

83-#714-#11328

COMINCO LTD.

EXPLORATION

NTS: 92B/13W

WESTERN DISTRICT

ASSESSMENT REPORT

GEOCHEMICAL AND GEOLOGICAL REPORT
FOR YANKEE, MOLLIE, MOLLIE Fr., MARGIE
(Reverted Crown Grants)
VICTORIA MINING DIVISION
CHEMAINUS RIVER AREA, B.C.

Latitude: 49° 50' N Longitude: 123° 46' W

Work Performed

June 15th to July 31st, 1983

Owner and Operator: Cominco Ltd.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,328

8 December 1983

J. Paul Sorbara

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WESTERN DISTRICT
8 December 1983

ASSESSMENT REPORT
GEOLOGICAL & GEOCHEMICAL REPORT
FOR YANKEE, MOLLIE, MOLLIE Fr., MARGIE
REVERTED CROWN GRANTS
VICTORIA MINING DIVISION
CHEMAINUS RIVER AREA, B.C.

INTRODUCTION

The Yankee, Mollie, Mollie Fraction and Margie reverted Crown Grants (100% owned by Cominco Ltd.) are located on the east side of the Chemainus River on Big Sicker Mountain at roughly 49°50'N and 123°46'W. Access to the property is by gravel road off Highway No. 1 north of Duncan, B.C.

During the period of June 15 to July 31, 1983 a total of 22 man days were spent on the property conducting line cutting, geological mapping and a soil geochemical survey. This work was conducted by the author and Arthur C. Freeze, both Cominco geologists.

GEOCHEMICAL SURVEY

The geochemical survey conducted on the property consisted of soil sampling with a 25 metre spacing along two lines, 100 m apart, each of which was approximately 1.4 km in length. These lines ran at 105° and were cut and chained by the author and A.C. Freeze. The samples were taken from the "A" soil horizon and were ashed before analyzing for Cu, Pb, Zn, Au and Ag. The ashing was done in Toronto and the ashing process involved the following steps:

1. Samples were homogenized in a blender.
2. Samples sieved to -80 mesh.
3. Samples were weighed.
4. Samples ashed in a furnace at 475°C.
5. After several hours the temperature was increased to 550°C.
6. Samples were cooled and weighed to calculate % ash.

The actual analyses were done in the Cominco Exploration Laboratory in Vancouver and involved decomposition with 20% HNO₃ followed by Atomic Absorption spectrophotometry. For Au only, decomposition was by Aqua Regia.

A total of 116 samples were collected, of which 58 were analyzed. The results are printed on plates 2, 3 and 4.

The threshold values for Cu, Pb and Zn were calculated using the Cominco STAT PAK program. Analytical results for Ag and Au were too low and uniform (0 ppm Ag, 0 - 2 PPb for Au) to calculate anomaly thresholds. The sample numbers with Au and Ag contents are listed in Table 1, instead of being plotted on a large map. The threshold values for Cu, Pb and Zn in ppm are given below.

	<u>Background</u>	<u>Possibly Anomalous</u>		<u>Anomalous</u>
Cu	50	50	150	150
Pb	80	80	120	120
Zn	100	100	140	140

TABLE 1

SAMPLE #	Au (ppb)	Ag (ppm)	SAMPLE #	Au (ppb)	Ag (ppm)
<u>Line 2+70 N</u>			<u>Line 1+70 N</u>		
11 + 00 W	0	0	11 + 00 W	0	0
10 + 50 W	0	0	10 + 50 W	0	0
10 + 00 W	1	0	10 + 00 W	0	0
9 + 50 W	0	0	9 + 50 W	1	0
9 + 00 W	0	0	9 + 00 W	0	0
8 + 50 W	0	0	8 + 50 W	0	0
8 + 00 W	0	0	8 + 00 W	0	0
7 + 50 W	1	0	7 + 50 W	1	0
7 + 00 W	1	0	7 + 00 W	1	0
6 + 50 W	1	0	6 + 50 W	0	0
6 + 00 W	0	0	6 + 00 W	0	0
5 + 50 W	0	0	5 + 50 W	1	0
5 + 00 W	0	0	5 + 00 W	0	0
4 + 50 W	0	0	4 + 50 W	1	0
4 + 00 W	0	0	4 + 00 W	1	0
3 + 50 W	1	0	3 + 50 W	1	0
3 + 00 W	0	0	3 + 00 W	0	0
2 + 50 W	1	0	2 + 50 W	0	0
2 + 00 W	2	0	2 + 00 W	0	0
1 + 50 W	0	0	1 + 50 W	0	0
1 + 00 W	1	0	1 + 00 W	13	0
0 + 50 W	0	0	0 + 50 W	5	0
0 + 00 W	1	0	0 + 00 W	0	0
0 + 50 E	0	0	0 + 50 E	0	0
1 + 00 E	0	0	1 + 00 E	0	0
1 + 50 E	1	0	1 + 50 E	0	0
2 + 00 E	0	0	2 + 00 E	0	0
2 + 50 E	0	0	2 + 50 E	1	0
3 + 00 E	1	0	3 + 00 E	0	0

GEOLOGICAL SURVEY

The geological mapping completed on the property by A.C. Freeze and the author was conducted using the chain and compass method. In addition to outcrops, the gravel access roads around the property were surveyed for control purposes. The geology of the property was found to comprise mainly andesitic and rhyolitic tuffs, breccias and schists of the Sicker Group as well as a diorite intrusive. Immediately south of the property is a major east-west fault bringing younger argillaceous rocks of the Nanaimo group into contact with the Sicker.

Schistose rhyolitic and andesitic rocks were found to have an orientation striking northwest with dips from 45° to vertical. Other than these foliation planes structured data, such as bedding, were not able to be determined. The only mineralization seen on the property was disseminated pyrite which was present in small amounts in the volcanic rocks.

The results of the geologic mapping are shown in Plate 5.

INTERPRETATION

The geological survey showed that the Yankee, Mollie, Mollie fraction and Margie reverted grants are underlain predominantly by andesitic to rhyolitic volcanics of the Sicker Group. These rocks are tuffs, schists and some breccias that contain minor amounts of pyrite mineralization. The volcanics have been intruded by a medium to coarse grained diorite which in one location contains some magnetite. Immediately south of the property is a major east-west fault bringing younger argillaceous rocks of the Nanaimo Group into juxtaposition with the older Sicker volcanics.

The geochemical survey did not outline any significant anomalies. Values for Au and Ag were almost zero and Cu was extremely flat. For Zn there were only 2 samples that were definitely anomalous, and while there were several anomalous values for Pb, the distribution of these values is scattered.

Report By: J. Paul Sorbara
J.P. Sorbara
Geologist

Endorsed By: F.D. Gill
F.D. Gill
Assistant Manager
Exploration, Western District

Approved for Release By: G. Harden
G. Harden
Manager
Exploration, Western District

Distribution: Mining Recorder (2)
W.D. Files (1)

APPENDIX I

STATEMENT OF EXPENDITURES

Salaries

J. Paul Sorbara	11 days @ \$155.76/day	\$ 1,713.36
A.C. Freeze	11 days @ \$182.16/day	2,003.76

Geochemistry

Incl. Ashing	58 Analyses @ \$17.30 ea.	1,003.40
<u>Truck Rental</u>	11 days @ \$32.50/day	357.50
<u>Food & Lodging</u>	11 days @ \$45.55/day	<u>501.05</u>
	TOTAL EXPENDITURE	<u>\$ 5,579.07</u>

Signed: _____

J. Paul Sorbara
J. Paul Sorbara
Geologist

8 December 1983

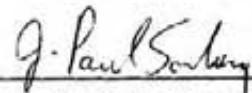
APPENDIX II

STATEMENT OF QUALIFICATIONS

I, J. PAUL SORBARA, OF THE CITY OF NORTH VANCOUVER, IN THE PROVINCE OF BRITISH COLUMBIA, HEREBY CERTIFY:-

1. THAT I am a geologist residing at #1209 - 2012 Fullerton Avenue, North Vancouver, British Columbia, with a business address at 409 Granville Street, Vancouver, British Columbia.
2. THAT I graduated with a B.Sc. in geology from the University of Toronto, Toronto, Ontario in 1976, and with a M.Sc. in geology from the University of Toronto in 1979.
3. THAT I have practised geology with Cominco Ltd. from 1979 to 1983.


Signed:

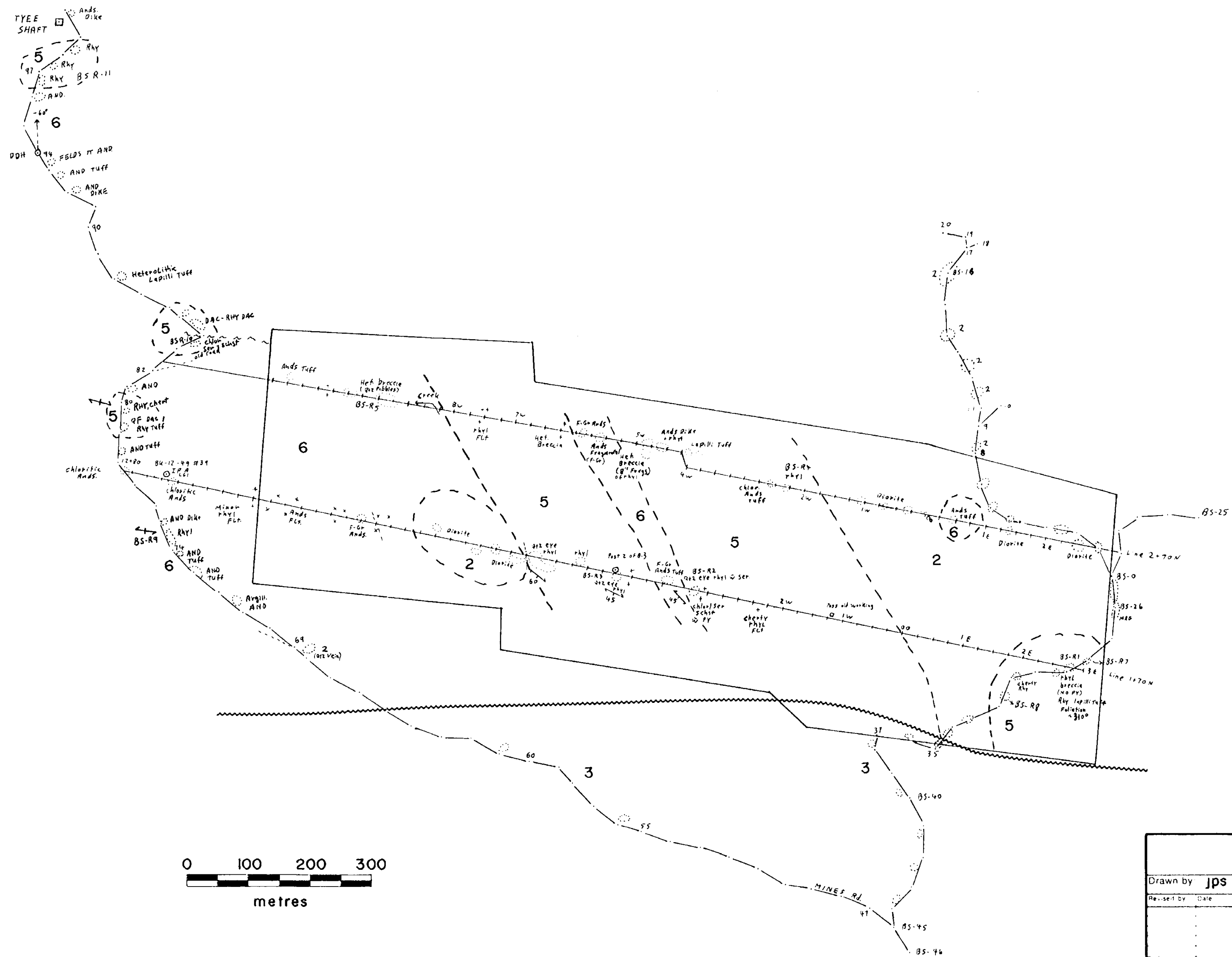


J. Paul Sorbara, M.Sc.
Geologist, Cominco Ltd.

8 December 1983

GEOLOGICAL BRANCH
ASSESSMENT REPORT

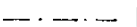


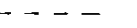


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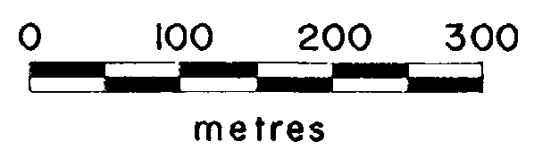



LEGEND

- 1 GABBRO (youngest)
- 2 DIORITE
- 3 NANAIMO SEDIMENTS
- 4 CHERT
- 5 RHYOLITE
- 6 ANDESITE Flows & Tuffs (oldest)

SYMBOLS

-  ROAD WITH STATION POINTS
-  FLOAT
-  OUTCROP BOUNDARY
-  INFERRED CONTACT
-  FAULT CONTACT
-  PORPHYRY



Big Sicker Reverted Crown Grants 			
Drawn by	jps	Traced by	
Revised by	Date	Revised by	Date
GEOLOGY			
Scale	1:5000	Date	NOV. 1983
		Plate	5

ACS. MIN. & PAPER
600' EITHER SIDE
7/6 1731, 21 MAY 73
SUBJ. TO CONDITIONS
RELEASE REQUIRED

666 (9)	81 1029(7)	669 (9)
J.J. 2 667 (9)	SHELA 82 1030(7)	J.J. 3 668 (9)
J.R.M. 1096 (9)	J.R.M. 1095 (9)	J.J. 661 (9)

RJ
806
(3)

JRM 2
1101(10)

JRM 1
1100(10)

WHITE
ENSIGN
743(11)

Brenton
Lakes
Holyoak
L.

MT.
BRENTON

OAK 2
170 (5)

OAK 1
169 (5)

001
116 (8)

NUGGET 1
745 (11)

PATRICIA-JANE
83 (5)

C.R. I
929 (5)

SILVER 1
535 (5)

PROSPERITY
270 (8) ✓

BRENT I
163 (5)

FANG
534 (5)

ROCKY 4
158 (4)

ROCKY 3
157 (4)

VAL
482 (2)

PEGGY FR.
119 (9)

BANANA
1073 (8)

TINE
484 (2)

Claims covered
by This Report

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

MINERAL RESERVE
7/6 3206, OCT. 20, 1977
RELEASE REQUIRED

Forest
Lookout
MT.
PREVOST

11,328

ACS. MIN. & PAPER
7/6 5546, 21 MAY 73
NO. 674144

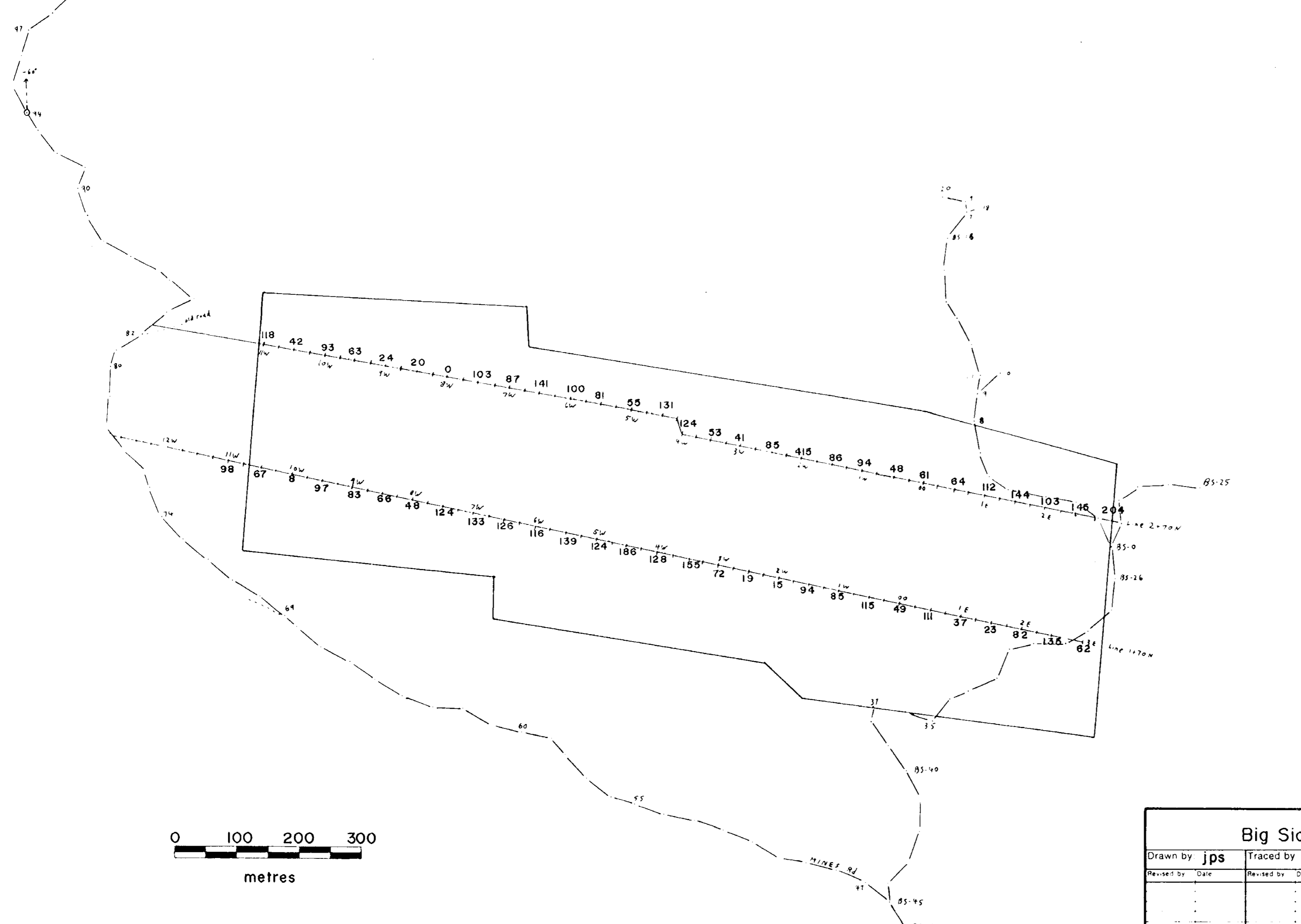
PROPOSED SAHTLAM-V.I.T. T/L.

Drawn by:	Traced by:
Revised By	Date
Revised by	Date

INDEX AND CLAIM LOCATION

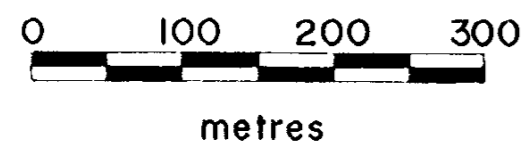
Scale: 1:50,000 Date: 24 Nov. 1983 Plate 1


TREE SHaft



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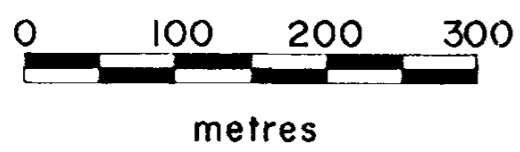


Big Sicker Reverted Crown Grants					
Drawn by: jps		Traced by:		SOIL GEOCHEMISTRY	
Revised by:	Date:	Revised by:	Date:		
				Pb in 'A' Horizon (ppm)	
Scale: 1:5000		Date: NOV. 83		Plate: 3	



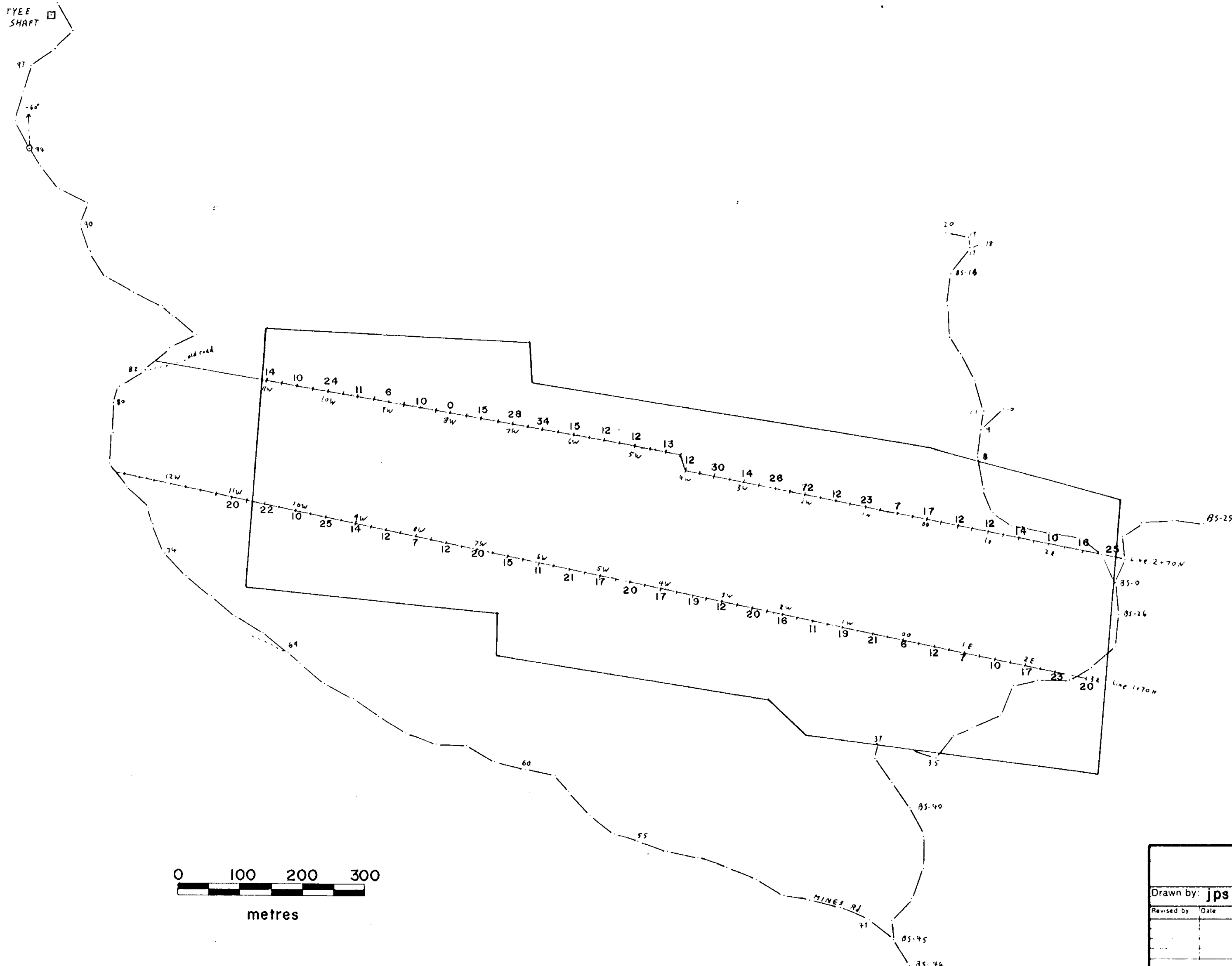
**GEOLOGICAL BRANCH
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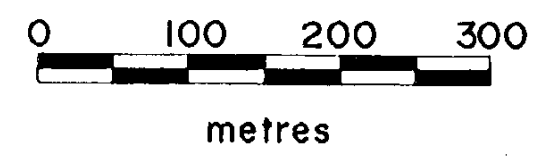
Big Sicker Reverted Crown Grants				
Drawn by: jps		Traced by:		SOIL GEOCHEMISTRY Zn in 'A' Horizon (ppm)
Revised by:	Date:	Revised by:	Date:	
Scale 1:5000		Date NOV. 83		Plate 4

EYE
SHAFT



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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Big Sicker Reverted Crown Grants				
Drawn by: jps	Traced by:			
Revised by	Date	Revised by	Date	SOIL GEOCHEMISTRY Cu in 'A' Horizon (ppm)
Scale	1:5000	Date	NOV. 83	Plate 2