.04	BLD			
357' - 375'	71-H-112	BLD	5	0.05	BLD			
375' - 385'	71-H-113	BLD	5	0.05	BLD			

METHODS:

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Mo, Bi by G.R.C. No. 2
 Sn by G.R.C. No. 5
 W by G.R.C. No. 4

B.L.D. = Below Limit of Detection



G. Long
 Chief Chemist



810014 71-818

LEGEND

- q quartz
- gr greisen
- w wolfram
- mo molybdenite
- as arsenopyrite
- py pyrite
- ⊙ width of veins in inches
- watercourse
- established boundary - position accurate
- - - established boundary - position approximate
- strike and dip of joints - inclined
- vertical joints
- vein
- castean or trench (exposed rock type designated by above symbols)
- D.D.H Diamond Drill Hole
- E 9 Cobra Rock Drill
- X Sample points approx only, after Heard. (Drg no 1/108)



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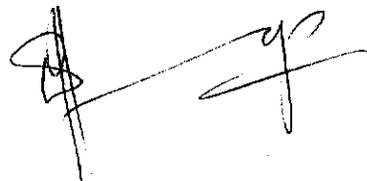
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DRAWN			TEXINS DEVELOPMENT PTY. LTD.
TRACED	W Jangejan	9/4/70	E.L. 6'68 NORTH-EAST TASMANIA CONSTABLES CREEK GEOLOGICAL MAP
CHECKED			
GEOLOGIST			
APPROVED			
SCALE 1" = 200'			
REVISIONS			PROJECT 6/68 DRAWING NO. 1/120

1/120

DIAMOND DRILL CORE - TIN-GRANITE
CONSTABLE CREEK AND ANCHOR MINE

Dr J. Klominsky (of Research School, Department of Geology, Nedlands, and Geological Survey of Czechoslovakia) sampled Department of Mines core from Aberfoyle drilling at the Anchor Mine, Blue Tier and from Constable Creek drilled by Geophoto. Results of investigations are to be forwarded. Samples as appended.



(D.J. Jennings)
ACTING SUPERVISING GEOLOGIST

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810016

J. KLOMINSKY - 20-11-81

<u>Constable Creek</u>	134'	5 cm
DDH 1	140'	8 cm
	180'	8 cm
	270'	7 cm
	380'	9 cm
DDH 2	10'	6 cm
	150'	7 cm
DDH5	37'	8 cm
	390'	8 cm
<u>Anchor Mine</u>		
DDH5	5'	7 cm
DDH12	95'	10 cm
DDH8	190'	9 cm