Office of the Supervising Mining Recorder
MAY 22 1979
WHITEHORSE
Yukon Territory

RECEIVED
16 MAY 1979
MINING RECORDER
LAND AGENT
MAYO, Y.T.
I.A. & N.D.

RECEIVED
MAY 22 1979
WHITEHORSE, Y.T.

1978

Project Report

On

The Dublin Gulch Property

Yukon Territory

Mayo Mining District

N.T.S. 106 D-4 - 64° 2' 30 N. Lat. 135° 47' W. Long

CLAIMS: Mar, Dave, Alec, R.D., Smoky, D.G., Bob, Jeff

COMMODITIES: Gold, Tungsten, Tin and Silver

PROPERTY OWNERSHIP: Canada Tungsten Mining Corporation Limited

Options from G. Dickson and Queenstake Resources

090471

May 11, 1979
Written By: W.B. Lennan
Exploration Geologist

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

$ 151,550.00

Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 53 (2) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory

Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

# FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

*(This form required in duplicate with sketch showing location of work.)*

RECEIVED
26 MAR 1979
MINING RECORDER
LAND AGENT
MAYO, Y.T.
I.A. & N.D.

OFFICE DATE STAMP

| | |
|---|---|
| I (Name) Brian Lennan | Occupation Geologist |
| (Postal Address) Box 12525 - Oceanic Plaza | #1600 - 1066 W. Hastings St. Vancouver B.C. V6E 3X1 |

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, wotk on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

PLEASE SEE ATTACHED SCHEDULE

Alec claims
Jeff claims
Smokey claims
R.D. claims
Bob claims
Dave claims
D.G. claims
Mar claims

situated at Bounded by 135°39' W.Long. and 135°55' W.Long 64° N.Lat. and 64°5'W.Lat. Claim Sheet No. 106 D - 4

in the Mayo Mining District, to the value of at least $151550.00

dollars, since the Thirtieth day of March 19 78,

to represent the following mineral claims under the authority of Grouping Certificate No. _____
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

PLEASE SEE ATTACHED SCHEDULE

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

A geochemical, geological, grid survey and aerial photography program was carried out on the attached list of claims. This work commenced on June 1st 1978 and finished on Oct. 10 1978. Report preparation has been continuing since . A report detailing the geological, geochemical, grid survey and aerial photography and aerial triangulation and map preparation will be forwarded by the thirtieth of April 1979. A statement of costs and invoice vouchers will be included with the report.

Sworn before me at Vancouver, B.C.
this 22 day of March 1979

Notary Public

Brian Lennan
Applicant.

Brian Lennan
Agent, Canada Tungsten Mining Corp. Ltd.

Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
May 8, 1979

| Claim | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment requirements |
|---|---|---|---|---|---|
| Alec 9 | YA 30088 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Alec 10 | YA 30089 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 11 | YA 30090 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 12 | YA 30091 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 13 | YA 30092 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 14 | YA 30093 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 15 | YA 30094 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 16 | YA 30095 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 17 | YA 30096 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 18 | YA 30097 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 19 | YA 30098 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 20 | YA 30099 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 21 | YA 30100 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 22 | YA 30101 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 23 | YA 30102 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 24 | YA 30103 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 25 | YA 30104 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 26 | YA 30105 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 27 | YA 30106 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 28 | YA 30107 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 29 | YA 30108 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 30 | YA 30109 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 31 | YA 30110 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 32 | YA 30111 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 33 | YA 30112 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 34 | YA 30113 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 35 | YA 30114 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 36 | YA 30115 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 37 | YA 30116 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 38 | YA 30117 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 39 | YA 30118 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 40 | YA 30119 | Oct. 1, 1981 | 3½ | 17.50 | 350 |

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Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
May 8, 1979

| Claim | Grant No. | Renew to | Claim yrs. | Filing Fees | Application requirements |
|---|---|---|---|---|---|
| Jeff 57 | YA 30120 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Jeff 58 | YA 30121 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 59 | YA 30122 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 60 | YA 30123 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 61 | YA 30124 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 62 | YA 30125 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 63 | YA 30126 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 64 | YA 30127 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Delete " e " from Smokey, should read Smoky | | | | | |
| Smokey 44 | YA 30072 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 45 | YA 30073 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 46 | YA 30074 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 47 | YA 30075 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 51 | YA 30076 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 52 | YA 30077 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 53 | YA 30078 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 54 | YA 30079 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 62 | YA 30080 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 63 | YA 30081 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 64 | YA 30082 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 65 | YA 30083 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 74 | YA 30084 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 75 | YA 30085 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 76 | YA 30086 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 77 | YA 30087 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| | | | | $980.00 | $19,600 |

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Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Cerificate of Work

Present Expiry Date
Oct. 1, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| R.D. 1 | YA 1393 | Oct. 1, 1981 | 3 | $15.00 | $ 300 |
| R.D. 2 | YA 1394 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 3 | YA 1395 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 4 | YA 1396 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 5 | YA 1397 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 6 | YA 1398 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 7 | YA 1399 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 8 | YA 1400 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 9 | YA 1401 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 10 | YA 1402 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 11 | YA 1403 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 12 | YA 1404 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 13 | YA 1405 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 14 | YA 1406 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 15 | YA 1407 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| R.D. 16 | YA 1408 | Oct. 1, 1981 | 3 | 15.00 | 300 |
| | | | | $240.00 | $4,800 |

Present Expiry Date
April 27, 1979

| | | | | | |
|---|---|---|---|---|---|
| Alec 1 | YA 30048 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 2 | YA 30049 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 3 | YA 30050 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 4 | YA 30051 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 5 | YA 30052 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 6 | YA 30053 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 7 | YA 30054 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 8 | YA 30055 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| | | | | $140.00 | $2,800 |

Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 24, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Bob 1 | YA 17729 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Bob 2 | YA 17730 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 3 | YA 17731 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 4 | YA 17732 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 5 | YA 17733 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 6 | YA 17734 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 7 | YA 17735 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 8 | YA 17736 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 9 | YA 17737 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 10 | YA 17738 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 11 | YA 17739 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 12 | YA 17740 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 13 | YA 17741 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 14 | YA 17742 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 15 | YA 17743 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 16 | YA 17744 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 17 | YA 17745 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 18 | YA 17746 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 19 | YA 17747 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 20 | YA 17748 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 21 | YA 17749 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 22 | YA 17750 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 23 | YA 17751 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 24 | YA 17752 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 25 | YA 17753 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 26 | YA 17754 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 27 | YA 17755 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 28 | YA 17756 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 29 | YA 17757 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 30 | YA 17758 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 31 | YA 17759 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 32 | YA 17760 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 33 | YA 17761 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 34 | YA 17762 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 35 | YA 17763 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 36 | YA 17764 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 37 | YA 17765 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 38 | YA 17766 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 39 | YA 17767 | Oct. 1, 1981 | 3½ | 17.50 | 350 |

Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 24, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Bob 40 | YA 17768 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Bob 41 | YA 17769 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 42 | YA 17770 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 43 | YA 17771 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 44 | YA 17772 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 45 | YA 17773 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 46 | YA 17774 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 47 | YA 17775 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 48 | YA 17776 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 49 | YA 17777 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 50 | YA 17778 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 51 | YA 17779 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 52 | YA 17780 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 53 | YA 17781 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 54 | YA 17782 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 55 | YA 17783 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 56 | YA 17784 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 57 | YA 17785 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 58 | YA 17786 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 59 | YA 17787 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 60 | YA 17788 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 61 | YA 17789 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 62 | YA 17790 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 63 | YA 17791 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 64 | YA 17792 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 65 | YA 17793 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 66 | YA 17794 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 67 | YA 17795 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 68 | YA 17796 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 69 | YA 17797 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 70 | YA 17798 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 71 | YA 17799 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 72 | YA 17800 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Bob 73 | YA 17801 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| | | | | $1,277.50 | $25,550 |

Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 24, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Dave 1 | YA 17802 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Dave 2 | YA 17803 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 3 | YA 17804 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 4 | YA 17805 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 5 | YA 17806 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 6 | YA 17807 | Oct. 1, 1982 | 3½ | 17.50 | 350 |
| Dave 7 | YA 17808 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 8 | YA 17809 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 9 | YA 17810 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 10 | YA 17811 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 11 | YA 17812 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 12 | YA 17813 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 13 | YA 17814 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 14 | YA 17815 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 15 | YA 17816 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 16 | YA 17817 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 17 | YA 17818 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 18 | YA 17819 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 19 | YA 17820 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 20 | YA 17821 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 21 | YA 17822 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 22 | YA 17823 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 23 | YA 17824 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Dave 24 | YA 17825 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| | | | | $420.00 | $8,400 |

Present Expiry Date
April 24, 1979

| | | | | | |
|---|---|---|---|---|---|
| Jeff 1 | YA 17826 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 2 | YA 17827 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 3 | YA 17828 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 4 | YA 17829 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 5 | YA 17830 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 6 | YA 17831 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 7 | YA 17832 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 8 | YA 17833 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 9 | YA 17834 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 10 | YA 17835 | Oct. 1, 1981 | 3½ | 17.50 | 350 |

Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 24, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Jeff 11 | YA 17836 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Jeff 12 | YA 17837 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 13 | YA 17838 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 14 | YA 17839 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 15 | YA 17840 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 16 | YA 17841 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 17 | YA 17842 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 18 | YA 17843 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 19 | YA 17844 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 20 | YA 17845 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 21 | YA 17846 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 22 | YA 17847 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 23 | YA 17848 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 24 | YA 17849 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 25 | YA 17850 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 26 | YA 17851 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 27 | YA 17852 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 28 | YA 17853 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 29 | YA 17854 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 30 | YA 17855 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 31 | YA 17856 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 32 | YA 17857 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 33 | YA 17858 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 34 | YA 17859 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 35 | YA 17860 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 36 | YA 17861 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 37 | YA 17862 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 38 | YA 17863 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 39 | YA 17864 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 40 | YA 17865 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 41 | YA 17866 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 42 | YA 17867 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 43 | YA 17868 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 44 | YA 17869 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 45 | YA 17870 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 46 | YA 17871 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 47 | YA 17872 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 48 | YA 17873 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 49 | YA 17874 | Oct. 1, 1981 | 3½ | 17.50 | 350 |

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Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 24, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Jeff 50 | YA 17875 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Jeff 51 | YA 17876 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 52 | YA 17877 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 53 | YA 17878 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 54 | YA 17879 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 55 | YA 17880 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 56 | YA 17881 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| | | | 3½ | $980.00 | $ 19600 |
| Jeff 65 | YA 17882 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 66 | YA 17883 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 67 | YA 17884 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 68 | YA 17885 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 69 | YA 17886 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 70 | YA 17887 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 71 | YA 17888 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 72 | YA 17889 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 73 | YA 17890 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 74 | YA 17891 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 75 | YA 17892 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 76 | YA 17893 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 77 | YA 17894 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 78 | YA 17895 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 79 | YA 17896 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 80 | YA 17897 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 81 | YA 17898 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 82 | YA 17899 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 83 | YA 17900 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 84 | YA 17901 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 85 | YA 17902 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 86 | YA 17903 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 87 | YA 17904 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 88 | YA 17905 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 89 | YA 17906 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 90 | YA 17907 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 91 | YA 17908 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 92 | YA 17909 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 93 | YA 17910 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 94 | YA 17911 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 95 | YA 17912 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 96 | YA 17913 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 97 | YA 17914 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 98 | YA 17915 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 99 | YA 17916 | Oct. 1, 1981 | 3½ | 17.50 | 350 |

Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 24, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Jeff 100 | YA 17917 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Jeff 101 | YA 17918 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 102 | YA 17919 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 103 | YA 17920 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 104 | YA 17921 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 105 | YA 17922 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 106 | YA 17923 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 107 | YA 17924 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 108 | YA 17925 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 109 | YA 17926 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 110 | YA 17927 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 111 | YA 17928 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Jeff 112 | YA 17929 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| | | | | $840.00 | $16,800 |

Delete "e" from Smoky, should read Smoky

| | | | | | |
|---|---|---|---|---|---|
| Smokey 1 | YA 17930 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 2 | YA 17931 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 3 | YA 17932 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 4 | YA 17933 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 5 | YA 17934 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 6 | YA 17935 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 7 | YA 17936 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 8 | YA 17937 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 9 | YA 17938 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 10 | YA 17939 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 11 | YA 17940 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 12 | YA 17941 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 13 | YA 17942 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 14 | YA 17943 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 15 | YA 17944 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 16 | YA 17945 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 17 | YA 17946 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 18 | YA 17947 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 19 | YA 17948 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 20 | YA 17949 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 21 | YA 17950 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 22 | YA 17951 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 23 | YA 17952 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 24 | YA 17953 | Oct. 1, 1981 | 3½ | 17.50 | 350 |

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Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 24, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Smokey 25 | YA 17954 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Smokey 26 | YA 17955 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 27 | YA 17956 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 28 | YA 17957 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 29 | YA 17958 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 30 | YA 17959 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 31 | YA 17960 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 32 | YA 17961 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 33 | YA 17962 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 34 | YA 17963 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 35 | YA 17964 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 36 | YA 17965 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 37 | YA 17966 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 38 | YA 17967 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 39 | YA 17968 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 40 | YA 17969 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 41 | YA 17970 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 42 | YA 17971 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 43 | YA 17972 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 48 | YA 17973 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 49 | YA 17974 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 50 | YA 17975 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 55 | YA 17976 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 56 | YA 17977 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 57 | YA 17978 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 58 | YA 17979 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 59 | YA 17980 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 60 | YA 17981 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 61 | YA 17982 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 66 | YA 17983 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 67 | YA 17984 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 68 | YA 17985 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 69 | YA 17986 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 70 | YA 17987 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 71 | YA 17988 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 72 | YA 17989 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 73 | YA 17990 | Oct. 1, 1981 | 3½ | 17.50 | 350 |

Delete "e" from Smokey, should read Smoky

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Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 24, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Smokey 78 | YA 17991 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| Smokey 79 | YA 17992 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 80 | YA 17993 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 81 | YA 17994 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Smokey 82 | YA 17995 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Delete "e" from Smokey, should read Smoky | | | | $1,155.00 | $23,100 |
| Alec 41 | YA 17996 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 42 | YA 17997 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 43 | YA 17998 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 44 | YA 17999 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 45 | YA 17800 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 46 | YA 30001 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 47 | YA 30002 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 48 | YA 30003 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 49 | YA 30004 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 50 | YA 30005 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 51 | YA 30006 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 52 | YA 30007 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 53 | YA 30008 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 54 | YA 30009 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 55 | YA 30010 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 56 | YA 30011 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 57 | YA 30012 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 58 | YA 30013 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 59 | YA 30014 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| Alec 60 | YA 30015 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| | | | | $350.00 | $ 7,000 |

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Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 12, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| D.G. 2 | YA 14945 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| D.G. 3 | YA 14946 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 4 | YA 14947 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 5 | YA 14948 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 6 | YA 14949 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 7 | YA 14950 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 8 | YA 14951 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 9 | YA 14952 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 10 | YA 14953 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 11 | YA 14954 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 12 | YA 14955 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 13 | YA 14956 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 14 | YA 14957 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 15 | YA 14958 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 16 | YA 14959 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 17 | YA 14960 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 18 | YA 14961 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 19 | YA 14962 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 20 | YA 14963 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 21 | YA 14964 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 22 | YA 14965 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 23 | YA 14966 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 24 | YA 14967 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 25 | YA 14968 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 26 | YA 14969 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 27 | YA 14970 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 28 | YA 14971 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 29 | YA 14972 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 30 | YA 14973 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 31 | YA 14974 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 32 | YA 14975 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 33 | YA 14976 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 34 | YA 14977 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 35 | YA 14978 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 36 | YA 14979 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 37 | YA 14980 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 38 | YA 14981 | Oct. 1, 1981 | 3½ | 17.50 | 350 |

GORDON F. D[illegible]

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Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
April 12, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| D.G. 40 | YA 14983 | Oct. 1, 1981 | 3½ | $17.50 | $ 350 |
| D.G. 41 | YA 14984 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 43 | YA 14986 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 45 | YA 14988 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 46 | YA 14989 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 47 | YA 14990 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 48 | YA 14991 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 49 | YA 14992 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 50 | YA 14993 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 51 | YA 14994 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 52 | YA 14995 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 53 | YA 14996 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| D.G. 55 | YA 14998 | Oct. 1, 1981 | 3½ | 17.50 | 350 |
| | | | | $875.00 | $17,500 |

Present Expiry Date
March 30, 1980

| | | | | | |
|---|---|---|---|---|---|
| Mar 1 | YA 14897 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 2 | YA 14898 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 3 | YA 14899 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 4 | YA 14900 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 5 | YA 14901 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 6 | YA 14902 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 7 | YA 14903 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 13 | YA 14908 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 14 | YA 14909 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 15 | YA 14910 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 16 | YA 14911 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 17 | YA 14912 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| Mar 18 | YA 14913 | Oct. 1, 1981 | 3/4 | 8.75 | 175 |
| | | | | $113.75 | $2,275 |
| | | | | 178.75 | 1300 3575 |

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Schedule of Claim Renewals and Work
To Accompany Form C - Application For A
Certificate of Work

Present Expiry Date
March 30, 1979

| Claim No. | Grant No. | Renew to | Claim yrs. | Filing Fees | Assessment Requirements |
|---|---|---|---|---|---|
| Mar 8 | YA 14903 | Oct. 1, 1981 | 3 3/4 | $18.75 | $ 375 |
| Mar 9 | YA 14904 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 10 | YA 14905 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 11 | YA 14906 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 12 | YA 14907 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 19 | YA 14914 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 20 | YA 14915 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 21 | YA 14916 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 22 | YA 14917 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 23 | YA 14918 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| Mar 24 | YA 14919 | Oct. 1, 1981 | 3 3/4 | 18.75 | 375 |
| | | | | $206.25 | $4,125 |

Total Fees Due: $7,577.50

Assessment Due: $151,550.00

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GEOCHEMICAL DATA

| | |
|---|---|
| Sample Listings | Attached File Folder |
| Statistical Analysis | Attached File Folder |

## SUMMARY

The Dublin Gulch Property which is made up of the Jeff, Alec, Dave, Bob, D.G., Smoky, R.D. and Mar claim blocks, is located in central Yukon Territory 25 air miles northeast of Mayo. The center of the claims are located approximately at latitude 64° 2'30" N. and longitude 135° 47' W. Access is via air or four wheel drive truck road from Mayo.

Canada Tungsten acquired 453 mineral claims in the Dublin Gulch area during the spring of 1978. The Mar 1-30 claims were optioned to Canada Tungsten by Queenstake Resources and the D.G. 1-56 claims were optioned to Canada Tungsten by Gordon Dickson, a local prospector. Canada Tungsten purchased the R.D. claims from Ron Holoway. The Jeff 1-112, Dave 1-24, Smoky 1-82, Bob 1-73 and Alec 1-60 claims were staked by Canada Tungsten crews in 1978.

Although considerable amounts of work have been done in the area over the last 79 years very little concrete data is available. Only one company (Canex-Placer) attempted a broader scoped and comprehensive evaluation program in 1970 and 1971. Their work concentrated on the large granodiorite stock that intrudes the Yukon Group metasediments. They were interested in exploring the stock for a potentially large scheelite bearing quartz vein stockworks system. This evaluation was done by establishing a grid, soil sampling, mapping, cat trenching and finally, diamond drilling. Three short angle holes were drilled and as can be observed from the drill logs located in Appendix II, only trace amounts or very low grades of tungsten were found. Very little work was done on the skarn zones found on the property.

During the spring and summer of 1978 Canada Tungsten embarked on a systematic evaluation of all the claims and areas peripheral to the claims. The program was designed to carry out a thorough evaluation that would take place over a few years and keep focussing in on targets generated by the broader evaluation aspects of the program. This was initiated by first of all having McElhanney Surveying make up 13 1:5000 scale detailed topographic base maps. These maps were made from 1960-1961 government aerial photography. At the same time McElhanney drew up plans to fly a new aerial photography program so that the base maps could be updated for the 1979 field season. All maps were produced utilizing metric measurements. Geologic mapping, geochemical surveys and geophysical surveys can be continually updated on these maps.

Prior to going out into the field, a geochemical data recording system was instituted so as to be able to take raw field data directly to a keypuncher and then to a computer. The computer then sorts the samples according to sampler and sample type. When geochemical analysis of samples are completed, the results are merged with the appropriate sampler and sample type in the computer and then statistical analysis of the data is done.

In the field, Canada Tungsten crews first of all established 35 aerial triangulation survey sites that were specified by McElhanney for the flying of new aerial photography. Another 55 sites were added during July. Reconnaissance geologic mapping and geochemical sediment sampling was done within and peripheral to the whole claim block. These two events were run simultaneously to obtain the best utilization of helicopter time. McElhanney survey crews surveyed in all the established sites and had their work completed in time for the aerial photography flights that took place on July 29, 1978.

By mid July, the reconnaissance geochemistry had indicated several anomalous areas with respect to tungsten and tin. On the west side of Haggart Creek, south of its junction with Dublin Gulch, two streams (Gill Gulch and a parallel stream to the south) were found to be highly anomalous in tin. Follow up geologic mapping located a small tin bearing granitic plug. Anomalous tin values were found in sediments from Ann Gulch which drains the known tin bearing zone called Tin Dome. Detailed follow up geologic mapping found an area that was intensively deformed, faulted and veined. The veins were tourmaline-quartz-cassiterite bearing. Significant tin values were not found in the remaining drainages on and around the property.

Highly anomalous tungsten values were obtained from streams draining in a northwesterly and southwesterly direction into Dublin Gulch. Several streams draining southwesterly from the ridge south of Dublin Gulch into Lynx Creek were also found to be anomalous in tungsten. The creeks are Ray Gulch and a small unnamed creek that lies to the west. Because the values obtained from these stream sediments were much higher (20 - 160 ppm tungsten) than those obtained in all other streams in the area, it was decided to establish a grid covering the Ray Gulch area as well as the Dublin Gulch area. A 9 Km baseline designated 10+000N was established on the ridge that lies south of and between Dublin Gulch and Lynx Creek. This line begins in the southwest near Platinum Pup and trends northeasterly on AZ 054$^{o}$ and passes between the two hills (East and West) that make up the Potato Hills. A grid consisting of 17 lines was run on Az 144$^{o}$ normal to the baseline over the Ray Gulch drainages. Another grid consisting of 16 lines was run on Az 324$^{o}$ normal to the baseline over the northwesterly trending drainages of Dublin Gulch. The eastern most and western most lines (L36+700E, L38+950E) were extended northwesterly onto the "North Ridge" on the north side of Dublin Gulch. These two lines were connected by another baseline called L12+100N. This line parallels baseline 10+000N. Two grid lines were placed on Tin Dome.

Jesmex Ltd. compassed, picketed and cut all lines. The lines were spaced 150 meters apart along the baseline. Stations were established every 50 meters on the grid lines. As each was completed, soil sampling was carried out along them. The detailed soil sampling was done to try and locate more specific source areas for the sediment sample anomalies. Tungsten, tin and gold anomalies were plotted on geochemistry base maps and it was then decided to proceed with detailed geologic mapping at a scale of 1:5000 on the grid lines. Anomalous areas were closely scrutinized.

Tungsten anomalies located on the "Ray Gulch" grid were followed up with mapping and 4 scheelite bearing skarn zones were located. Tungsten values ranging between 30 and 300 ppms outlined the skarn zones well with the exception of one zone. The 40+150 Skarn Zone, 39+800 Skarn Zone and 39+400 Skarn Zone were readily located using geochemistry. Only a few anomalous single samples were found in the Garnet Skarn Zone. Follow up geologic mapping found no outcrop but a close examination of small float rocks located an area abundant in scheelite bearing garnetiferous skarn pebbles. Some gold anomalies located on this grid emanate from quartz veins cutting the metasediments. Tin and silver anomalies of any significance are not found on this grid.

Follow-up detailed geologic mapping on tungsten, gold and silver anomalies located on the "Dublin Gulch" grid resulted in the finding of an intensly veined porphyritic core area of the main granodiorite stock. Scheelite is the only mineral found in the quartz veins in this stock. The gold and silver anomalies overlap the tungsten anomalies slightly but have an elongate northeasterly trend. This trend was found to line up with a large gold bearing quartz vein fault-fissure system lying to the southwest on Stuttle, Eagle and Stewart Gulches. As most of the anomalous area is covered in scree, work needs to be done to extend this fissure-vein system.

A tungsten and gold anomaly was located in the junction area of Olive Gulch and Dublin Gulch. A small Quartz Monzonite plug was subsequently mapped and a scheelite bearing quartz vein stockworks was located within the plug. Samples taken on the "North Ridge" baseline above the plug were anomalous in tungsten and mapping revealed that the quartz vein stockworks penetrated the overlying biotite-quartzite metasediments. Scheelite, wolframite, cassiterite and molybdenite mineralization were found in these veins. The two lines that cross the Tin Dome area were, as expected, anomalous in tin and tungsten. Mapping has indicated that the higher grade anomalies coincide with major rather than minor fault zones in this area. Rock chip samples were taken wherever outcrop was found and the results were compared with soil anomaly locations. The reconnaissance and detailed follow-up geologic mapping resulted in the establishment of 11 rock types. Six metasedimentary units and five intrusive units were mapped. Future detailed mapping and petrographic work may result in a further breakdown of the metasedimentary units. The Dublin Gulch area is underlain by Precambrian and/or Palaeozoic Yukon Group metasediments consisting of Black Phyllitic Schists, Marble, Laminated Diopside and Garnet Skarns, Muscovite-Quartzite Schists and Plyllites, and Biotite-Quartzite Schists. The metasediments were intruded by Cretaceous rocks consisting of Granodiorite, Granite, Aplite Dykes, Quartz Monzonite and Diorites and Gabbros.

At least three phases of progressive regional metamorphism has taken place on the property. Two and possibly three faulting events occurred contemporaneously with or slightly later than regional metamorphism. Mapping indicates that Dublin Gulch is located near the nose of a southwesterly plunging anticline and faulting occurs parallel to the fold axis and normal to the fold axis. The presence of this fold is best outlined in the Ray Gulch area and to the E.N.E. of Ray Gulch.

Two and possibly three intrusive events occurred in the Dublin Gulch area. The earliest event was the emplacement of the main 3 mile long granodiorite stock that lies on the ridge to the south of Dublin Gulch. This stock extends from Platinum Pup in the southwest to the base of the Potato Hills to the northeast. Later stage intrusive activity resulted in the emplacement of a Quartz Monzonite plug located at the junction of Olive Gulch and Dublin Gulch. Granitic plugs were emplaced on the west side of Haggart Creek south of its junction with Gill Gulch and near the base of the ridge that lies immediately to the east of Ray Gulch. An intrusive plug (cupola) of unknown composition is believed to exist at depth under the Tin Dome metasediments.

Faulting events that are strictly related to intrusive activity are located on the property. The most noteable being a gold-arsenopyrite bearing quartz vein fault-fissure system that lies sub-parallel to the contact area of the granodiorite stock and biotite-quartzites located south of Dublin Gulch. Intense faulting, brecciation and veining in the Tin Dome area indicates emplacement of a cupola at depth. The faulting, brecciation and veining are a result of stresses incurred as the intrusion came in and forced or domed the overlying metasediments upward. The intrusive activity overprinted retrograde metamorphic sequences on the previously regionally metamorphosed sediments.

The mineralization found in the Dublin Gulch area is caused primarily by intrusive events. Gold, tungsten and tin mineralization occurs in economic quantities in the Dublin Gulch placer deposits. Tungsten (scheelite) is derived almost exclusively from the quartz vein stockworks found in the large granodiorite stock and the small Quartz Monzonite plug described previously. Significant scheelite mineralization is found within skarn units that are found on the south facing slopes of the ridge lying to the south of Dublin Gulch. The skarns are also located in Ray Gulch. Scheelite mineralization found in skarn horizons is most likely due to contact metamorphism caused by the emplacement of the granodioritic stock.

Gold mineralization appears to be restricted to the veining that is associated with a major fault-fissure that runs sub-parallel to the northwestern contact of the granodioritic stock and biotite quartzites. This fault-fissure is located to the south of Dublin Gulch.

Tin (cassiterite) mineralization is primarily derived from tourmaline-quartz-cassiterite veins found only in the Tin Dome area. The association of tin and tourmaline is characteristic of tin deposits world wide. Tourmaline is found throughout the property as prisms on foliation planes but is most abundant as vein fillings on Tin Dome. Tin (cassiterite) is also found in crystalline form in a quartz vein stockworks that penetrate biotite-quartzite found on the "North Ridge". The veins emanate from the Quartz Monzonite plug that has intruded the quartzites. A small granitic plug located near the junction of Gill Gulch and Haggart Creek is surrounded by anomalous sediment samples. No cassiterite bearing veins have been found to date.

## CONCLUSIONS

1. The Keno-Hill lead, silver mining camp lies approximately 8 miles to the southeast of Dublin Gulch. The ore is hosted by fault controlled vein systems that trend northeasterly. The veins contain minor amounts of tin mineralization..

2. Deformation in the Dublin Gulch area is similar to that of the Keno-Hill area. Three regional metamorphic events have taken place and the foliation and fold axis trend in a northeast-southwest direction.

3. Deformation stresses resulted in faulting parallel to foliation and fold axis. These faults trend in an east-northeasterly direction. Faulting normal to the fold axis and foliation also occurred due to a change in stress direction. These faults trend northeasterly to northwesterly.

4. The large granodioritic stock intruded Yukon Group metasediments in the Dublin Gulch area along the previously developed east-northeasterly trending fault system. Quartz veining took place in this stock during its last stages of cooling and subsequent joint and fracture development. The quartz veins carried scheelite mineralization.

5. Limestone or marble horizons found within the Yukon Group metasediments may have been skarnified by regional metamorphism but were further skarnified by contact metamorphism. Garnet formation and the introduction of scheelite into the skarns were caused by the granodiorite intrusion.

6. Small quartz monzonite to granitic plugs intruded the metasediments of Dublin Gulch after or during the latter stage of the emplacement of the granodioritic stock.

7. Further scheelite bearing quartz veins were introduced as the plugs cooled and fractured.

8. A boron rich tin bearing cupola intruded the pelitic metasediments of Tin Dome. The resultant uplift caused intense normal reverse faulting around the periphery of the cupola and lifted older metasediments above younger ones. Violent pressure changes (degassing) at the top of the cupola caused intense brecciation and fracturing. Hydrothermal fluids containing tourmaline, tin and quartz streamed off the top of the cupola and formed veins along fault zones and infilling in breccia zones.

9. Possibly the last structural event to take place was the development of a wide northeasterly trending fault-fissure system that runs sub-parallel to the northern contact of the granodiorite stock with biotite-quartzites. Parallel sets of quartz veins were introduced along this fissure. Gold, arsenopyrite, antimony and minor silver are found in these veins.

10. The scheelite found in the Dublin Gulch placer deposits accumulated as a result of the weathering of large quantities of scheelite bearing quartz veined granodioritic and quartz monzonitic talus boulders.

11. The gold found in the Dublin Gulch placer deposits accumulated as a result of the weathering of gold bearing quartz veins found in the large northeasterly trending fault-fissure system.

12. The tin (cassiterite) found in the Dublin Gulch placer deposits accumulated as a result of the weathering of tourmaline-quartz-cassiterite veins found on Tin Dome.

13. Stream sediment geochemistry is very useful and effective in locating areas that contain tungsten, tin and gold. It was from the results of stream geochemistry that follow-up geologic mapping and detailed soil sampling was done. The result was the successful location of skarn zones, scheelite bearing quartz vein stockworks, tin bearing veins and gold bearing quartz veins.

14. Soil geochemistry was useful and effective in narrowing down the search for mineralized areas. Soil geochemistry must be carefully evaluated and in particular, small insignificant single anomalies. A visual check by geologic mapping is required on all soil anomalies. The "Garnet Skarn Zone" is an example where no outcrop exists and only three samples indicated the presence of tungsten. Float mapping revealed the presence of an abundance of garnetiferous scheelite bearing skarn pebbles which hopefully will reflect an outcrop at depth.

15. Glaciation has not taken place in the Dublin Gulch area. Soil development is therefore of residual origin. Horizon development has not taken place. Upward movement of tungsten, gold, tin and silver minerals is minimal due to their high specific gravities and general lack of solubility. As mentioned previously soil anomalies must be checked carefully because these minerals tend to stay close to bedrock and varying overburden depths can greatly affect the sample result.

16. The quartzitic schists and phyllitic schists are not good localizers of mineralization. Scheelite mineralization is restricted to most quartz veins and skarn zones. Gold mineralization is restricted (as so far indicated) to the quartz veins that accompany the fault-fissure system. Tin mineralization is restricted primarily but not exclusively to tourmaline bearing vein systems. Silver appears to favour the gold bearing quartz veins but is not restricted to them.

## RECOMMENDATIONS

Three thousand feet of diamond drilling is required in the vicinity of the Mar 1-30 claims. This will honour the conditions set out in the option agreement between Canada Tungsten and Queenstake Resources Ltd.

Prior to drilling it is recommended that cat trenching be done on the scree covered section of the "Garnet Skarn Zone". This area lies on the "Ray Gulch" grid between Lines 38+200E and 38+950E and between the baseline 10+000N and station 9+200N. This should be done to help locate the source area for the scheelite bearing garnetiferous skarn float rock. Further detailed geologic mapping and rock chip sampling is required on the skarn horizons belonging to the "Garnet Skarn Zone", 39+400 Skarn Zone, 39+800 Skarn Zone and 40+150 Skarn Zone. This will help delineate the lateral extent of the zones and the grade of mineralization over that total extent. The proposed drill holes located on Map 5 are by no means firm and would be subject to position changes pending the results of the above work.

D.D.H. 79-1 Az 090$^{O}$ Dip - 70$^{O}$ Length 300 meters

The purpose of this hole is to test the 39+400 and 39+800 Skarn Zones at depth as close as possible to the granodiorite contact. This would hopefully indicate an increase in scheelite grade as one approached the contact.

D.D.H. 79-2 Az 090$^{O}$ Dip - 70$^{O}$ Length 152 meters

This hole is designed to test the 39+400 and 39+800 Skarn Zone farther away from the intrusive contact and to provide a cross section between holes 79-1 and 79-2 and observe the change of grade along the section.

D.D.H. 79-3 Az 090° Dip - 70° Length 152 meters

This hole will test the 39+800 Skarn Zone as well as other possible skarn zones that lie stratigraphically below it. The 39+800 Skarn Zone "appears" to be lower in the stratigraphic section than the 39+400 Skarn Zone.

D.D.H. 79-4 Az 090° Dip - 70° Length 152 meters

The location of this hole is not definite. The trenching of the "Garnet Skarn Zone" float will ultimately determine where this hole is spotted. The hole will test the scheelite bearing "Garnet Skarn" unit. It is presently located just to the west of a belt of garnet skarn float pebbles.

D.D.H. 79-5 Az 090° Dip - 70° Length 152 meters

This hole is designed to test an outcrop deficient area between Garnet Skarn Zone and the 39+400 Skarn Zone. It is hoped that more skarn units will be found so that a total picture of the skarn units, their overall thickness and grade potential, can be estimated. The location of this hole depends on the results of cat trenching and channel sampling.

D.D.H 79-6 Az 116° Dip - 60° Length 152 meters

The purpose of this hole is to test the thickest skarn zone on the property (40+150 Skarn Zone) and to check the existence of more skarn zones at depth. Skarn zones found southeast of the 40+150 zone may be faulted off and down dropped units that lie stratigraphically below the 40+150 Skarn Zone.

It is recommended that the "Ray Gulch" grid be extended southwesterly from L38+200E to Line 36+700E. This would involve the compassing, picketing, chaining and cutting of 10 lines that would extend southeasterly (Az 144$^{o}$) from the baseline to station 8+900N. Picketed stations should be established at 50 meter intervals along the lines. Detailed geologic mapping and soil sampling should be carried out along the lines to determine if any skarn zones exist in this area. (See Map 5).

Ten new lines should be compassed, chained, picketed and cut out on the "Dublin Gulch". The lines would trend on Az 324$^{o}$ at 150 meter intervals along baseline 10+000N. This grid would extend southwesterly along the baseline from the presently established Line 36+700E to a new 35+200E line. Picketed stations should be established at 50 meter intervals along the lines. The lines should terminate in the placer area in Dublin Creek so as to facilitate geologic mapping of recently exposed bedrock. The termination of the lines should be in the vicinity of station 12+100N. This grid extension is required to map the granodiorite-biotite-quartzite schist contact area in detail. Further delineation of the gold quartz vein and fault-fissure system can be attempted from this grid. Detailed geologic mapping and soil sampling should be carried out along all the lines. (See Map 5).

Geophysical work should be carried out on all new and previously established grid lines belonging to the "Ray Gulch" and "Dublin Gulch" grids. A proton magnetometer survey and a vector pulse Electromagnetic survey should be conducted on the lines. This would help to delineate the scree covered "Garnet Skarn Zone" - granodiorite contact and gold bearing quartz veins in the area of the fault-fissure. It is believed by the writer that more gold bearing quartz veins running parallel to the gold quartz vein and fault-fissure system exist on the scree covered northwesterly facing slopes between the fault-fissure and Dublin Gulch. (See Map 5).

It is recommended that old workings (shafts and adits) found on the gold quartz vein and fault-fissure system be cleaned out and sampled. Any vein extensions should be trenched and intensively sampled.

The lines belonging to the Dublin Gulch grid located between Lines 36+700E and 38+950E should be extended northwesterly from Dublin Gulch to intersect the "North Ridge" baseline (Map 5). These lines should be compassed, chained and picketed. Because of larger wider spaced trees in this area, line cutting is not required. Detailed geologic mapping and soil sampling should be done to help delineate the scheelite, wolframite, cassiterite and molybdenite bearing quartz vein stockworks emanating from the Olive Gulch-Dublin Gulch Quartz Monzonite plug. Cat trenching should be done to expose and delineate the stockworks system. The thin skarn units located between lines 39+850E and 40+300E and southeast of station 8+600N on the "Ray Gulch" grid need further detailed mapping to try and determine thickness and lateral extent. Chip sampling is required to evaluate the tungsten mineralization potential of the units.

A small grid should be established on the Tin Dome Hills. No line cutting is required. The lines should be compassed, chained and picketed at 50 meter intervals. Detailed mapping at a scale of 1:1000 is required on the grid to help delineate the Black Phyllite and White and Brown Quartzite Schists. A more detailed map of tourmalinized fault zones and veins would be obtained from this detailed mapping. The precise location of the tourmaline-cassiterite bearing breccia zones needs to be determined. Resampling of rock units, vein and breccia material on a close spaced grid may help narrow down specific mineralized targets. The sampling interval for rock and soil samples should be 20 meters. The results of the survey should then be evaluated and if warranted, diamond drill hole targets should be selected.

Detailed mapping at a scale of 1:1000 is required on the small granitic plug located south of Gill Gulch near its confluence with Haggart Creek. This work is required to locate the source of tin anomalies found in sediment samples in the streams surrounding the plug. A small grid trending north should be established over the plug. The grid should be compassed, chained and picketed at 20 meter intervals. Line cutting may be required. Soil sampling and extensive rock chip sampling should be done at 20 meter intervals along the grid lines. All data should then be evaluated and if warranted, cat trenching should be done.

Of all the grid lines mentioned previously, 33 kilometers require cutting and clearing.

A general prospecting program on all the claims and on areas peripheral to the claims is mandatory. This program will help to further understand the structural history of the area and hopefully locate new mineral showings. Particular attention should be given to prospecting the possible extensions of the gold quartz vein-fault and fissure system. From Maps 3 and 4 this system may extend to the northeast from Line 38+950 station 11+100N to a lead, silver vein system located east and northeast of Lynx Dome. From Map 4 this zone may extend to the southwest from Line 36+700E station 10+850N across Haggart Creek to the No. 3 vein located south of the Gill Gulch granitic plug.

PROJECTED COSTS OF 1979 EXPLORATION PROJECT - DUBLIN GULCH

| | | |
|---|---|---|
| Salaries and Wages | 2 Junior Assistants (sampling - geophysics) | |
| Personnel | May 15 - Sept. 15, 1979 | $ 11,040 |
| | 1 Senior Assistant and prospector | 7,320 |
| | 2 Geologists (May 7 to Sept. 15, 1979) | 15,000 |
| | 1 Project Geologist - Office time | 8,000 |
| | - Field time | 9,600 |
| | 1 Cook (3-5 months) | 6,300 |
| | B. Lennan - supervision | 8,000 |
| Helicopter - 10 hrs. at $375/hr. | | 3,500 |
| Camp Supplies | | 4,000 |
| Room and Board - May 15 - Sept. 15, 1979 - 7 crew, 5 drillers | | 22,320 |
| 124 days at $15/day x 12 men | | |
| Truck Rentals | 3 trucks $850/month each less 2 months for 1 truck | 8,500 |
| Repairs | | 1,500 |
| Camp Mobilization and Demobilization | | 2,600 |
| Geochemistry - 1000 samples - 3 elements analyzed $9/sample | | 9,000 |
| Drill core assaying - 5000 ft. at 10 ft. intervals - | | |
| 500 samples - $22.75 | | 11,375 |
| Sample shipping | | 1,000 |
| Fuel - Truck - Camp - Helicopter | | 4,000 |
| Fuel - Daimond Drill - 1750 gals. for 5000 ft. (without difficulties) | | |
| x $1.20/gal. | | 2,100 |
| Cat Trenching, Drill Moves and Drill Site Preparation | | |
| D-7 or D-8 - 150 hrs. at $85/hr. | | 12,750 |
| Diamond Drilling - Mobilization and Demobilization | | 4,800 |
| Drilling - 5000 ft. - $30/ft. | | 150,000 |
| Core Boxes - 230 at $6 each | | 1,380 |
| Garage Fuel | | 700 |
| Line cutting 20 miles - "with difficult bush" | | 11,000 |
| Expediting | | 4,000 |
| Mixed groceries and supplies | | 3,000 |
| Radio phone rental and telephone calls - $350/month x 4 months | | 1,500 |
| Sub Total | | 324,285 |
| Plus 10% Contingency | | 32,428 |
| Total | | $356,713.50 |

## Introduction

### Location and Access - Figure I and II

The contiguous groups of claims called the Jeff, Alec, Dave, Bob, Smoky, D.G., R.D. and Mar are located in the vicinity of Lynn Creek, Dublin Gulch and Haggart Creek. This area is located in the central Yukon some 25 air miles northeast of Mayo and bounded by Lines of Longitude 135° 39' west long. and 135° 55' west long. and by Lines of Latitude 64° N. Lat. and 64° 5' N. Lat. This area is located on N.T.S. map sheet 106 D-4.

The property is accessible by road some 55 miles from Mayo. A good all weather road goes from Mayo for 30 miles to the South McQuesten River Bridge. From the bridge, a 4 wheel drive (primarily) tote road runs along Haggart Creek some 22 miles to the base camp located at the junction of Ann Gulch and Dublin Gulch. For a few weeks in the summer a 2 wheel drive truck can negotiate the road. From the base camp on Dublin Gulch, a 3 mile very rough cat road, negotiable only by 4 wheel drive, goes up to the summit, near Potato Hills. Some branching cat trails are occasionally negotiable by 4 wheel drive. Many times during the 1978 work season none of the tote roads past the base camp were accessible by vehicle due to deep mud resulting from melting ice and heavy rain storms. In this case a helicopter from Mayo was used to take crews out and pick them up.

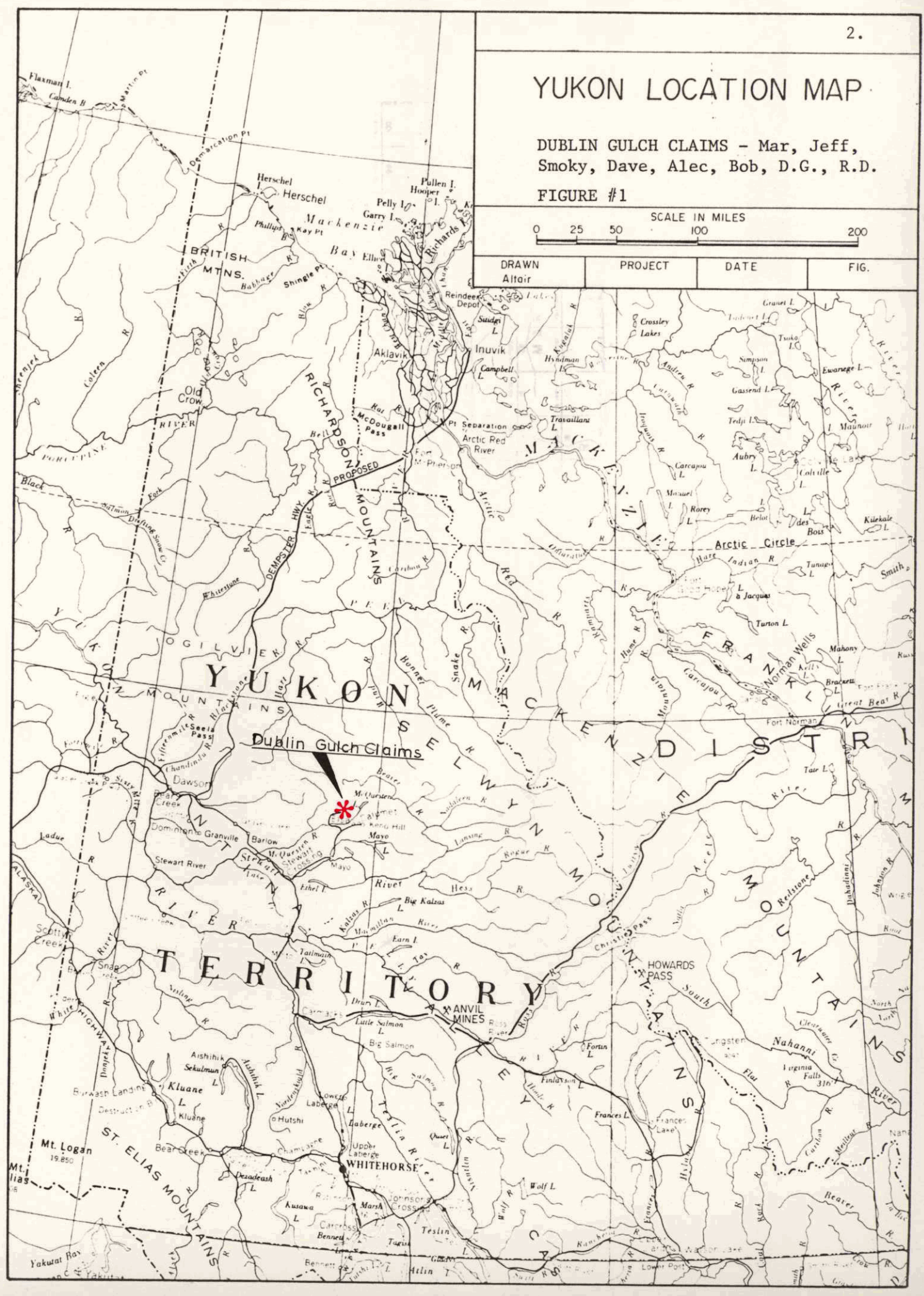
# YUKON LOCATION MAP

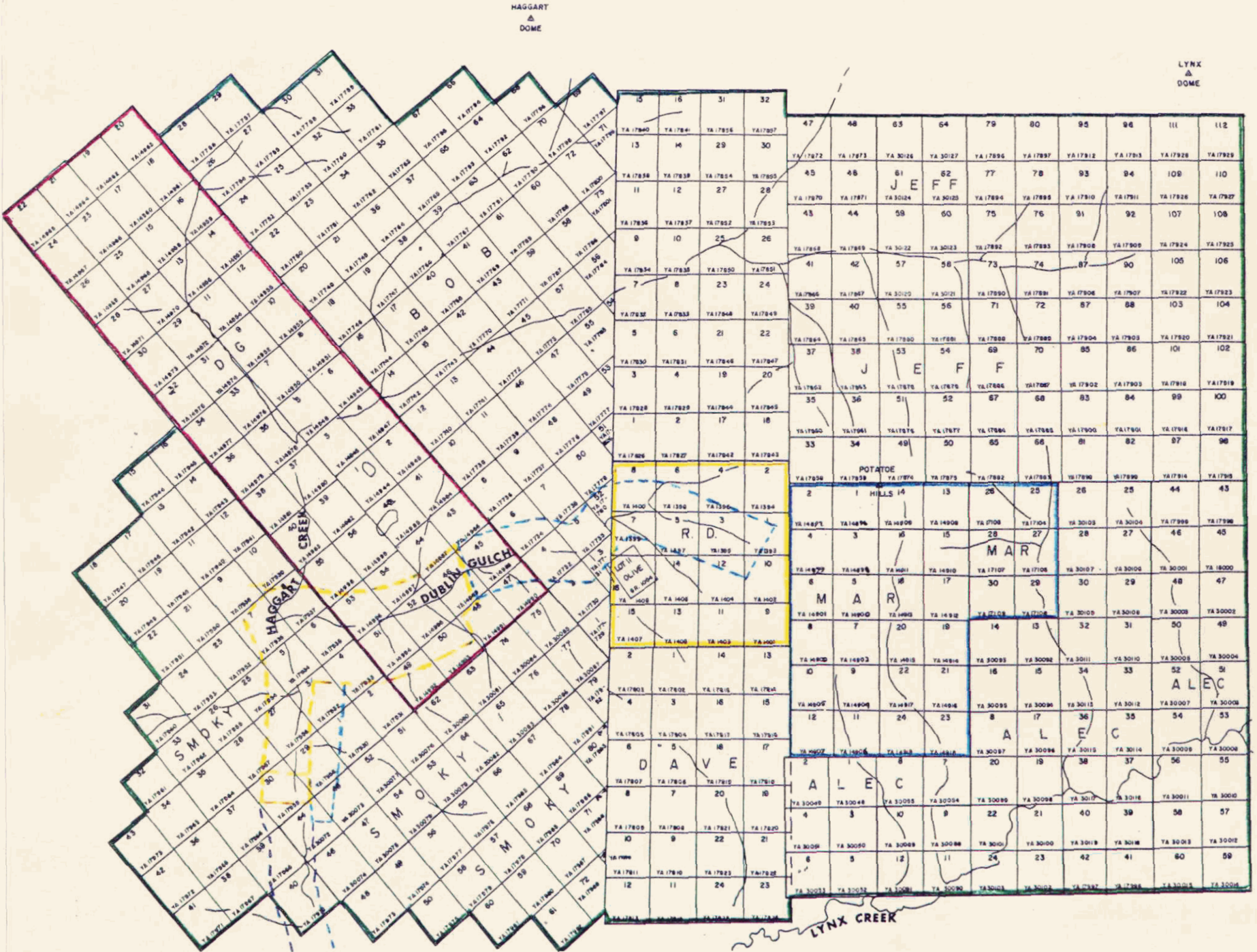
DUBLIN GULCH CLAIMS - Mar, Jeff, Smoky, Dave, Alec, Bob, D.G., R.D.

FIGURE #1

SCALE IN MILES
0 25 50 100 200

| DRAWN | PROJECT | DATE | FIG. |
|---|---|---|---|
| Altair | | | |






## CLAIM MAP

Scale 1:50000

### QUARTZ CLAIMS

- OPTIONED FROM G. DICKSON
- OPTIONED FROM QUEENSTAKE
- PURCHASED FROM DUBLIN GULCH MINING
- STAKED BY CANTUNG 1978

### PLACER CLAIMS

- OPTIONED FROM G. MANSON
- OPTIONED FROM QUEENSTAKE
- PURCHASED FROM DUBLIN GULCH MINING

FIGURE 2

W.B.L.

Climate

The climate is typical of the Central Yukon area with a mean annual temperature of $-2^{o}C$. The low average temperature is about $-10^{o}C$ and the high average temperature is about $3^{o}C$. The temperatures from winter to summer range from lows of $-55^{o}C$ to highs of $+30^{o}C$.

The average annual precipitation is about 15 inches with most of the rainfall occurring in May and June. Daily heavy thunder showers occur throughout the summer months.

Snow begins to accumulate as early as mid September and is melted by mid June at higher elevations. Up to 5 feet of snow may accumulate in the Upper Ray Gulch - Potato Hills area.

Topography and Vegetation

Three southwesterly trending drainages traverse the claim area. Haggart Creek, Dublin Creek and Lynn Creek make up the main drainages. Haggart Creek flows due south from a point 1 mile upstream from its junction with Dublin Creek. Lynn Creek flows into Haggart Creek at a point where Haggart Creek turns abruptly and flows south westerly again and later empties into the South McQuesten River system.

All of the above creek valleys are heavily timbered with mixed fir and spruce. This type of timber extends up the valley walls to an elevation of 3500 ft. where it gives way to scrub balsam and spruce. The balsam and spruce trees become more stunted as one approaches the 4000 ft. elevation level. Dense buck brush predominates all areas of the mountain slopes above 4000 ft. The only exceptions are the hillocks that approach 5000 ft. in elevation. The Potato Hills, Lynx Dome, Haggart Dome and parts of the ridge extending Southwest from the Potato Hills are barren except for lichens and alpine grasses and flowers.

The Potato Hills form the highest topographic point in the claim area reaching an elevation of 5043 ft. All the mountain slopes are fairly steep but rather uniform from one slope to the next. The slopes range from $25^{o}$ to $40^{o}$. The southeasterly facing slopes of the ridge North Lynx Creek are the exception. Ragged cliffs dominate this slope and are typified by the cliff in Ray Gulch (see Plate No. 2). The steepness and dense buck brush on this slope made line cutting, geologic and geochemical work very difficult.

History

The Dublin Gulch - Haggart Creek area is rich in mining history dating back to the Klondike gold rush days.

Placer gold was discovered in Haggart Creek and Dublin Gulch in 1898 and 1899. The creeks were worked sporadically during the early stages and it wasn't until 1904 that scheelite was identified in the placer deposits. In 1908 Cockfield located scheelite and wolfromite in quartz veins and pegmatitic veins at the head of Dublin Gulch. The results of this discovery and the increasing amounts of placer gold and tungsten being recovered, spurred on a flurry of lode deposit exploration from 1913 to 1916.

A major vein fissure system containing gold, arsenopyrite and silver was discovered on the north facing slopes of a ridge to the south of Dublin Creek.

J.S. Stewart and Dr. William Catto discovered ten veins belonging to this system between Stewart and Olive Gulches. Other veins belonging to this fissure system were discovered in Eagle Pup, Stuttle Pup, Platinum Pup, Bawn Boy Pup and near the junction of Cascallen and Dublin Gulch. A significant number of the veins have extensions of greater than 200 ft. and widths up to 10 feet.

Many test pits, adits and shafts were driven on these veins and values of $15 gold across 5 foot widths were common. Keeping in mind that gold was $20/oz. then, this translates into $210 over 5 feet at today's price of $280/oz. Canadian.

Many old reports (now out of print) by T.A. MacLean, and D.D. Cairnes of the Canadian Dept. of Mines 1914 and 1915 detail work on these veins. Dr. W.E. Cockfield of the Geological Survey of Canada reported on many of the above occurrences in a publication released in 1918.

From 1916 to 1918 Mr. Robert Fisher prospected around the headwaters of Dublin Gulch and located several small lode deposits carrying scheelite. Little or no work was carried out on these showings. Dr. Cockfield of the G.S.C. reported that the scheelite in the placer deposits was emanating from quartz veins and pegmatitic veins found in a small Mesozoic monzonite stock located at the junction of Dublin Gulch and Olive Gulch as well as from the numerous and similar veins found in the main 3 mile long granodioritic body found to the south of Dublin Gulch. The veins vary in width from 1/8 inch to over 5 feet. Assays range from 0% to 10% $WO_3$. It was during this time that some scheelite concentrate was saved and shipped out from the placer operations.

From 1934 and into the 1940's, Fred Taylor, Blyler and others worked the placer ground in Dublin Gulch. In 1940 cassiterite was recognized in placer concentrates. The cassiterite appeared to emanate from Ann Gulch and further prospecting led to the discovery of two tin, tourmaline quartz veins on Tin Dome in 1943 (Map 7). In 1945 Cominco drove a short adit (56') towards the vein intersection but did not reach it. No assessment work has been recorded since 1945. In April of 1977 Gordon Dickson staked 56 mineral claims over the Tin Dome showings. The claims were optioned to Canada Tungsten in 1978.

Some historical notes pertaining to other areas around Dublin Gulch, particularly Ray Gulch, are as follows.

Harvey Ray, a prospector, located scheelite bearing float in Ray Gulch in 1942. The source areas were not located until 1943 when the G.S.C. located several skarn zones at the head waters of Ray Gulch and other gulches cutting the steep southerly facing slope. All the gulches flow into Lynx Creek.

Mayo Silver Mines Ltd. located a 2½ foot arsenopyrite quartz vein on the east side of the headwaters of Ray Gulch. They did not explore for Tungsten.

Mr. Provencher staked the Ray Gulch and Dublin Gulch area in 1968. The ground was optioned to Great Plains Development in 1968, Tam Mining in 1969 and Connaught Mines Ltd. from 1969 to 1971. In 1970 Connaught subleased the property to Canex-Placer. In 1970 and 1971 Canex carried out an extensive soil sampling program that extended from Platinum Pup to the Potato Hills and covered the south side of Dublin Gulch.

Canex drilled 2000 feet and cut 20 bulldozer trenches in the Dublin Gulch - Bawn Boy Pup area. The work was primarily continued to the granodiorite stock in the hopes of locating a large low-grade scheelite bearing quartz vein stockworks. No work was done in the Ray Gulch area.

In March of 1977 Gordon Gutrath of Queenstake Resources staked 24 Mar Claims in the Ray Gulch drainage area. In October of 1977 Mr. Gutrath staked the Mar 25 to 30 claims which lie attached to but to the east of the Mar 1-24 claims. Queenstake carried out a small program of geologic mapping and sampling of the skarn zones in the Ray Gulch areas. One year of assessment was applied to the Mar 1-24 claims. No assessment on the Mar 25-30 was applied by Queenstake. Canada Tungsten optioned the Mar claims from Queenstake during the summer of 1978. Three years of assessment has been applied to the Mar 25-30 claims by Canada Tungsten.

References

W.E. Cockfield, Summary Report, 1918, Part B, Canada Department of Mines, Geological Survey

T.A. MacLean, "Lode Mining in Yukon" 1914

D.D. Cairnes, Sessional Papers 1916 Nov. 26

H.S. Bostock, Mining Industry of Yukon 1939 and 1940

H.S. Bostock, Map 43-9 with descriptive notes and 1949 map indicating tin prospect

H.S. Bostock, Canada Department of Mines 1942

G. Gutrath, P. Eng., Various compilations and Preliminary Geological Report on the Mar Claim Group

R.W. Boyle G.S.C. Bulletin III

Work Done in the 1978 Program

An extensive exploration program was undertaken by Canada Tungsten from June 1st, 1978 to Sept. 20, 1978 on 453 mineral claims the company had acquired in the Dublin Gulch, Haggart Creek and Lynx Creek drainages. The claims surround the placer gold, tungsten and tin deposits found in Haggart Creek and Dublin Gulch and an exploration program was designed to try and locate a mineable source area.

McElhanney Surveying was commissioned to prepare 13 1:5000 base maps from government air photos to provide the Canada Tungsten crews with accurate topographic control for their geologic, geochemical and geophysical surveys. These maps were necessary so work could begin while McElhanney was carrying out a new comprehensive aerial triangulation survey tied in with the flying of new aerial photography. New topographic maps and an orthophoto are nearing completion and will be ready for the 1979 field season. This work was done to facilitate accurate control of geologic information and any further mining that may come about as exploration proceeds.

Three high level air photo flight lines were flown to give stereo coverage at a scale of 1 inch equals 1/2 mile over 76 square miles of ground. Two low level air photo flight lines were flown down Dublin Gulch and Haggart Creek to provide detail and accurate map control for future placer mining operations (See Map 1).

Canada Tungsten crews cut out and established all survey sites and during the last two weeks of July a McElhanney survey crew was able to quickly survey all the sites in. On July 29 the aerial photography was flown.

An extensive reconnaissance geologic mapping, prospecting and geochemical program was then carried out. This work covered all drainages and most ridges within the claims boundaries and just peripheral to the boundaries. This was done to obtain a geologic and geochemical picture of the area. The information was used to establish geochemical signatures for different rock types and apply that information to more detailed work.

While the reconnaissance program was in operation a six mile long baseline was established along the ridge to the south of Dublin Gulch and trends north eastward passing between the two Potato Hills. See Geology Map 5 and Geochem maps 10, 11, 12, 13 for Grid Lines.

From the baseline, the "Ray Gulch" Grid was established. The grid runs perpendicular to the baseline and trends southeasterly across most of Ray Gulch. It covers the Mar 1-30 claims, R.D. claims and part of the Dave claims.

The "Dublin Gulch Grid" was also established and shares a common crossline normal to the baseline. with the "Ray Gulch" grid. This line is 38+950E. The Dublin Gulch grid runs perpendicular to the baseline and trends northwesterly into and across Dublin Creek. This grid connected with another baseline trending northeasterly along the ridge immediately to the north of Dublin Gulch. The "North Ridge" baseline parallels the main baseline described above.

The "Dublin Gulch Grid" crosses parts of the R.D., Dave, Smoky, D.G, Bob and Jeff claim blocks.

Detailed soil sampling, geologic mapping, prospecting and minor geophysics was then done on the grids. The work was done at a scale of 1:5000.

While the detailed work on the grid was progressing, a number of old trenches on Tin Dome were cleaned out and detailed geologic mapping at a scale of 1:1000 was done. Two grid lines were established over Tin Dome and soil samples were taken.

The detailed work established several areas of interest with respect to Tungsten, Tin and Gold mineralization. These areas were tested with rock channel samples. This was the last phase of the 1978 field program.

During the fall of 1978 and spring of 1979 all data was compiled and evaluated. Computer techniques were utilized in assessing a large amount of geochemical data.

Dublin Gulch Property - Survey Controls

The stages of survey control procedures undertaken at Dublin Gulch can be broken down into five distinct parts. They are (1) Map production from Government Aerial Photography (1960-1961) (2) 1978 Ground Aerial Triangulation Survey (3) 1978 Aerial Photography (4) Production of new Topography maps and orthophoto from 1978 Aerial Photography (5) Grid Control and Line Cutting.

1. Map Production from Government Aerial Photography (1960-1961) - (See Map 1)
   With the staking and acquisition by Canada Tungsten of 453 mineral claims in the Dublin Gulch area and 72 mineral claims in the Secret Creek area during the spring of 1978, it was necessary to have map coverage at sufficient scale to adequately evaluate this area.

   The only topographic maps available that cover this area are government 1:50000 map sheets. McElhanney Surveying and Engineering Ltd. were commissioned to produce 13 map sheets at a scale of 1:5000 with a 10 meter contour interval. It was decided to carry out all aspects of the map, survey, geochemical and geological programs in metric to avoid confusion in future years as Canada goes metric. From Map 1, the 13 sheets are outlined but the actual topography plotted lies within the

boundaries of the fine dashed line. This was done to confine the cost of map production to an area that would encompass all the claims and yield enough peripheral topographic information to aid in evaluating the outer boundaries of the claims.

Production of the maps by McElhanney was slow so blow ups of government 1:50000 maps to a scale of 1:10000 were required to carry out reconnaissance geology and geochemistry surveys on all the claims. This data is plotted on maps 3, 4, 8 and 9. The McElhanney 1:50000 maps arrived in August 1978 so most of the grid work was plotted on sheets 6 and 7. The past work and future work will be located on the remaining sheets as work continues on the property.

2. 1978 Ground Aerial Triangulation Survey (Map 2)
In order to facilitate the flying of new aerial photography over some 76 square miles of ground, the Canada Tungsten field crews cut out 35 horizontal and vertical control survey sites and laid out white markers and survey pins. These sites were specified by McElhanney. This work was carried out by Canada Tungsten to save time and ultimately lower the costs of the actual survey done by McElhanney crews. After these sites were established an additional 55 sites were established on grid lines, old road, tailings piles, drill holes and other noteable topographic features. The sites were tied to the 35 control sites and their U.T.M. coordinates and elevations located are on Map No. 2.

The McElhanney survey crew consisting of 2 men arrived on July 14th and commenced surveying immediately. The helicopter was used to position the surveyors at their various locations and provided for quick movement from site to site. When the helicopter was not needed while the surveyors were taking readings, it was utilized to pick up and drop off sampling crews carrying out reconnaissance geology and geochemistry surveys. The surveying was completed on July 30, 1978.

3. 1978 Aerial Photography - See Map 1

The surveying of ground control points was completed on schedule and the photography aircraft flew three high level flight lines and two low level flight lines over the Dublin Gulch and Secret Creek areas on July 29, 1979. The high level lines produced stereo photo coverage at a scale of 1 inch equals one half mile. The two low level lines (one flown down Dublin Creek, the other down Haggart Creek) produced photo coverage at a scale of 1 inch equals 1000 feet. The flight lines and photo numbers are located on Map 1.

As the photography plane was located in Whitehorse rather than Edmonton, ferry charges were saved. Because the cost of the aircraft were substantially less than anticipated it was decided to do the two low level flight lines down Dublin and Haggart creeks and thus provide photo and map coverage of the placer claims acquired by Canada Tungsten. This photo survey will be utilized in estimating the annual production of the placer operation.

The costs of all the surveying, mapping and photography apply primarily to the Dublin Gulch mineral claims.

4. Production of new Topography maps and orthophotos from 1978 Aerial Photography

The results of the new aerial photography yielded very high quality photos. The new photos were received by Canada Tungsten with instructions from McElhanney to locate and mark on the photos, any points which could be used to tie in future geologic work and diamond drill work etc. In addition to the 90 already established survey points, another 130 or so points were located on the new photos. With the aid of the computer, the elevations and coordinates for the 130 or so points could be estimated directly from the photos. Their coordinates and elevations are listed and located in Appendix III.

Maps and an orthophoto from the low level photography have been completed by McElhanney.

The orthophoto being made from the high level photography covering the mineral claims is nearing completion. The surveying data is correlating very well with the old government air photos so only minor adjustment will have to be made to the 13 1:5000 maps produced from them earlier. Cat roads and trenches put in by other companies since the government photos were taken, show up well on the new photos. This information will be transferred onto the 1:5000 map sheets. These minor adjustments negate the production of a complete set of new maps from the new photography thereby saving considerable expenditures.

5. Grid control and Line Cutting. See Geology Map 5 and Geochem Maps 10, 11, 12, 13 for location of grid lines.

A survey baseline was established on the divide between Dublin Gulch and Lynx Creek using Brunton compass and slope corrected chaining methods. The baseline, arbitrarily designated 10+000 meters North, runs from the southwest extreme of the ridge near Platinum Pup on Az 054 between East and West Potato Hills for a total distance of about 9 Km. Pickets are marked and placed at 50 meter intervals east and west along the baseline from an arbitrarily designated 40+000 E point and extended using Brunton compass and slope corrected chaining normal to the baseline on Az $144^{o}$. All stations are marked and picketed at 50 meter intervals on the crosslines. The baseline was transit surveyed from crossline 40+300 to its termination near Platinum Pup.

The "Ray Gulch" grid consisting of 17 lines was established and run normal to the baseline on Az. 144°. The grid starts at Line 38+200 East on its western edge and ends at L 40+600 E on its eastern edge. The shortest line L 39+250 E extends along Az. 144° from the baseline to station 9+350 N while the longest lines 39+700 E, 40+000 E, 40+150 E and 40+300 E extend along Az. 144° to station 7+600 N. Tie lines connected all lines between and including L 39+400 E and L 40+600 E at station 8+900 N and 8+000 N. Because of heavy buck brush and cliffs, the lines were not straight.

All lines were cut and cleared out to a minimum width of 1 meter after the compassing, slope correcting and picketing was done. Lines 40+150 E and 40+300E were transit surveyed.

The "Ray Gulch" grid crossed the Mar 1-24 claims, Mar 25-30 claims, Alec claims, R.D. claims and Dave claims.

The "Dublin Gulch" Grid was established next with 16 lines extending along Az. 324° normal to the baseline. The grid starts at Line 36+700 E on its western edge and terminates on its easterly edge with Line 38+950 E. Line 38+950E is shared with the "Ray Gulch" Grid.

Lines 36+700E and 38+950E extend northwesterly across Dublin Creek and up to the top of the ridge north of Dublin Gulch (designated "North Ridge" - see Geology Map 5) terminating at stations 12+200 N and 12+100N respectively. The lines are connected at these stations by another base-line running parallel to baseline 10+000 N. The second baseline is designated 12+100 N.

The lines between Lines 36+700 E and 38+950 E terminate at or just to the north of Dublin creek.

Two crosslines extend along Az. 324° normal to the 12+100 N baseline.

The "Dublin Gulch" grid crosses several of the R.D. claims, Dave claims, Smoky claims, D.G. claims, Bob claims and the Jeff 1 and 2 claims.

Two lines extend along Az. 324° over Tin Dome to the northwest of Ann Gulch. These lines cross the D.G. 1, 39, 42, 44, 54 and 56 claims.

All lines in the "Dublin Gulch" grid with the exception of the two lines over Tin Dome were cut and cleared to a minimum 1 meter width after compassing, slope-correcting and picketing was completed.

A total of 87 Km of lines in the "Ray Gulch" and "Dublin Gulch" grid were cut, cleared, compassed, slope-corrected and picketed. Of the 87 kilometers of line, 1.9 kilometers were cut and surveyed on the Mar 25-30 claim group.

Survey Personnel

The persons engaged in performing survey control on the Dublin Gulch claim blocks are listed below:

8 & 9 July 1978 - Ivo Noga, Registered Land Surveyor, Elsa, Yukon

4 July - 8 August 1979 - D.A. Lyman, 307 Maude Rd., Port Moody, B.C.

12 July - 9 August 1978 - John Graham, Jesmex Ltd., P.O. Box 5197, Whitehorse, Yukon

## Geologic Setting of the Dublin Gulch Property

Regional Geology - (See Maps 3, 4 and 5)

The Smoky, D.G., Bob, Dave, Jeff, R.D., Mar and Alex claims are underlain by thick succession of Yukon Group meta sedimentary rocks. The age of the Yukon Group is still uncertain but is believed to be Precambrian and/or Palaeozoic. (R.W. Boyle - G.S.C. Bulletin III). Cretaceous granodiorite, quartz monzonite and mafic stocks and plugs have intruded the meta sediments in the Dublin Gulch, Haggart Creek and Lynx Creek drainages.

R.W. Boyle has broken the Yukon Group rocks into 3 units in the claims area. These units are located on a G.S.C. map accompanying Boyle's Bulletin III.

Unit 1 lies in the vicinity of the Mar 25-30 claims, the Alec 25-32 and 43-50 claims and the Jeff 65-68, 81-84, 97-100 claims. This unit is made up of massive white quartzite, phyllite and quartz-mica schist.

Unit 2 lies immediately to the west of unit 1 and includes the Potato Hills, Ray Gulch and the two creeks draining southerly into Lynx Creek just to the southwest of Ray Gulch. This unit covers the Jeff 33-64, 69-80, 85-88 claims, the Mar 1-24 claims, the Alec 1-14, 32-42, 51-60 claims and the Dave 1-24 claims. Unit 2 is made up of quartzite, phyllite, graphitic schist, limestone, quartz-mica schist and skarn.

With the exception of the claims underlain by the granodioritic stocks and plugs, the remaining claims in the Dublin Gulch block are underlain by rock belonging to unit 3. This unit is made up of quartzite, phyllite, graphitic schist and quartz mica schist.

Once the reconnaissance geologic mapping and sampling program began it was realized that Boyle's 3 units were too generalized for detailed purposes so changes were implimented as the program unravelled the complexities of the area.

Skarn and limestone horizons were not restricted to Boyle's unit 2 and were found interbedded with rocks belonging to units 1 and 3. The meta sediments were broken down into 6 units and are located on maps 3 , 4 and 5 and described under the heading of "Local Geology". With further mapping in 1979 it is conceivable that more stratigraphic breakdown of units will be required.

The intrusive activity in the area has been broken into 5 phases. A 3 mile long granodiorite stock intrudes the meta sediments on the northwesterly facing slopes of the ridge lying between Dublin Gulch and Lynx Creek. This stock represents the earliest intrusive phase.

Quartz monzonite plugs (e.g. mouth of Olive Gulch) are satellitic to and a younger phase of the granodioritic stock.

The youngest intrusive activity in the area is represented by aplitic dykes and mafic plugs. Although rare, mafic plugs are located on the Smoky 36-39 claims and the D.G. 51-54 claims.

Structure

The Dublin Gulch area has undergone two phases of regional metamorphism. Evidence of a third phase has been indicated from the geologic mapping program. Antcline and syncline fold axis trend in a northeast-southwest direction. Normal dipslip faulting occurred parallel or sub-parallel to the fold axis. A northwesterly-southeasterly set of faults normal to fold axis is also apparent. Some evidence of thrusting along this set of faults is shown by drag folds in the black phyllitic schists located in Dublin Creek downstream from the mouth of Ann Pup. The Tin Dome fault may represent a thrust fault.

The northeasterly trending fault systems formed the zones of weakness that allowed the intrusion of granodioritic stocks and plugs.

The northeasterly trenching fabric (faults, fissures and folding) of the area is very similar to that exhibited in the Keno-Hill mining camp.

Local Geology (Maps 3, 4, 5, 6 & 7)

General Statement

A program of reconnaissance and detailed geologic mapping and geochemical sampling was carried out by Canada Tungsten during the summer of 1978 on all the claims belonging to the Dublin Gulch claim block. These claims are the Jeff 1-112, Alec 1-60, Mar 1-30, Dave 1-24, Smoky 1-82, D.G. 1-56, R.D. 1-16 and Bob 1-73. Larger areas of the ground are covered in moss, brush and scree which hampered mapping of contacts etc. The sharp ridges and incised creeks provided the best outcrop exposures.

Considerable amounts of work have been done in the area since the turn of the century by others but only a small amount of information is available.

Any information with respect to geology, has been incorporated with the Canada Tungsten work and is provided in the geologic maps in this report. Copies of diamond drill logs (although of poor quality) from Canex Placer's work in 1971 are located in Appendix II.

The references sited in the "History" portion of the report provide almost exclusively, the only record of previous work in the area.

Rock Types

Prior to metamorphian in the area, the rocks originally consisted of a thick succession of relatively pure and well sorted quartz arenites, arkoses, pelitic sediments and limestones. The two or three phases of regional metamorphism caused the formation of quartzites, phyllites, gritty quartzites, marbles and skarns.

Small intrusive plugs and stocks were emplaced in Cretaceous times along major zones of weakness. The intrusive activity took place much later than regional metamorphism.

Yukon Group Meta sedimentary Units (Precambrian and/or Palaeozoic) - (See Maps 4, 5, 6 and 7)
Unit 1 - Black Phyllite (Maps 4 and 7)

These rocks are graphitic phyllites that were black shales or argillites originally. Foliation planes are parallel to the bedding. The black phyllites exhibit a very lustrous shine where graphite is smeared on foliation planes.

These rocks are primarily located in a domed fault block that extends from Tin Dome (N.W. of Ann Gulch - Map 7) to the west bank of Haggart Creek just opposite the mouth of Dublin Creek. A small outcrop is located on the west side of Haggart Dome.

Very intensely folded black phyllites are located on Dublin Creek approximately 500 meters southwest of the mouth of Ann Pup. This location is where the Tin Dome Fault Zone crosses Dublin Creek (Map 5). It is this intense folding that suggests thrusting along the Tin Dome Fault.

Unit 2 - Marble - (Maps 3 and 5)

Relatively pure white to grey units of marble are found interbedded with biotite and muscovite quartzites and phyllites. The main outcrops are located on the southwesterly facing slopes of the ridge lying between Dublin Gulch and Lynx Creek.

The textures of the marble vary from relatively massive unaltered limestone to sugary textured crystalline marble.

The best exposures of marble are located on L38+050 E station 8+900 N, L39+700 E station 8+900 N, L38+850E stations 9+200 N and 8+900 N, L40+000 E station 8+700 N, L40+300 E station 8+650 N, and L40+600 E station, 9+050 N. Marble has also been located on the Jeff 100 claim and on a creek to the east of the claim block (see Map 3).

Unit 3 - Laminated Diopside Skarns (Maps 3, 4, 5 and Appendix I samples 8DL-0088, 8DL-0106H 8+900 N, 40+450 E)

Four major skarn zones were identified during the detailed mapping program. Examples of varying degrees of skarnification were found in many thinly bedded skarns throughout the property.

The colour of the skarn units vary from light green to dark green. The colour is dependent on the composition of the pyroxenes and the amount of calcium in the skarn. The light green skarns represent the diopside end of the pyroxene solid solution series while the dark green skarns represent the hedenbargite end of the solid solution series. Light green skarns also carry more calcium.

It appears that the light green diopside skarns have not undergone intense skarnification while the dark green hedenbergite skarns have undergone almost complete skarnification. The most completely skarnified rocks carry less than 5% carbonate. Next to diopside-hedenbergite the most abundant minerals are quartz and plagioclase feldspars.

From petrographic studies (see Appendix I) sample 8DL-106H indicates metasomatic involvement of the intrusive rocks as opposed to a strictly regional metamorphic origin for the remaining skarns which is indicated by sodic plagioclase. Further petrographic studies may indicate more metasomatic involvement.

The skarns range in thickness from 10 cm to greater than 12 meters. The thin skarn lenses exhibit distinct laminated texture while the thick sections appear massive. The massive units are, in fact, distinctly laminated upon close examination with potash and plagioclose feldspars forming trains parallel to layering.

Garnet Skarn Zone (see Figure 3, Maps 3 and 5)

This zone is not represented in outcrop but is implied from a considerable amount of float samples collected on the rounded scree covered hills located between and including Lines 38+200 E and 38+800 E and between stations 10+100 N and 8+600 N.

Skarn units exposed between Lines 38+200 E and 38+350 E near station 8+900 N may represent non-garnetiferous sections of the Garnet Skarn Zone. It is believed by the writer that garnet formation occurs as one approaches the intrusive contact and that the garnet skarn float is closer to the contact than those outcrops located on cliff faces in the area described above. Tungsten mineralization is greater in the Garnet Skarn Zone than in the other 3 zones discovered making this a good exploration target. Several samples taken of garnet bearing float assay greater than 1% $WO_3$ while the non-garnetiferous skarn samples belonging to the garnet skarn zone range from .15% $WO_3$ to .60% $WO_3$. To avoid cluttering these samples are plotted on geochemistry map 8.

The garnets occur as porphyroblasts and are surrounded by reaction rims of plagioclose and feldspar.

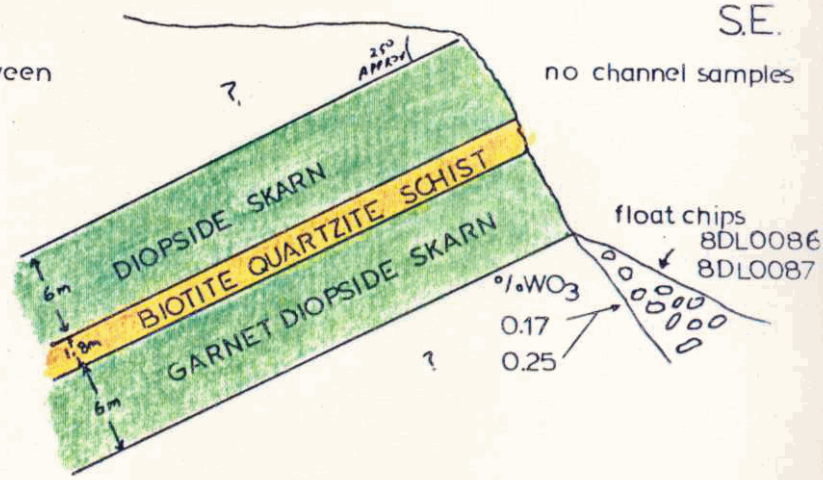
# GARNET SKARN ZONE

garnetiferous skarn found only as float - possble section below - float occurs along a 600 meter stike? length, bounded-north by granodiorite stock, south by fault?

N.W. S.E.

this zone rarely exposed. float rock occurs between lines 38 • 200 and 38+950 south of baseline

| line 38 • 200 | %$WO_3$ |
|---|---|
| 8DA0266 | 0.30 |
| 267 | 0.18 |
| 275 | 2.26 |
| 276 | 0.50 |
| 282 | 0.27 |
| 285 | 0.22 |
| 286 | 0.47 |
| 287 | 0.30 |
| 290 | 0.60 |
| 292 | 0.43 |
| line 38+350 | |
| 8DA0268 | 0.16 |
| 269 | 0.20 |
| 270 | 0.19 |
| line 38+500 | |
| 8DA0272 | 0.38 |
| 273 | 0.15 |
| line 38+650 | |
| 8DL0081 | 0.03 |
| 82 | 0.74 |
| 83 | 0.53 |
| 84 | 0.31 |
| 85 | 0.69 |




SCALE 1:500

0 5m 10m

FIGURE 3

WBL

39+400 Skarn Zone (see Figure 4, Plate 1 & 2, Map 5)

This skarn zone is approximately 23 meters thick and dips northwesterly towards the granodioritic stock contact area.

The skarns are massive appearing dark green laminated diopside-hedenbergite units that are interbedded with grey to black biotite quartzites. Garnets have not been observed in this zone to date. The zone is farther away from the intrusive contact area than the Garnet Skarn Zone.

Channel samples were taken from all but one skarn bed and assays range from .03% $WO_3$ to .74% $WO_3$. Scheelite is disseminated throughout the skarns but has an affinity for quartz grains.

The 39+400 skarn zone is located between Lines 39+200 E and 39+400 E near station 9+300 N.

Where this zone comes into close contact with the intrusive stock, garnet formation and better scheelite mineralization may take place.

39+800 Skarn Zone (see plate 2, Figure 5 and Map 5)

The skarn units of this zone are similar to those of the 39+400 zone. This skarn zone lies between Lines 39+550 E and 39+850 E and between stations 9+400 N and 9+500 N.

The true thickness of this zone is not known. The old trenches that were cut in the 1960's have exposed 13 meters but moss, brush and scree cover the northeast and southwest extensions.

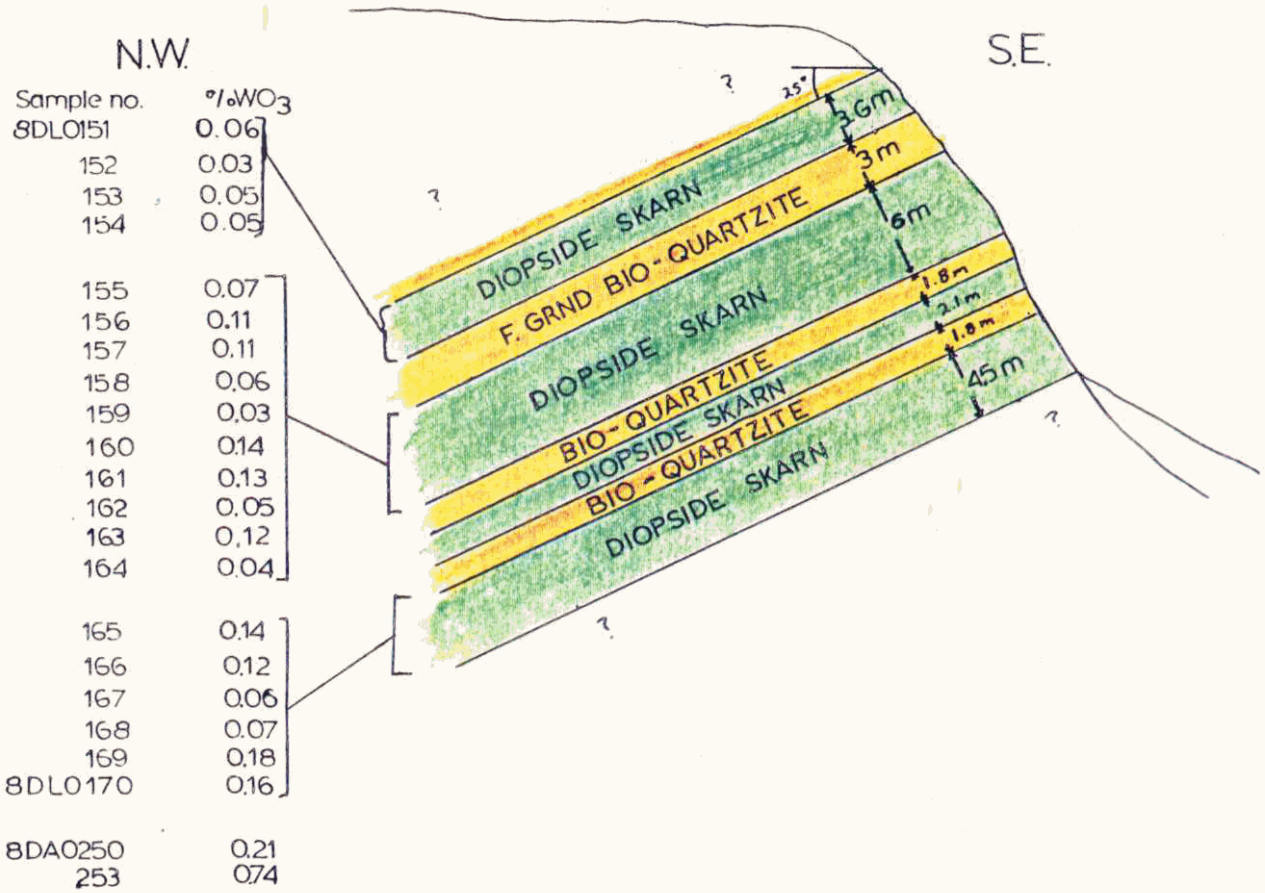
Two normal dip slip faults with approximately 10 meter and 2 meter displacements have offset the 39+800 zone between Lines 39+550 E and 39+700 E.

# 39+ 400 SKARN ZONE

outcrop indicates stike length of 200meters.

float rock indicates additional 300meters

bounded by faults? to north and south




SCALE 1:500
0 5m 10m

FIGURE 4

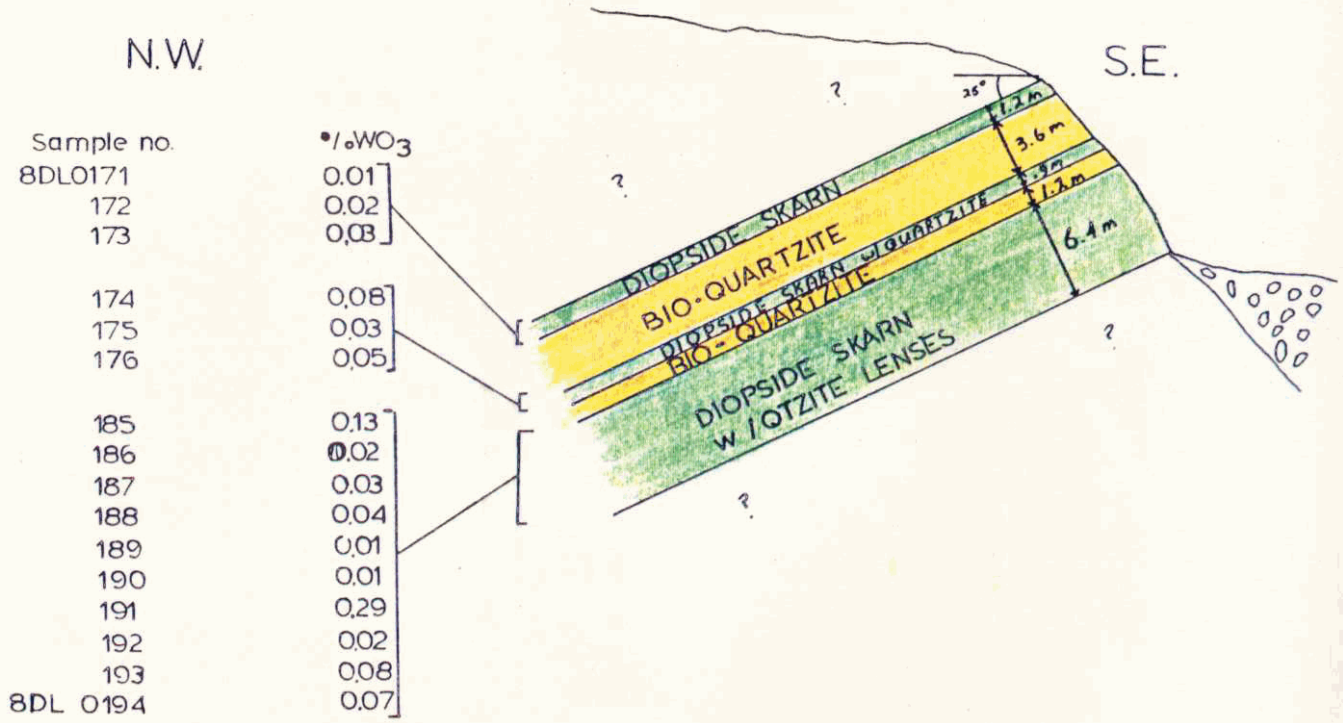


PLATE # 1 39 + 400 SKARN ZONE

VIEW LOOKING NORTHEAST

# 39+800 SKARN ZONE

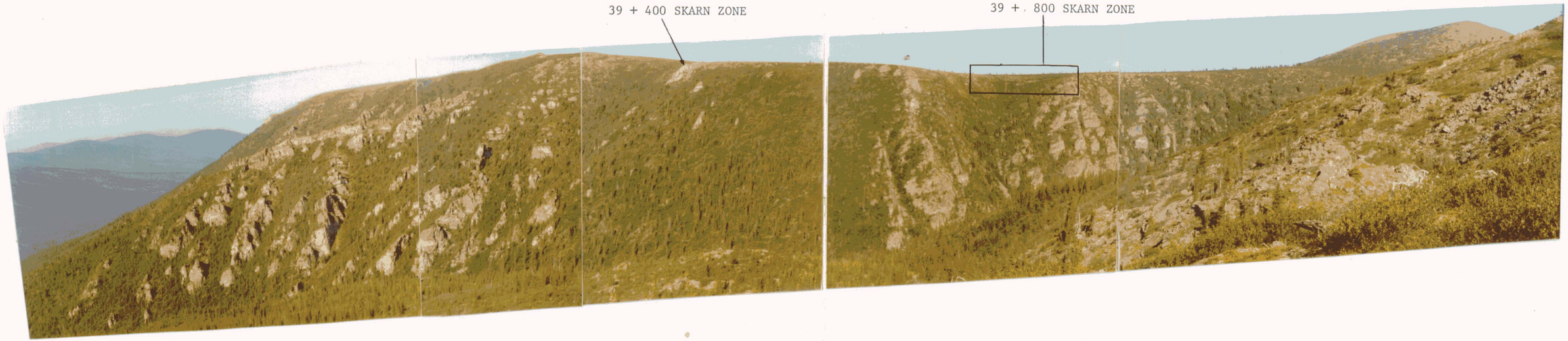
outcrop occurs on two cliff noses which are separated by 200 meters of covered terrain - extensions obscurred by cover.




SCALE 1:500
0 5m 10m

FIGURE 5

WEST POTATO HILL




PLATE# 2 VIEW LOOKING NORTHWEST - CLIFFS ON WEST SIDE OF RAY GULCH
INTERBEDDED BIOTITE - QUARTZITE SCHIST, MUSCOVITE -QUARTZITE SCHIST
MINOR MARBLE AND LAMINATED TO MASSIVE DIOPSIDE SKARNS.

The skarn beds are dark green and appear massive from a distance but are well laminated when observed more closely.

Scheelite is noticeably scare here as compared to the two previously described skarn zones. Again this zone is still farther away from the intrusive contact than the Garnet Skarn Zone and 39+400 skarn zone. Channel sample assays range from .01% $WO_3$ to .29% $WO_3$. The scheelite is finely disseminated throughout all skarn beds.

40+150 Skarn Zone (see plate 3, Figure 6 and Map 5)

This skarn zone (the thickest and most extensive on the Dublin Gulch Property) outcrops along and between Lines 40+150 E and L40+300 E and between stations 9+200 N and 9+ 300 N. Large skarn boulders extend from the sharp bend in Ray Creek at L39+750 E station 9+100 N, northeasterly to Line 40+600 E station 9+500 N.

The cliffs along Line 40+150 E station 9+250 N expose the best example of this unit. It is approximately 12 to 15 meters thick, dark green equigranular, and laminated. There are no quartzite lenses or beds within the main skarn bed. The skarn is overlain and underlain by biotite-quartzite schists although the overlying schists are more phyllitic than those that underly the skarn.

The skarn horizon strikes aprpoximately N26E$^{o}$ and dips 28$^{o}$ NW. A 1/2 meter quartz vein cuts the skarn zone at L40+150 E station 9+280 N.

Some of the large (up to 5 mm) diopside-hedenbergite grains impart a granoblastic texture to the rock while the finer grained crystals give a laminated appearance to the rock.

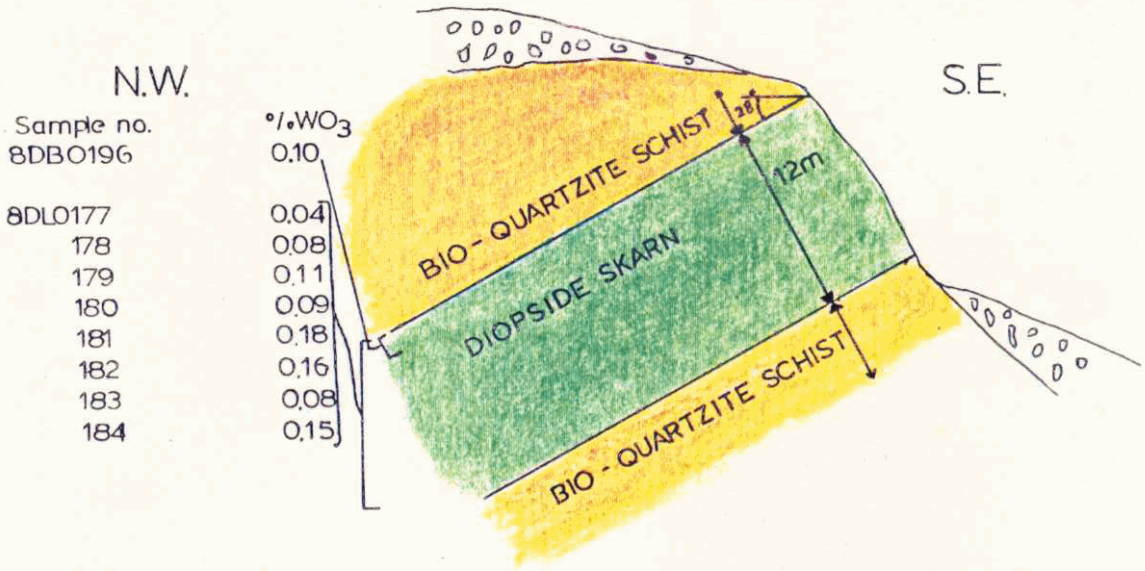
Quartz grains range up to 5 mm in diameter and can compose up to 15% of the rock. It is believed by the writer that the quartz was introduced with quartz veining that took place at the time of intrusive activity.

# 40 + 150 SKARN ZONE

200 meters of strike length exposed in outcrop

bounded to south by erosional features and a fault

bounded to north by probable transition to unaltered marble




SCALE 1:500

0 5m 10m

FIGURE 6

WBL




PLATE # 3 VIEW LOOKING EAST - EAST SIDE OF RAY GULCH

Unit 4 - Muscovite - Quartzite (Schistose) - (Map 3, 4, 5 & 7)

This unit is made up of three rock types, Continued geologic mapping during the 1979 season may necessitate the separating of this single unit into its 3 component rock types.

The first rock type in this unit is a white to pale green, very hard and pure muscovite quartzite. Although massive in appearance due to it's hardness, the rock is very finely laminated (1-2 mm thick laminations) with a dusting of very fine grained muscovite lying in the lamination planes.

Muscovite-Quartzite Schist is the most common rock type in this unit. Sericite is often found with muscovite on the foliation planes. The schistose texture is caused by platy layers of muscovite separating thin (1-3 mm) laminae of quartz grains. This rock type is cream coloured to light brown.

Muscovitic Phyllites are the remaining rock type belonging to this unit. These rocks are composed mainly of muscovite and/or sericite. This imparts a bright lustre to the rocks, particularly in sunlight. Only a few beds of the rocks belonging to this unit are found on the southeast side of baseline 10+000 N. An increase in occurrences of this unit are found to the southeast of baseline 10+00 N in the vicinity of Lines 40+150 E to L40+600 E between stations 8+600 N and 9+300 N.

This unit predominates the area to the west of Haggart Creek and is found on the Smoky 13-26, 36-43 claims, and the D.G. 1-38 claims. The Bob 8-49 and 54-73 claims and the Jeff 9-16, 25-32, 45-47, 61-64, 79-80, 95-96 and 111-112 claims which lie between the east fork of Haggart Creek and Haggart and Lynx Domes, are underlain by the Muscovite-Quartzite unit (see Map 3 & 4).

Unit 5 - Biotite - Quartzite (Schistose) - (Map 3, 4, 5 & 6)

This is a very distinctive unit that occupies a long portion of the claim area. The best exposures are located to the southeast of baseline 10+000 N on the "Ray Gulch" grid. It forms a very thick succession (500 meters exposed) that is interbedded with the skarn units described previously.

The granodiorite stock intrudes this unit almost exclusively and small pendants of biotite-quartzite are found in places (see Section Map 6 A-A').

Good exposures are also located on the "North Ridge" between Dublin Gulch and the east fork of Haggart Creek. The claims underlain by this unit are Alec 1-60, Mar 1-30, R.D. 9-12, Dave 3-24, Smoky 49-75, 78, 80-81, D.G. 45-52, Bob 50-53 and Jeff 1-8, 17-24, 33-44, 49-60, 65-78, 81-94 and 97-110.

This unit is characterized by a grey to black colouration (depending on biotite content) and schistose texture caused by the formation of biotite on foliation planes between white quartz and feldspar laminae.

Unit 6 - Garnet Diopside Skarn

*Described previously under "Garnet Skarn Zone"*

Unit 7 - Biotite Granodiorite - (See Map 5 and Appendix I - sample - Eagle-Stewart Ridge: 10+200 N)

This unit is very limited in extent and is located where Line 36+650 E station 10+050 N should be. It forms part of the contact area of the main gronodiorite stock with biotite-quartzite schists. It is distinguished from the granodiorite by its much darker and blotchy colouration. This is due to the xenoliths of country rock being incorporated into and partially assimilated by the qranodiorite.

The writer does not believe that this unit is a separate phase of the granodiorite stock but just an area where the granodiorite magma assimilated pieces of rock that separated from country rock due to shattering caused by intrusion.

Unit 8 - Granodiorite and Granite - (see Maps 3, 4, 5, 6 and Plate 5)

This unit forms the largest intrusive body in the Dublin Gulch-Haggart Creek area. It forms a northeasterly trending elongate body on the south facing slopes of the ridge between Dublin Gulch and Lynx creeks. The granodiorite stock is approximately 250 wide at its southwestern contact near Platinum Pup and it widens approximately 1500 meters as it trends towards its northeastern contact near the base of West Potato Hill.

The unit is of typical granodiorite composition and the stock does not exhibit any compositioned zonation changes from the contact areas to its core. A textural zonation is evident with the rock exhibiting a medium grained euhedral equigranular texture as one approaches the contact area with the biotite quartzites and a medium to coarse grained porphyritic texture in the core area of the stock. This porphyritic texture is best exposed on the "Dublin Gulch" grid between Lines 36+700 E and 38+950 E and between stations 10+400 N and 10+600 N.

This main granodioritic stock covers the following claims: Mar #2, Jeff 2, 17, 18, 33 and 34, R.D. 1-8, 11-16, Dave 1-4, Smoky 53, 54, 65, 75-79, and Bob 1 and 2.

Two small plugs of mafic deficient granites also occur on the property and may be satellitic to the main granodiorite body. They represent a different phase of intrusion and "appear" to be younger than the granodiorite stock.

One of the granitic plugs lies on the south bank of Gill Gulch. The Smoky 26-28 and 31-35 claims cover most of this plug. The other plug is elongate and felsic with a fine to medium equigranular texture. This plug is located near station 8+000 N along Lines 40+150 E, 40+300 E, 40+450 E and 40+600 E of the "Ray Gulch" grid. The claims that cover this plug are Alec 13-16, 29-32 and 48.

Unit 9 - Aplite Dykes - (Map 5 and Appendix I - sample E-10 L 10+000 N station 38+500 E)

There are only 2 occurrences of aplitic dykes recognized on the property to date. One location is on L 38+500 E station 9+100 N on the "Ray Gulch" grid and the other cuts across an outcrop of biotite-quartzite located between Lines 40+150 E and 40+300 E at station 9+525 N.

The dykes are typified by their fine to medium grained sugary texture and white colour. Quartz constitutes at least 60% of the rock and plagioclase grains intergrow and are anhedral in nature.

Unit 10 - Quartz Monzonite - (see Maps 4, 5 and 7, Plate 4 and Appendix I - sample E-16 Canex #3 D.D.H.)

The quartz monzonite plug is located on the property and it is quite distinct both texturally and compositionally from the main porphyritic granodiorites and granites. This small plug is located at the junction where Olive Gulch flows into Dublin Gulch. The precise location is at athe end of and between Lines 37+450 E and 37+750 E on the "Dublin Gulch" grid. The Bob #5 claim covers this area. Canex Placer drilled their #3 diamond drill hole into this plug in 1971.




PLATE# 4 VIEW OF " NORTH RIDGE " LOOKING NORTHWEST
Quartz vein stockworks emanating from small Quartz Monzonite Plug. Veins carry Scheelite and minor molybdenite and cassiterite.

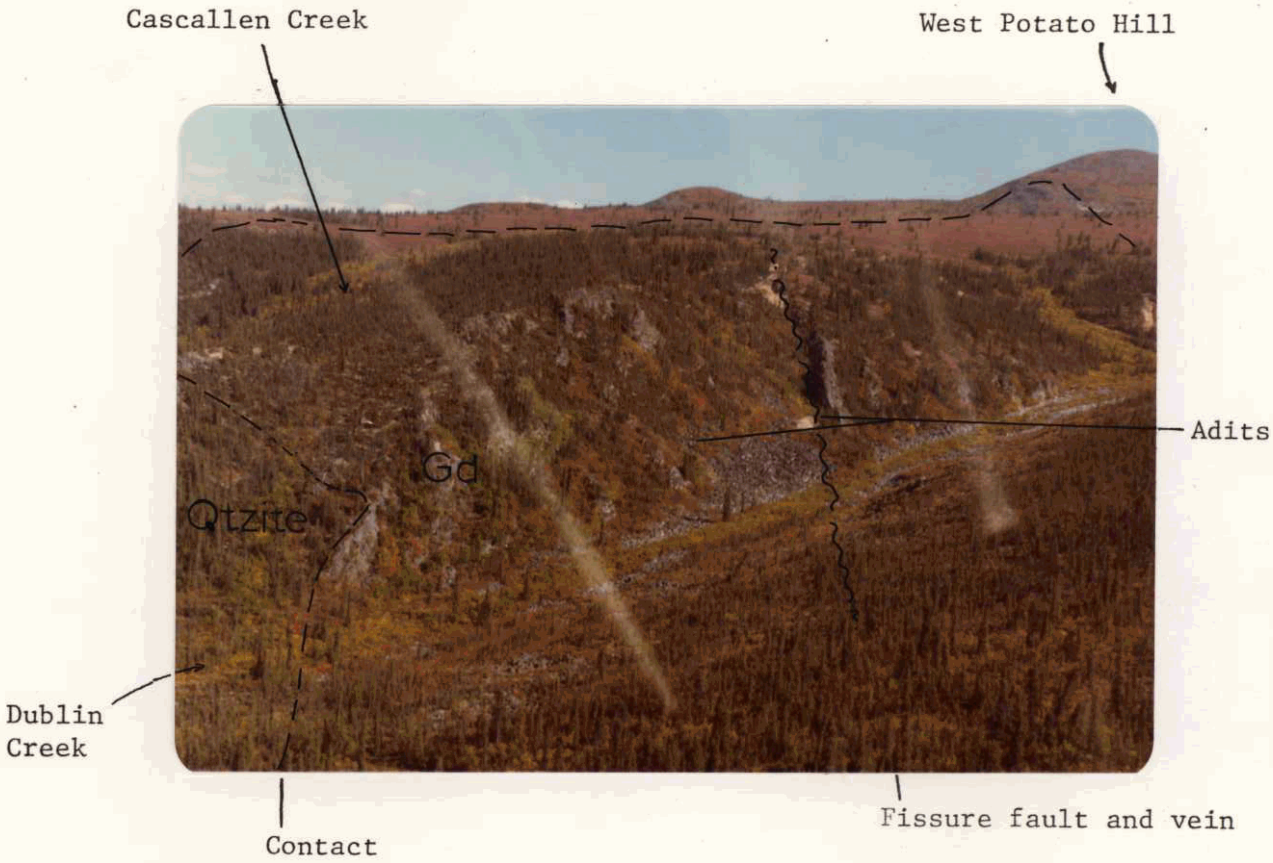



PLATE # 5 VIEW LOOKING NORTHEAST - CASCALLEN AND DUBLIN CREEKS
QUARTZITE AND GRANODIORITE CONTACT AREA

The quartz monzonite has medium to coarse grained porphyritic texture. Orthoclase phenocrysts up to 1 cm in diameter are common. The crystals are anhedral and often contain microperthite lamellae. Quartz is interstitial to the orthoclase. There is the suggestion of a previously miarolitic texture with subsequent formation of interstitial radiating masses of chlorite and prehnite.

It is believed by the writer that this plug represents a later intrusive phase originating from the granodiorite and is actually an unroofed cupola. This unit contains a quartz vein stock works that carries scheelite. Where these quartz veins penetrate the biotite-quartzites overlying the plug, cassiterite and minor amounts of molybdenite are found.

Unit 11 - Mafic rocks - Gabbros and Diorites

Two outcrops of this unit were mapped on the Dublin Gulch property in 1978. The largest showing is located immediately to the south of the Gill Gulch granitic plug west of Haggart Creek. The Smoky 36 and 37 claims cover the mafic rock outcrops. The rocks from the above location appear to be dioritic in composition and are dark green in colour. Chlorite alteration is of moderate intensity.

Small gabbroic lenses were discovered in biotite quartzite schist that was exposed by the placer miners. This outcrop is located in Dublin Creek just 50 meters upstream from where Eagle Pug joins it (Map 5). These small mafic intrusive plugs are mapped throughout the McQuesten area including the Keno Hill mining camp. It is not known if this was the last intrusive phase in the area.

Quartz Veining - (see Map 5 and Plates 4 and 5)

The quartz veining events on the Dublin Gulch claim block are the most important geologic features with respect to economics. The bulk of the lode showings and placer deposits are directly attributable to mineralized quartz veins. To date four distinct quartz veining events have been mapped.

The first vein system is made up of 2 sets of veins, one trends North to N 20°E with dips of 80° N.W. or S.E. and the other trends 90° to 120° with dips of 90° or 80° to the S.W. This vein system is the oldest on the property and is directly associated with the cooling and fracturing phase of the main gronodiorite intrusion. The veins range in thickness from 2 mm to greater than 30 cm although the latter is rare. The veins that are greater than 5 cm thick have a pegmatitic texture with clear quartz, milky quartz, pink potash feldspar crystals and scheelite patches making up the bulk of the vein minerals. Vein density ranges between 2 and 10 per 30 cm. Although rare, a few of these veins cut the biotite-muscovite-quartzites and skarn zones southeast of baseline 10+000 N. A 1/2 meter thick vein cuts the 40+150 Skarn Zone near Line 40+150 E station 9+300 N. Canex Placer drilled two holes in the granodiorite stock in 1971 to test the scheelite content of this vein system.

The second veining event is related to the intrusion of the small quartz monzonite stock described previously and located at the junction of Olive Gulch and Dublin Gulch. This system is also made up of two set of veins. The most prominent set trends Az. 075° to Az. 090° and dips 60° to 70° to the south. These veining ranges in thickness from 2 mm to 10 cm and are composed of clear quartz, milky quartz and

patches of scheelite. The other set of quartz veins trends Az. 345° to Az. 360 and dips 80° to the east or west. The composition of this vein set is identical to the above mentioned set. These two sets of veins make up a stockworks system that penetrate the overlying biotite-quartzite schists. A distinct feature of this system is that cassiterite, scheelite, wolframite and minor molybdenite mineraliztion occurs in the veins only after they enter the biotite-quartzites while scheelite is only present in the veins within the quartz monzonite plug only along the "North Ridge" area of the property.

The third veining event is located on Tin Dome and is covered by the D.G. 1, 39, 42, 44, 54 and 56 claims. These veins are difficult to identify because of their dark colour and gougy texture. They blend in with brecciation zones and fragmented black phyllites and quartzite-schists. This veining event may be the same age as the previous one if the "suspected" hidden cupola intruded at the same time as the quartz monzonite stock. Tourmaline and cassiterite mineralization are found almost exclusively in this vein system. There are two sets of veins associated with this system. One set trends N 25°E and has a 90° dip and the other set trends N 54°W and has a 90° dip. Cominco tried to reach an area where these two vein sets intersect with an adit but failed.

The youngest veining stage on the Dublin Gulch property accompanies an extensive fault-fissure system that trends northeasterly and parallels the northwest contact area between the large 3 mile long granodiorite stock and biotite-quartzite schist. This system is composed of several parallel veins that vary in number. Arsenopyrite and gold are the main minerals found in the vein system and were extensively explored from 1912 to 1940. These veins were referred to in the "History" section of the report.

Mineralization

The primary economic minerals found on the Dublin Gulch property are tungsten (scheelite), tin (cassiterite), and gold. All the above minerals are found in the placer deposits on Dublin Creek and in the quartz vein systems described previously.

There are five distinct mineral zones on the Property. Most of these zones are related to the veining events described above so it could be expected that ages of mineralization would follow suit. This, does in fact, appear to be the case.

The most important mineralizing event occurred with the oldest sets of veins that are found within the large granodiorite stock. It is believed by the writer that scheelite mineralization in these veins are the primary source of scheelite found in the Dublin Gulch placer deposits. This is based on the fact that 1) the Dublin Gulch valley is filled with overburden up to 50 meters thick which is composed of 75% to 80% granodiorite boulders derived from the stock and 2) the largest amount of veining occurs in the granodiorite stock and the veined boulders are decomposing in Dublin Gulch. Scheelite is the only economic mineral found in this vein system and it is distributed unevenly throughout as patches and blebs. Canex-Placer drilled two holes into these veins in 1971 in the hopes of finding a large low grade Tungsten stockworks deposit. Because of the uneven distribution of scheelite in the veins the results were disappointing. (See Appendix II). The writer believes that mineable grades will not be found within the stock but that because of the sheer volume of talus derived boulders within Dublin Gulch, concentration of scheelite through weathering can easily account for the placer deposits.

Scheelite mineraliztion is also found within the four skarn zones discussed earlier. This mineralization was introduced contemporaneously with the intrusion of the main granodiorite stock. Evidence for this is indicated by the occurrence of scheelite bearing quartz veins emanating from the granodiorite, cutting across beds of skarn, quartzite and phyllite. A zonation of mineral grade also indicates the direct association of mineralization with intrusive activity. From Figures 3, 4, 5 and 6 and the channel sample assays plotted on them, it can be seen that tungsten grade drops off as one travels southeasterly away from the granodiorite - quartzite contact area. The float and outcrop samples from the "Garnet Skarn Zone" have an average grade of 0.45% $WO_3$ while channel samples from the 39+400 zone have an average grade of 0.124% $WO_3$. The 39+800 Skarn Zone and 40+150 Skarn Zone have average channel sample grades of .057% $WO_3$ and 0.11% $WO_3$ respectively. This zonation is confused in the 40+150 Skarn Zone and in thinner skarn units found lying between Lines 39+700 E and 40+600 E and stations 8+000 N and 8+900 N. Although the mineraliaztion in the thinner skarn units is not evenly distributed, some higher grade sections are found and this is attributable to the small elongate granitic plug lying southeast of station 8+000 N on the lines belonging to the "Ray Gulch" grid and mentioned above. This causes a boost in the grade in an area quite distant from the main granodiorite stock. The second small intrusive event possibly caused remobilization and concentration of scheelite originally introduced by the granodiorite stock. More exploration on the southeast half of the "Ray Gulch" grid is needed to see if any larger areas of "upgraded" skarn can be located.

The vein system associated with the small Quartz Monzonite plug located near the junction of Olive Gulch and Dublin Gulch carries patches and blebs of scheelite. As the distribution of mineralization is not even, assays of samples taken along one vein range between .01% $WO_3$ and .71% $WO_3$. This vein system penetrates the overlying biotite-quartzite schist and the mineralization changes. Scheelite, wolframite, cassiterite and minor amounts of molybdenite are found only in veins outside the stock itself even though the veins originate from within the stock. (See Map 4 and Plate 4). This discovery was made late in the 1978 field season and the "North Ridge" area that overlies the Quartz Monzonite stock has become a prime exploration target. Trenching is required to expose and explore the extent of this mineralized stockworks. This mineralization event was probably the second one and is slightly younger than the one associated with the granodiorite stock.

The mineralization that occurs on Tin Dome is different from the three previous ones described but may be the same age as the mineralizing event associated with the Quartz Monzonite plug. The veins found on Tin Dome are diffucult to distinguish from the highly sheared and fragmented Black Phyllites and quartzites. They are dark greenish grey coloured and have a consistency of a clay rich fault gouge. The veins are primarily made up of quartz and tourmaline. Cassiterite is found in crystalline form within the veins. Four of the rock samples taken by Canada Tungsten crews assayed .84% Sn, .36% Sn, .01% Sn and..40% Sn. In 1945 Thompson and Bostock sampled the veins and obtained assays of 1.53% Sn and .83% Sn over 2.5 ft. Boyle took a sample in 1965 that assayed .26% Sn over 330 feet. Cassiterite cobbles weighing 2 to 3 lbs. have been found in placer concentrates according to old reports. Another area that has tin mineralization associated with it in a similar manner to that of Tin Dome is the small granitic plug (described previously) located near the junction of Haggart Creek and Gill Gulch (Map 4).

This plug has not been studied in detail but silt samples in Gill Gulch and casserite found in the Haggart Creek placer deposits downstream from the mouth of Gill Gulch, are highly anomalous and indicates that detailed exploration is required in 1979.

The youngest mineralizing event on the property is restricted to the vein system associated with the major northeasterly trending fault-fissure zone described previously. Arsenopyrite and gold are the primary minerals found in the quartz veins. Lesser amounts of antimony, silver, and galena are also found. The mineralization is distributed throughout the parallel sets of veins belonging to this system. Up to 10 veins running parallel to each other have been found. It is from this mineralized system that the gold in the placer deposits of Dublin Gulch are derived. As one walks downslope in a northwest direction towards Dublin Gulch, the overburden becomes deeper and may cover other gold bearing parallel sets of quartz veins. It is this set of mineralized veins that the prospectors of the early 1900's sank shafts and adits in the hopes of locating the mother lode. Vein widths and assays were described under the heading of "History". A Vector Pulse Electromagnetic geophysical survey should be undertaken to delineate the existence of more parallel northeast trending veins covered by overburden. Old workings should be cleared out and tested.

Structural Geology

a) Metamorphism: (study of petrographic report - Appendix I)

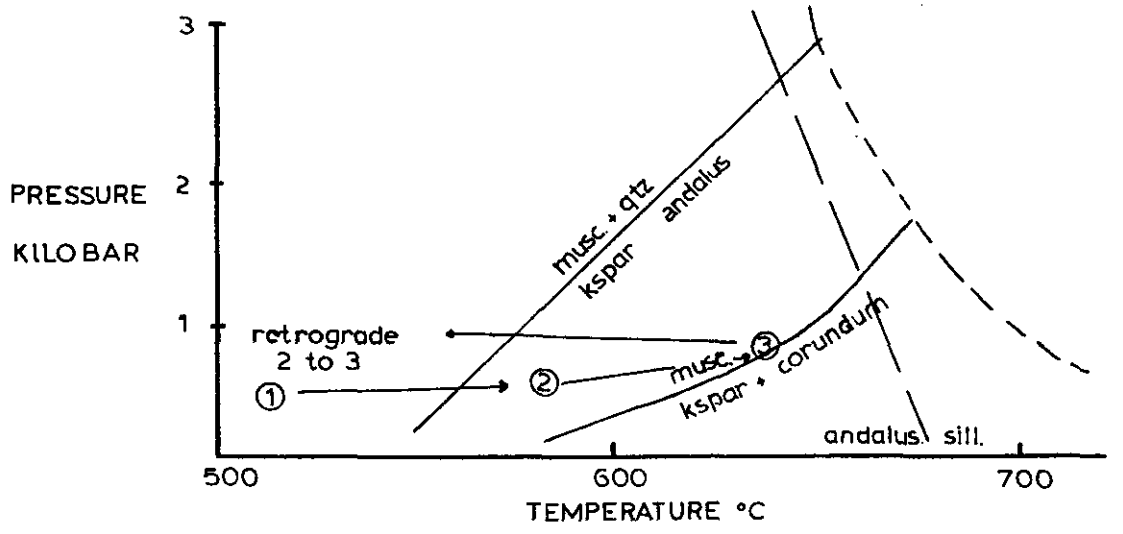
The pelitic phyllites and quartzitic schists from the Dublin Gulch area show both progressive and retrograde metamorphism. Wtih the presence of quartz, muscovite, andalusite (9+500 N, 39+650 E), Kspar and corundum assemblages,

pressure-temperature sequences from regional to contact metamorphism can be estimated. The graph below (from Turner, Metamorphic Petrology, P. 120 reaction A) shows the metamorphic events as portrayed by thin section studies of the following samples -

event (1) 8DB 0228 (8DB0151 and 207 also contain muscovite plus quartz)

event (2) 8DB 0234

event (3) 9+500 N, 39+050 E




The regional metamorphism resulted in progressive metamorphism while intrusive activity caused the overprinting of contact metamorphism which was retrogressive.

b) Deformation:

Two early intense phases of deformation (folding) accompanied regional metamorphism in the Dublin Gulch area. All of the pelitic schists (phyllites), muscovite-quartzites and biotite quartzites exhibit a micaceous foliation parallel to the compositional layering. This foliation is denoted as $F_1$. Chevron folds and kinks with their axial planes parallel to the compositioned layering and $F_1$ foliation occur throughout the quartzite units on the property. The biotite - quartzite units exhibit this feature best because of the alternating light coloured quartz laminae and dark coloured biotite

laminae. The biotite-quartzite rubble and cliff outcrop at the end of Line 37+900 E station 11+600 N show very good examples of this. This foliation is denoted as $F_2$. Thin section sample 9+100 N, 38+550 E shows rootless isoclines lying with their axial planes parallel to the compositional layering. The $F_2$ events refolded $F_1$ foliation into the same plane as the original $F_1$ event. $F_1$ and $F_2$ preceded the development of contact phases which overprint the foliation in samples 9+500 N, 39+050 E and 8DB 0234.

$F_3$ folding has only been indicated in a few outcrops on the property. Pencil structures in the quartzite on the northwesterly facing slopes of the "North Ridge" (towards Haggart Dome) exhibit the best examples of $F_3$ events. Quartz rodding in the 39+400, 39+800 and 40+150 skarn zones may also represent $F_3$.

c) Folding

The reconnaisance and detailed mapping done west of Line 38+950 E on the "Ray Gulch" Grid suggested the presence of southwesterly plunging anticline with the nose of the fold dipping under the cliffs on the west side of Ray Gulch. With the plotting of all altitudes taken on maps 3, 4 and 5 the broad anticlinal fold becomes more apparent. The quartzites, schists and phyllite found on the "North Ridge", Haggart Dome, Lynx Dome and Potato Hills have northeasterly trending strikes with dips of $10^{o}$-$40^{o}$ to the northwest. These altitudes represent the northern limb of the anticline. As one approaches the cliff area to the west of "Ray Gulch" and the long ridge that trends southwesterly between Dublin Gulch and Lynx Creek (vicinity of baseline 10+000 N), the quartzites, schists, phyllites and skarns strike slightly northeasterly to slightly northwesterly and dip $10^{o}$-$40^{o}$ westerly. These altitudes represent the nose area of the anticline. In the vicinity of Lines 40+150 E to 40+300 E between stations 8+400 N and 8+600 N the biotite quartzites and skarns strike southeasterly and dip $20^{o}$-$40^{o}$ to the southwest. These altitudes represent the southern limb of the anticline. Faulting in

areas where the southern limb should be well represented has disturbed the beds to such an extent that bedding altitudes are unreliable.

The geologic mapping program that will take place in the summer of 1979 may help to more firmly establish the presence of the anticline.

d) Faulting (Maps 3, 4, 5, 6 & 7) - (Plates 3 and 5)

To date mapping has revealed 3 faulting events in the Dublin Gulch claim block. The age relationship between the 3 events is not fully understood and further mapping, particularly in the placer mining area on Dublin Creek, in 1979 may reveal a better understanding of the situation. Good flat exposures of bedrock in Dublin Creek will be studied as placer operations clear away overburden.

The writer believes the age relation between the 3 faulting events is as follows:

1) A normal dip slip east northeasterly trending fault system developed contemporaneously and/or after $F_2$ folding events. These faults are parallel or sub-parallel to the axis of the previously described anticline.

   The cliffs on the west side of Ray Gulch exhibit deeply incised crevices which outlines the faults zones. One set of these faults is located south of the 39+400 skarn zone near the termination of Line 39+100 E. A displacement of 50 meters occurs on one of the faults. The downdropped side occurs to the south of the fault scarp in most cases. The dips of the scarps range between $38^{o}$ and $90^{o}$.

   The 39+800 skarn zone is dissected by 2 of these faults, one of which has a displacement of 10 meters and the other, 2 meters. Lines 39+550 E and 39+700 E cross these faults near stations 9+400 N and 9+450 N respectively.

Another prominent fault scarp is located southeast of the 40+150 skarn zone near Line 40+150 E station 8+900 N. This scarp is shown on plate 3. These faults have a strike that is almost normal to the strike of the bedding.

2) The second faulting event has strikes that vary between northwest and north-northeast. Little is known about these faults as most are buried by stream gravels. The age relation between this fault system and the previously mentioned system is primarily implied from observing and mapping abrupt changes in lithologies across outcrop deficient drainages (see Map 4). Haggart Creek is believed to be one of these buried second stage fault zones. The Black Phyllite Fault Zone is another example of this stage of faulting. This fault can be traced only along ridge tops and incised drainages. Ray Gulch may also indicate the presence of another second stage fault. Lack of obvious displacement of units on both the east and west sides of Ray Gulch indicate that the fault has a small displacement. Large talus boulders cover the bottom of Ray Gulch obscuring all outcrop that would confirm the presence of this fault.

This fault system has a strike that is almost normal to oldest fault system and to the axis of the previously described anticline. The strikes of the second stage faults are parallel or sub-parallel to the strikes of the rock units.

3) The third and probably the final faulting event to take place in the Dublin Gulch claim block cross-cut the two previous systems. This system is discussed to some extent under the headings of Quartz Veining and mineralization. This system has a northeasterly trending strike which could be confused with first and second stage faulting. The third stage faulting is, however, distinctly related to intrusive events. The earliest and most noteable fault belonging to this system, is the Gold quartz-vein and fissure system shown on Plate 5 and on Map 5. The fissure-fault crosses the "Dublin Gulch" grid between Lines 36+700 E and 38+950 E and stations 10+800 N and 11+100 N. The fault paralles the large granodiorite stock and metasediment contact. It is believed by the writer that the fault formed during the late stages of intrusion because the vein system related to the fault-fissure cuts across other quartz and pegmatitic veins found within the granodiorite stock. Many shafts and adits by previous prospectors were driven on the gold-arsenopyrite veins associated with this fault. From maps 3 and 4 it is conceivable that this fault zone is connected to No. 3 vein on the Smoky 32 claim near the southwest limit of the claim block. The fault zone may also be connected to two lead, silver showings due west and northeast respectively of Lynx Dome. This northeasterly trending system requires further delineation as it has a potential total length of 1550 meters. The Tin Dome Fault Zone belongs to this third stage fault system and is also related to intrusive activity (see Maps 4, 5 & 7). From alteration, mineralization and veining evidence discussed previously, the writer believes an intrusive cupola has caused a doming of the meta sediments that lie above it. Faulting occurred

when rock failure due to doming stresses took place. Ann Gulch outlines this fault zone. Ann Gulch is located between the "North Ridge" and Tin Dome and it drains southwesterly into Dublin Gulch. The D.G. 41-44 and 54 claims as well as the Bob 10 claim cover the Tin Dome Fault Zone. This fault zone is an attractive exploration target because tin minerals are found in placer concentrates that originated from Ann Gulch. This extensive fault zone parallels or sub-parallels the N.E. trending fault and veins systems near Keno-Hill.

e) Discussion: Although the Dublin Gulch claim area has undergone two and possibly three periods of regional metamorphism and approximately three faulting events, the focus of attention is drawn towards the intrusive events. The last stage of faulting is directly related to the emplacement of the large granodiorite stock as well as small plugs. Quartz veins and their accompanying minerals are found almost exclusively related to the intrusive metamorphic and faulting events. For economic reasons alone, these systems require further exploration attention. This applies to the skarn zones that may have been formed only by regional metamorphism. Tungsten mineralization is greater where contact metamorphism has overprinted regional metamorphism of the skarns. This is most likely due to the fact that the quartz veins in the stock are scheelite bearing but any scheelite originally present in the skarns could be remobilized and reconcentrated by contact metamorphism.

Tin Dome Geology - (see Maps 4, 5 and 7)

The Tin Dome area consists of three hills located on the north side of Dublin Gulch between Haggart Creek and Ann Creek (Gulch). The D.G. 1, 2, 39, 41, 42, 43, 44, 54 and 56 claims cover this area. A great deal of cat trenching has been carried out on the claims over the last 40 years. From July 23 to Aug. 3, 1978 Canada Tungsten had the trenches cleaned out with a D-9 cat and mapped at a scale of 1:1000. Even with the cleaning out of the trenches, good solid outcrop was hard to find. This is due to the highly foliated and fragmented nature of the rock and their resultant rubble pile appearance (see Map 7).

This area is underlain by a very pelitic section of the Yukon Group metamorphic rocks. The rocks found here are distinct from the quartzite-schists and skarns found on the rest of the Dublin Gulch property. Three rock types have been observed and mapped and are described below. (See Appendix I - samples 8DL-0089 and 8DA-0337).

1) Black Phyllite - this is an intensely foliated graphitic phyllite. Black shales or argillites probably formed the original composition of the rocks. Graphite was formed with the metamorphic events and gives the rock a silvery lustre on foliation planes.

2) Micaceous Quartzites (white to grey) - this unit varies from massive non-laminated quartzite to lustrous sericite and muscovite rich phyllitic appearing schists. It is found interbedded with the black phyllites.

3) Micaceous Quartzites (brown colour) - this unit is very similar to the light coloured Micaceous Quartzites. The brown colouration may be due to an arkosic composition of the original sediments. This unit can also be very phyllitic with lustrous sericite and muscovite forming along foliation planes. The massive brown and white Micaceous Quartzite sections of the units described above originated from the metamorphism of quartz arenite sediments.

Metamorphism and Deformation

Two phases of regional metamorphism resulted in the development of quartzites and phyllites from pelitic, arkosic and arsenitic sediments. Tourmaline crystals aligned parallel to the foliation planes indicate $F_1$ deformation while another set of tourmaline crystals cut across the first set at a slight angle, indicates $F_2$ deformation. From the petrographic description of sample 8DL-0089 tourmaline was introduced by metasomatism that was taking place contemporaneously with regional metamorphism. The last deformation event was a period of intense faulting, fracturing, brecciation and quartz-tourmaline-cassiterite veining. This was a period of metasomatism caused by the emplacement of an intrusive cupola.

Faulting

Although many faults have been mapped on Tin Dome, it is believed by the writer that they are, for the most part, of the same relative age. Two main fault directions are found in the area. Faults trending N.N.W. appear to be the oldest and are off-set (left lateral) by steeply dipping N20$^{o}$-50$^{o}$E trending faults. Two of the most prominent northeasterly trending faults bound the Tin Dome area. One is located along Ann Gulch southwest of the two main Tin Hills shown on Map 7. The other lies in a divide to the northwest of the Tin Hills and separates them from the third "Hill". The third "Hill" is not plotted on Map 7 but is located on Maps 4, 5 and 9. The D.G. #1 claim covers most of this "Hill". The area between these two main faults is intensely faulted, fractured and brecciated. These faults appear to be the result of a doming event in which the metasediments have been elevated and possibly thrust onto the other metamorphosed sediments on the property.

Veining and Mineralization

The veins in this area are also quite different than those found on the rest of the Dublin Gulch property. They are almost indistinguishable from the brecciated country rock and are composed of tourmaline and quartz. The veins are dark green and have the texture of a clay rich fault gouge. Fine grained cassiterite crystals are found within this material. Tourmaline was introduced while regional metamorphism was taking place and is found as prismatic crystals lying along the planes of foliation in the micaceous quartzites. Along with the fracturing and faulting events then taking place, quartz-tourmaline-cassiteritic veins were formed and cut across the trend of the quartzite foliation. Two major veins were discovered in 1943 (described under earlier headings of Quartz Veining and Mineralization) and were subsequently trenched.

Only the decomposed gougy vein material was found even at depths up to 3 meters. One of the veins trends northwesterly and the other, northeasterly. (Attitudes and sample assays described previously). In 1945 Cominco drove a 17 meter adit towards the projected intersection of the two veins. The adit did not reach its objective. Portions of these veins were found by Canada Tungsten crews in 1978 but further cleaning out of trenches is required to properly evaluate them.

Interpretation

The writer believes that a tin bearing intrusive cupola exists at depth below the Tin Dome area. This is based on the fact that two other small plugs are exposed on the property and both are tin bearing. One plug is located on the north side of Dublin Gulch across from its junction with Olive Gulch. This is a Quartz Monzonite plug. The other is a tin bearing granitic plug located on the north facing slopes of a ridge that lies immediately to the southwest of the junction of Gill Gulch and Haggart Creek.

The significantly different rock types located on Tin Dome and the intense faulting suggest that the metasediments have been domed and eroded as a result of uplift caused by the emplacement of a cupola. The metasediments are believed to be older than metasediments found elsewhere on the property as they "appear" to lie stratigraphically above the younger metasediments.

The veins found on Tin Dome are different in composition than the others found on the Dublin Gulch property. The intense tourmalization and associated cassiterite mineralization is a characteristic if not a classic feature of tin deposits world wide. Intense brecciation, fragmentation and further tourmaline -cassiterite mineralization took place as final phases of intrusive activity when degassing at the top of the cupola occurred. Hydrothermal streaming of tin-tourmaline bearing fluids took place in the pipe like breccia zones formed above the cupola.

A paper given during the 1977 C.I.M.M. Convention on Alaskan Tin Deposits (personal witness, author unknown) described the formation of tin deposits derived from cupolas in Alaska. All features described during the talk are found on Tin Dome.

Further trenching, geologic mapping and sampling is required on Tin Dome in 1979. If results warrant it, diamond drilling should be considered.

Geochemistry

Introduction

A geochemical survey program was undertaken on the Dublin Gulch claim block during the summer of 1978. The program was made up of two surveys. A reconnaissance stream sediment samping and ridge top soil sampling and geologic mapping program was initiated first during the month of July 1978. This program was designed to test all drainages within and peripheral to the 453 claims comprising the Dublin Gulch claim block. It was felt that an overall view of the geochemical character of the area was required to determine what readings constituted background signatures and what constituted anomalous signatures. As the program was coordinated with reconnaissance geologic mapping, a feeling for the geochemical response of various lithologic units in sediments and soils formed from them could be obtained.

This information was then applied to the more detailed property soil sampling program. Most but not all of the detailed soil sampling program was carried out on the two grids described near the beginning of the report under the heading of "Grid Survey Control". All silt, soil, rock, channel and grab samples were sent to Chemex Labs in Vancouver and analyzed for tungsten, tin, gold and silver. Results were plotted on 1:5000 and 1:10000 scale topographic maps. Anomalous results were followed up with further prospecting and geologic mapping. During the fall of 1978 and spring of 1979 all the geochemcial data was compied and processed with the aid of a C.G.E. computer. Statistical analyses of the results were also done with the aid of a computer.

Reconnaissance Geochemistry - (see Maps 8 and 9)

Silt samples were taken in most drainages within and surrounding the claim block. It was decided to establish a 150 meter sample interval on all streams but due to steep terrain in many areas and the disappearance of streams under talus boulders, samples were taken whenever silt was available. For the most part the sample interval ranged from 75 meters to 150 meters.

Rock chip samples were taken where outcrop occurred along the streams. Rock chip samples were taken from most outcrops on the ridge top geologic mapping traverses. Soil samples were often taken next to the rock sample to compare the two results and find a background geochemical signature for the major rock units on the property. Due to rapid changes in lithologies (i.e. many alternating thin beds) this did not yield characteristic signatures. All of these samples are plotted on 1:10000 scale topographic maps (Maps 8 and 9). Some rock chip and float samples are plotted on these maps so they wouldn't become cluttered and lost on detailed soil grid maps 10, 11, 12 and 13. A total of 466 silt samples, 265 rock chip and 91 channel samples were taken. The silt samples and 241 rock samples were analyzed for tungsten, tin, gold and silver. The 91 channel and 41 rock chips samples were assayed for percent tungsten, tin, gold and silver. Where it was felt necessary, molybdenum was also analyzed.

Detailed Grid Geochemistry - (Maps 10, 11, 12, 13)

Soil sampling was carried out once the southeasterly trending "Ray Gulch" grid and the northwesterly trending "Dublin Gulch" grid were established. Because glaciation did not cover the Dublin Gulch area, the soil is of residual origin. Test profiles were done prior to sampling to check soil horizon development. As no distinct horizons were observed and the soil being very gravelly, it was decided that heavy minerals like scheelite, cassiterite and gold would be located near bedrock. Soil augers 1½ inches in diameter were driven 1 meter into the soil and the samples taken from the last 10 cms. This yielded a series of samples taken at consistent depth over all the grid lines.

Sample sites were spaced 50 meters apart and taken at marked picket stations on the grid lines as well as the baseline. A total of 1553 soil samples were taken and analyzed for tungsten, tin, gold and silver. Some of the rock chip and channel samples described previously were actually taken on the grids while geologic mapping was being done.

## GEOCHEMICAL SAMPLE PREPARATION AND ANALYTICAL PROCEDURES- 1978

### ppm Ag, ppb Au, ppm W, ppm Sn

### Sample Preparation (Silts, Sediments)

Sample materials are dried at 50 $^{o}$C. and screened to -35 mesh. The screened portion is pulverized in a ring grinder to reduce particle size and also acts to homogenize the sample. This is required when tin and tungsten values are required.

### Sample Analysis

### ppm Silver

A 1 gm. sample is attacked with $HClO_4$-$HNO_3$, heating to fuming $HClO_4$. After dilution to volume with demineralized water and mixing, the silver content is determined by atomic absorption spectrometry with simultaneous background correction.

### ppm Tungsten

An 0.2 g. sample is fused with potassium pyrosulfate and leached in HCl. An aliquot is reduced with stannous chloride and quantitatively extracted with toluene-3,4-dithiol in amylacetate in a water bath. The tungsten dithiolate is dissolved in kerosene and the concentration determined colorimetrically against tungsten standards carried through the same extraction procedure.

### ppm Tin

A 1 gm. sample is sintered with ammonium iodide and the stannic iodide volatilized trapped on a cool surface of the test tube. After leaching with HCl and reduction with ascorbic acid, the tin is quantitatively extracted into methylisobutylketone containing trioctylphosphine oxide. The tin concentration is determined by atomic absorption spectrometry against tin standards extracted by the same procedure.

### ppb Gold

Five grams of pulverized material is digested to dryness twice with Aqua Regia. The residue is baked and dissolved in 25% HCl. Gold is extracted into MIBK as the gold bromide complex. The extract is analyzed for gold by atomic absorption techniques. Detection limit = 10 ppb.

Data Compilation and Computer Processing

Prior to the sampling, a 50 column sample code sheet was made up. This sheet was used in the field and the sampler, sample location, sample type, sample composition etc. were identified by code numbers or letters. These sheets could then be key punched directly from the field. The key punched data was then fed into the computer where a sort according to sample type was done. The sample analysis results were key punched and fed into the computer where they were merged with the appropriate sample numbers and types. The sorted data was stored in the computer system according to a file system listed below.

1) soil samples and corresponding analysis results - "old S File"
2) silt samples and corresponding analysis results - "old L File"
3) rock chip and float samples and corresponding analysis results - "RF File"
4) rock channel samples and corresponding analysis results - "H File"

All the samples and their analysis results belonging to the above files are listed and located in the pouch attached to the report.

A statistical analysis program was adapted to the geochemical data situation. It was found that ordinary statistical procedures cannot be made "to fit" the data so the results of the program were not completely satisfactory. More work is needed to provide a suitable program.

A statistical analysis was done on each element (tungsten, tin, gold, silver) for soil, silt and rock samples. This was done to determine background levels, threshold break and anomalous levels. The average, standard deviation, log of mean and log of standard deviation for each element was calculated from internal histogram analysis. Several histogram frequencies were run for a particular element occasionally so that comparisons could be made for "best fit" of data. In each case a listing of frequency, percent, cumulative frequency and cumulative percent was provided. The results

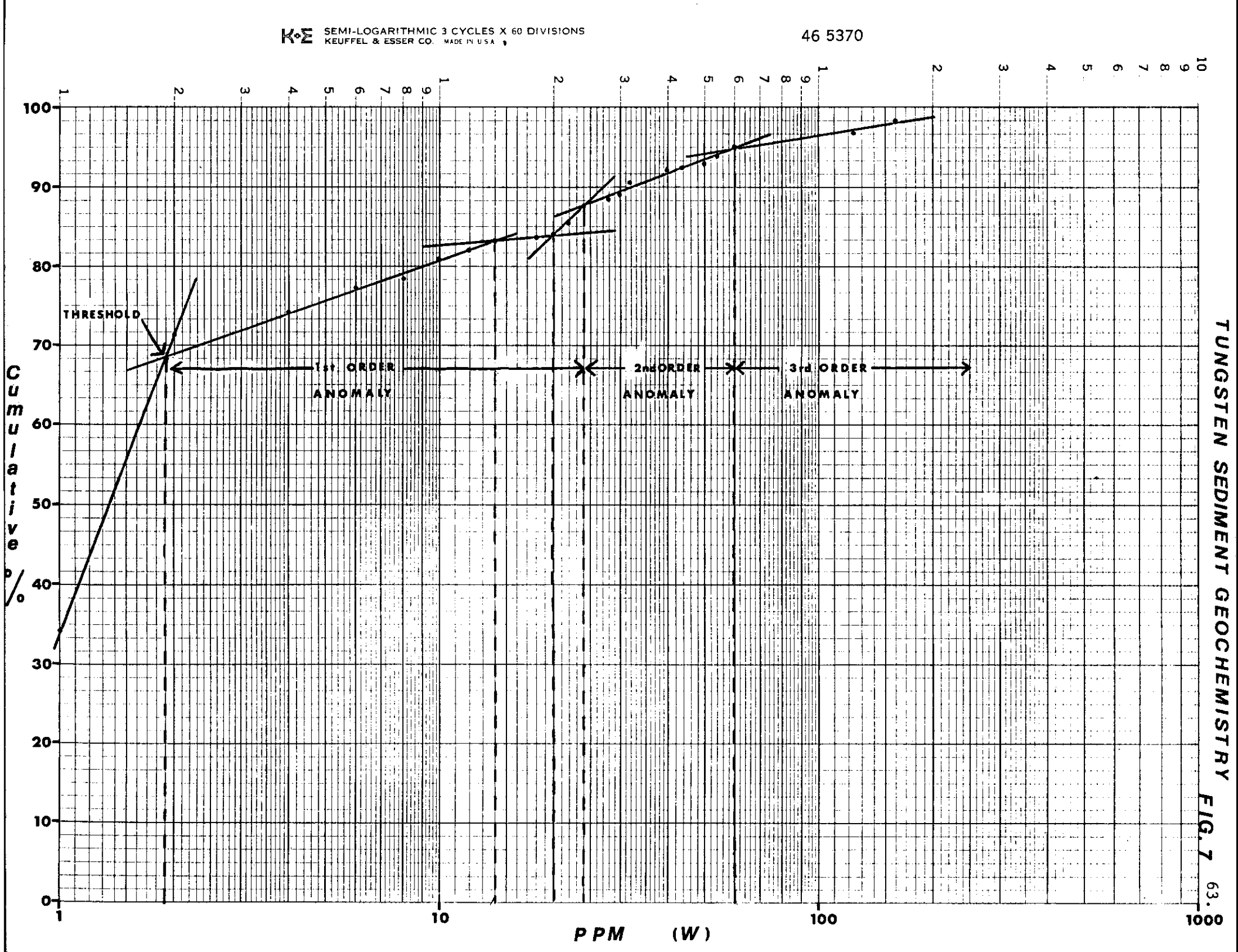
of this analysis were then plotted on graphs with Log normal parts per million (ppm) on the Y axis and cumulative probability on the X axis. As mentioned before, the program was not completely satisfactory and this came to light when the graphs were plotted. The computer program has a random generator factor built in which distributed the samples found in the first histogram frequency cell to non existent parts per million divisions. The fact that the elements in the Dublin Gulch area are not randomly distributed (except tin) and their resultant highly skewed histograms could account for the problem. The data was then plotted by hand on semi-logorithmic paper with parts per million or billion located on the X axis and cumulative percent on the Y axis. This proved more satisfactory as breaks in slope were readily observed. The statistical data from the computer program is located in the pouch attached to the report.

Interpretation of Stream Sediment Geochemical Data
(Four elements plotted on Maps 8 and 9)
abbreviations ppm - parts per million
ppb - parts per billion

Tungsten - (see Figure 7 and Maps 8 and 9)

The background readings for tungsten in sediment samples are 2 ppm or less. Virtually all drainages within and surrounding the claim area register background readings. The streams that drain northwesterly and southwesterly into Dublin Gulch and those found on the "Ray Gulch" grid draining southeasterly into Lynx Creek are the exception. From Figure 7 first, second and third order anomalies are colour coded with a line under the appropriate reading on Maps 8 and 9. The drainages that flow into Dublin Gulch and described above all have 1st order and 2nd order anomalies in them. This is a range of 3 ppm to 60 ppms. The erosion of scheelite bearing veins in the granodiorite stock and quartz monzonite plug cause the 1st and 2nd order anomalies. Third order anomalies of greater than 60 ppm are located exclusively within the Dublin Gulch channel. This is caused by the downslope movement of 1st and 2nd order anomalous sediments into Dublin Gulch. Dublin Creek acts as a concentrator of scheelite and results in highly anomalous readings.

Sediment samples taken in Ray Gulch range from background readings to 3rd order anomalies. The highest readings of 150 and 160 ppm's $WO_3$ are found immediately below the 40+150 skarn zone. As one travels downstream from the skarn zone the tungsten values gradually decrease to 1st order levels. The small stream immediately to the west of Ray Gulch has 1st and 2nd order sample anomalies. These results reflect the presence of scheelite bearing skarns in the cliffs at the headwaters of the creek.




TUNGSTEN SEDIMENT GEOCHEMISTRY

FIG. 7

Tin - (see Figure 8 and Maps 8 and 9)

From the graph on Figure 8 it was determined that the background levels for tin in the claim area are less than 2 ppm's. During the reconnaissance sampling program, small intrusive plugs were mapped but not in detail. The results of the sample analysis indicated that values greater than 2 ppm occurred near these plugs. This applies to rock and soil samples as well. Because of the sampling results, the anomalies were checked by more detailed mapping and tin showings were found associated with all the plugs.

Tin (cassiterite) is the only true randomly distributed element on the property. The graph shows very distinct breaks in slope which identify the threshold and anomalous levels very well. First order (2-6 ppm) and second order (6-11 ppm) anomalies are found in Gill Gulch sediments and in the sediments found in the stream parallel to and immediately south of Gill Gulch. These streams surround a small granitic plug.

Fisher Gulch sediments exhibit a 1st order anomaly. It is believed by the writer that a buried tin bearing fault zone and accompanying veins extend along the gulch and trends northeasterly across Tin Dome (Map 4).

Only background levels of tin are found in the Gulch that cross the three mile long granodiorite stock south of Dublin Gulch. No cassiterite has been found in this stock.

Sediment geochemistry did not locate tin anomalies in the "North Ridge" area even though the biotite-quartzites are dissected by a tin bearing quartz vein stockworks emanating from a Quartz Monzonite plug situated at the junction of Dublin Gulch and Olive Gulch. Only one sample taken in Ann Gulch (located between Tin Dome and the "North Ridge") was anomalous (8 ppm).

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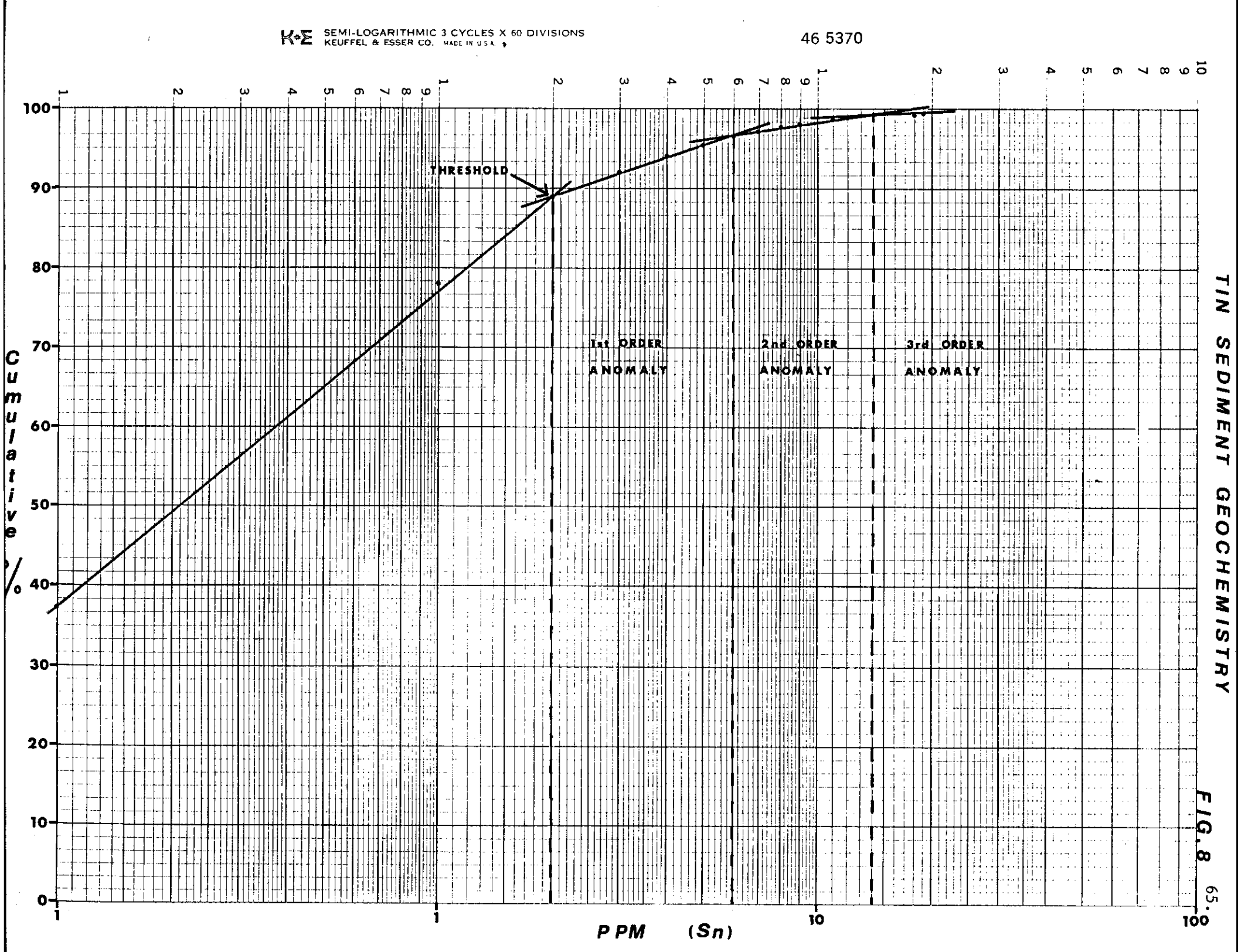


TIN SEDIMENT GEOCHEMISTRY

FIG. 8

Gold - (see Figure 9 and Maps 8 and 9)

From the graph on Figure 9, the Dublin Gulch area has a background gold content of less than 13 parts per billion (p.p.b.). From maps 8 and 9 it can be seen that most of the claim area has a gold content of less than the analysis detection limit of 10 p.p.b. First order anomalies range between 13 and 26 p.p.b., second order anomalies range between 13 and 52 p.p.b. and third order anomalies are greater than 52 p.p.b. An area of flattening in the graph suggests a single type source for gold but that uneven distribution of the element within that source occurs.

From maps 8 and 9 it can be seen that all samples anomalous in gold are located near intrusive centers. All intrusive stocks and plugs, faults and vein system have been described in detail previously so only locations will be referred to.

Gill gulch and the stream immediately south of Gill Gulch have numerous 1st and 2nd order anomalies occurring in their sediments. Quartz veins found in the granitic plug lying between the two creeks are believed to be the source of the gold.

Four samples taken in Fisher Gulch range from 1st to 3rd order anomalies. Suspected veins and faulting in the gulch may be the source.

The head waters of Platinum Pup, Stuttle Pup, Eagle Pup, and Stewart Gulch all of which drain northwesterly into Dublin Gulch, cut across the gold-quartz vein fissure system that trends northeasterly along the granodiorite stock-biotite quartzite contact. Samples taken in these streams ranged from background levels to 3rd order anomaly values.

The short streams, including Ann Gulch, that drain southwesterly into Dublin Gulch have gold contents ranging from background levels to high 3rd order values. This gold is derived from a quartz vein stockworks emanating from the Olive Gulch-Dublin Gulch Quartz Monzonite plug.

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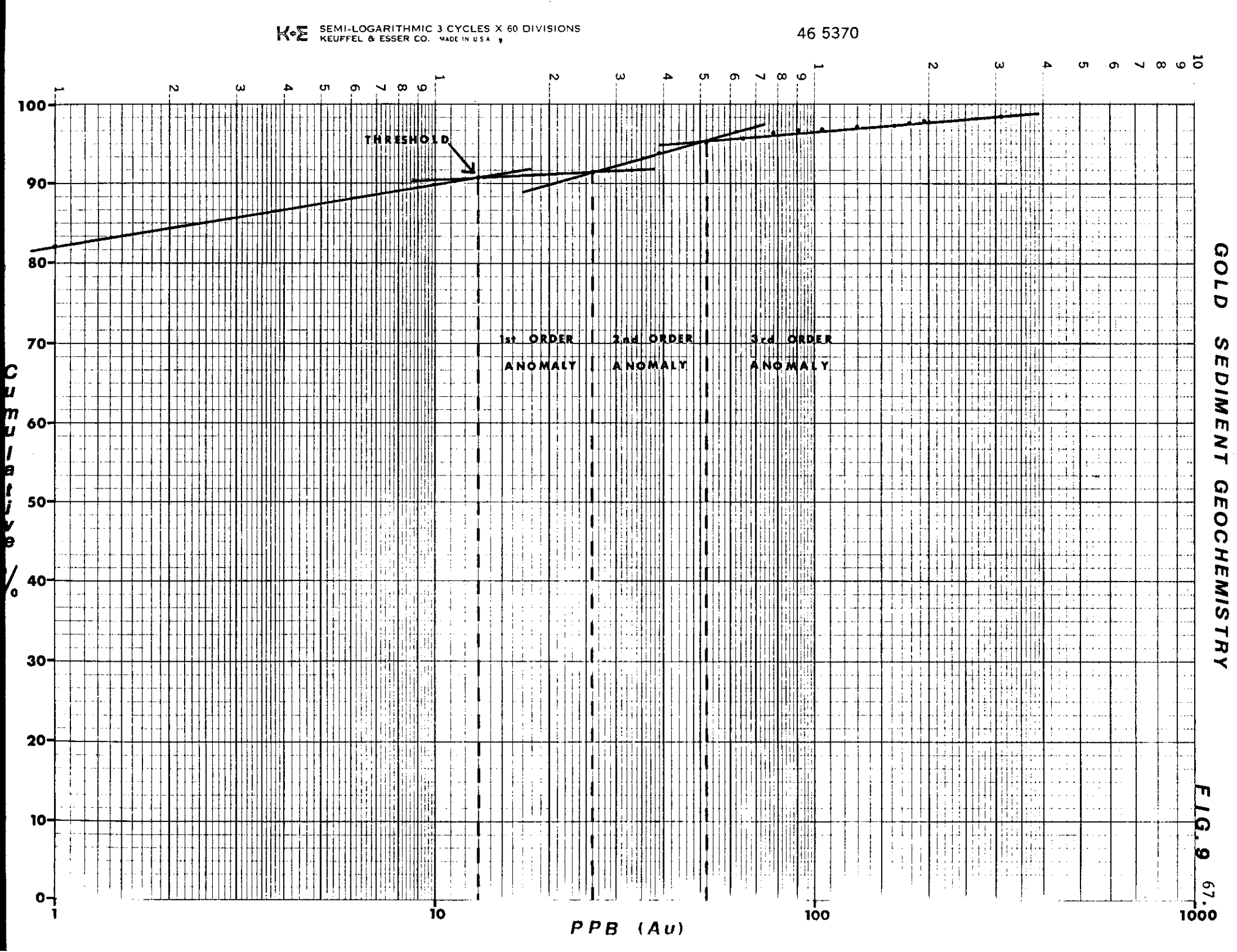



GOLD SEDIMENT GEOCHEMISTRY

FIG. 9

Most of the samples taken in Dublin Gulch itself are high 3rd order anomalies. This is where the gold from all the streams collect and forms the placer deposits. As mentioned previously, scheelite is also accumulated in Dublin Gulch by the tributory streams crossing mineralized rock.

Single sample anomalies generally of 1st order anomaly value are scattered throughout and peripheral to the claim area. These are related to sporadic quartz veins that cut the metasediments. Although rare, veins from the large granodiorite stock penetrate the metasediments for long distances.

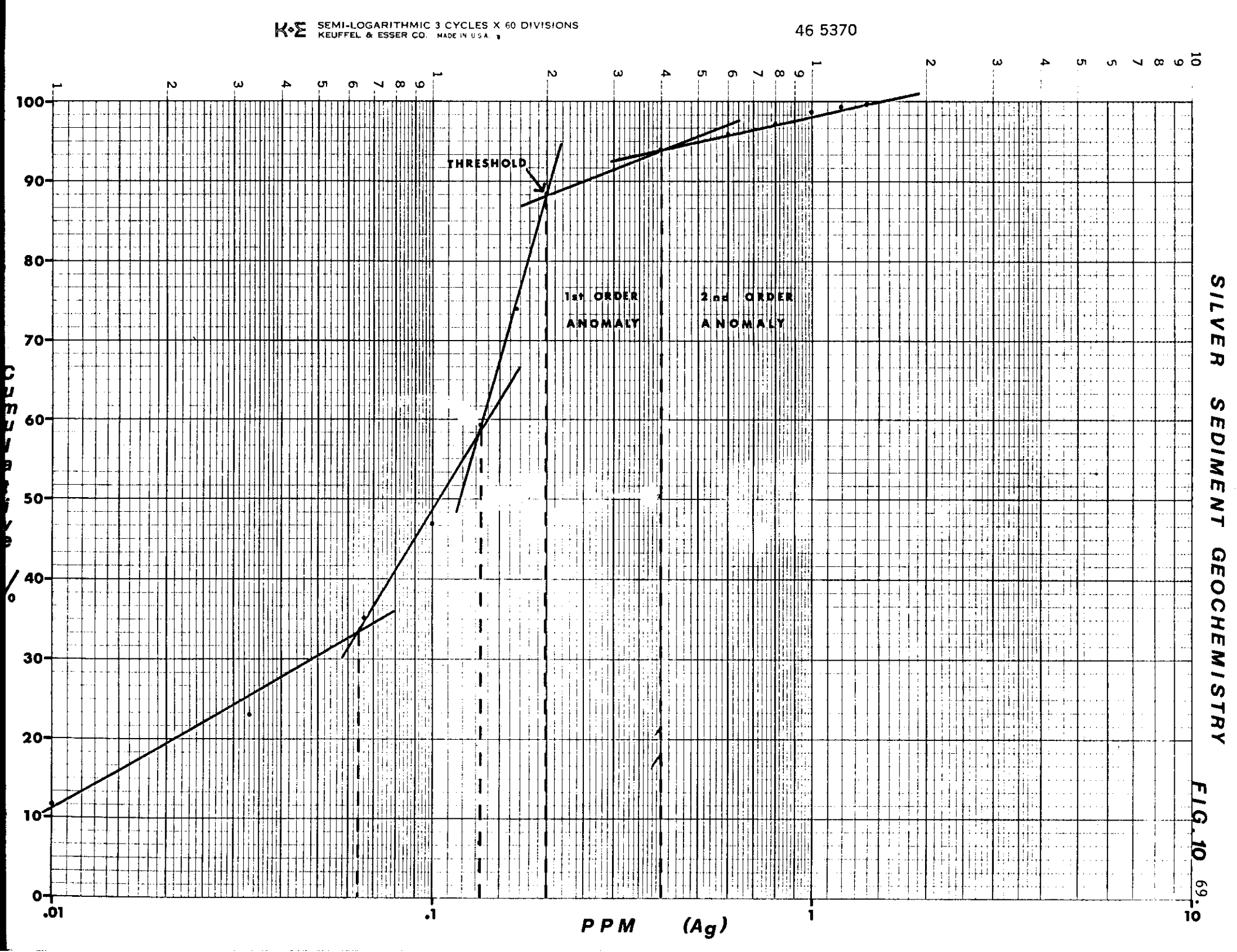
Silver - (see Figure 10 and Maps 8 and 9)

The histogram for silver is very unusual and difficult to assess. At least 4 peaks occur but are not connected in any manner by a curve. This suggests that several sources for silver occur. The graph on Figure 10 was plotted and the threshold value was chosen after observing the volume of data rather than considering the first two break points located before the threshold value indicated.

The background values for the Dublin Gulch area are less than 0.2 ppm silver. The threshold break is at 0.2 ppm and 1st order anomalies range from 0.2 ppm to 0.4 ppm. Any values greater than 0.4 ppm silver constitute a second order anomaly.

Virtually all drainages within and surrounding the Dublin Gulch claim block contain only background levels of silver. Iron Rust Creek and a major tributory draining southwesterly from Haggart Dome have a consistent 1st order and 2nd order anomaly level. These drainages cross the D.G. 26, 27, 28, 11, 9, 7, 5 and the Bob 31, 30, 27, 26, D.G. 16, 13 claims respectively.

Only a few 1st order and 2nd order anomalies are found in the sediments of the streams flowing into Dublin Gulch.




SILVER SEDIMENT GEOCHEMISTRY

FIG. 10

Interpretation of Soil Geochemical Data
(4 elements plotted and contoured on Maps 10, 11, 12 and 13)
abbreciations ppm - parts per million
ppb - parts per billion

Tungsten - (see Figure 11 and Map 10)

The graph on Figure 11 indicates that a higher background level is found in soils than in sediments in the Dublin Gulch area. The threshold break for tungsten in soil samples is 21 ppm while 1st order anomalies range from 21 to 30 ppm, 2nd order anomalies 30 to 68 ppm and 3rd order anomalies greather than 68 ppm. The tungsten is not randomly distributed as the histogram curve is highly skewed.

The contour lines on Map 10 portray the northeasterly trending fabric of the grid area. A second order anomaly is located on the "North Ridge" baseline on the "Dublin Gulch" grid which lies N.W. of the 10+000N baseline. This anomaly outlines a scheelite bearing quartz vein stockworks that emanates from a Quartz Monzonite plug that lies between Lines 37+450E and 37+750 where the lines terminate in Dublin Gulch. This plug itself is outlined by a 3rd order anomaly.

A third order anomaly lies at the end of Line 38+200E near station 11+500N. A small monzonite dyke may exist under residual overburden.

A series of parallel northeasterly trending 3rd order anomalies are located on the "Dublin Gulch" grid between Lines 36+950E and 38+950E and between stations 10+000N and 11+200N. These anomalies indicate a more intensely mineralized intrusive granodiorite stock. Mapping indicated that the area was the porphyritic core area of the granodiorite stock. Quartz vein density is greater in this area with up to 10 veins per 30 cms occurring. The veins range in thickness from .5 cm to 30 cm and carry patches of scheelite. The sampling outlined the more intense scheelite bearing vein system.

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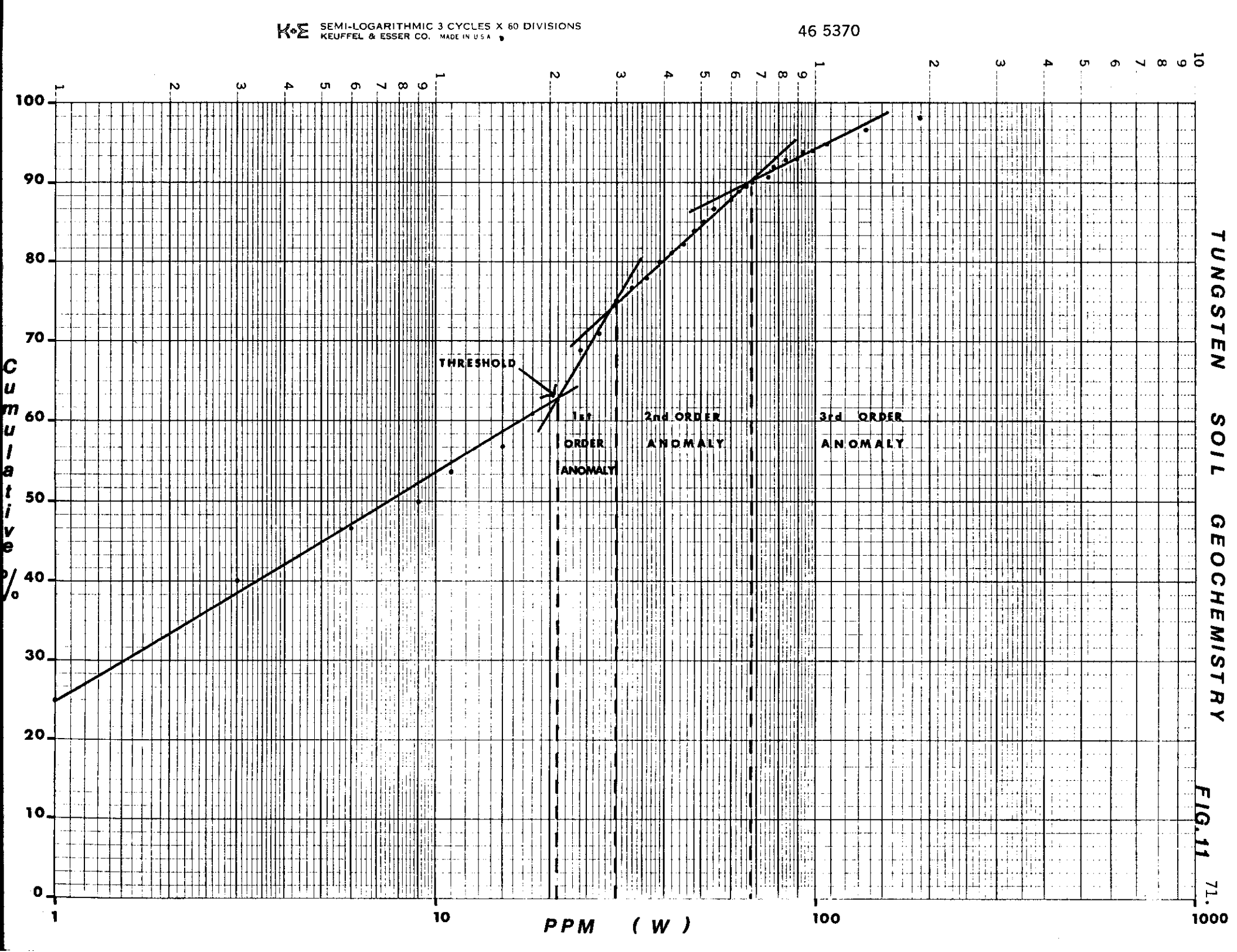


TUNGSTEN SOIL GEOCHEMISTRY

FIG. 11

On the "Ray Gulch" grid located southeast of the baseline three 3rd order anomalies outlined three major skarn zones. Scheelite bearing garnet skarn float was found on Line 38+650E station 9+600N. Only 3 soil samples revealed this scree covered skarn zone. The 39+400 and 39+800 skarn zones are outlined by 3rd order contours crossing Line 39+100 station 9+200N, Line 39+250E station 9+350N and Line 39+400E station 9+350N. The thick 40+150 skarn zone is outlined by 3rd order contours extending northeasterly between Lines 39+850N and 40+150N and between stations 9+100N and 9+300N.

A large area of 1st and 2nd order contours is outlined between Lines 39+700E and 40+600E southeast of station 8+250N. This area is underlain by numerous thin skarn units and an elongate granitic plug. More evaluation of this anomaly is required. Soil geochemistry for tungsten works well in areas of intrusive rocks. Small single sample anomalies found in biotite-quartzite schist and skarn areas should be checked carefully. All float should be checked if no outcrop is present in anomaly area.

Tin - (see Figure 12 and Map 11)

Only one break in the line is located on the Figure 11 graph. The threshold value of 2 ppm is identical to that of the sediments in the area. Tin is more randomly distributed in soils than in sediments. Any values over 2 ppm are considered anomalous in soil samples.

Only two areas of anomalous tin values were located by soil sampling. The known tin showings on Tin Dome and covered by the D.G. 1, 39, 42, 44, 54 and 56 claims was outlined by soil sampling. The tin bearing quartz veins stockworks found on the "North Ridge" baseline did not show up in soil samples.

Some highly anomalous samples are found on Line 40+000E between stations 8+100N and 8+500N. It is not known what the source for tin is in this area. No other noteable tin anomalies were located on the grids.

Gold - (see Figure 13 and Map 12)

The graph on Figure 13 is slightly different than that for sediments. The background level in soil samples is less than 10 ppb. The threshold break occurs right at 10 ppb. First order anomalies range between 10 and 20 ppb, 2nd order anomalies range between 20 and 80 ppb and 3rd order anomalies are greater than 80 ppb. In the area of the D.G. 1 and 39 claims on Tin Dome a 3rd order anomaly indicates the possible existence of a buried northeasterly trending veined fault zone.

On the "Dublin Gulch" grid many single sample 3rd order anomalies occur. The small anomalies are not representative of a specific vein at depth but rather a chance pick up of minute gold bearing pieces of quartz vein that occur in the gravelly soils. Two noteable 3rd order anomalies are located on the "Dublin Gulch" grid. One is located on Dublin Creek between Lines 37+150E and 37+450E and between stations 11+500N and 11+800N. This area is located on the Bob #4 claim. The anomaly outlines a weakly gold bearing but significant scheelite bearing quartz vein stockworks found within the well described Quartz Monzonite plug.

The second 3rd order gold anomaly is a northeasterly trending elongate one. It lies between Line 37+300E and 38+800E and between stations 10+900N and 11+400N. This anomaly extends across the Bob 2 and 3 claims and the R.D. 16, 7, 5, 6 claims. This anomaly outlines the major gold bearing fault-fissure system than parallels the northern granodiorite-biotite quartzite contact area (see plate 5).

Several single sample gold anomalies are found on the "Ray Gulch" grid southeast of the baseline. These anomalies outline the widely spaced and rare quartz veins that cut the quartzite-schists and skarns. Some of the veins originate in the large granodiorite stock and others may be formed by metamorphic processes.

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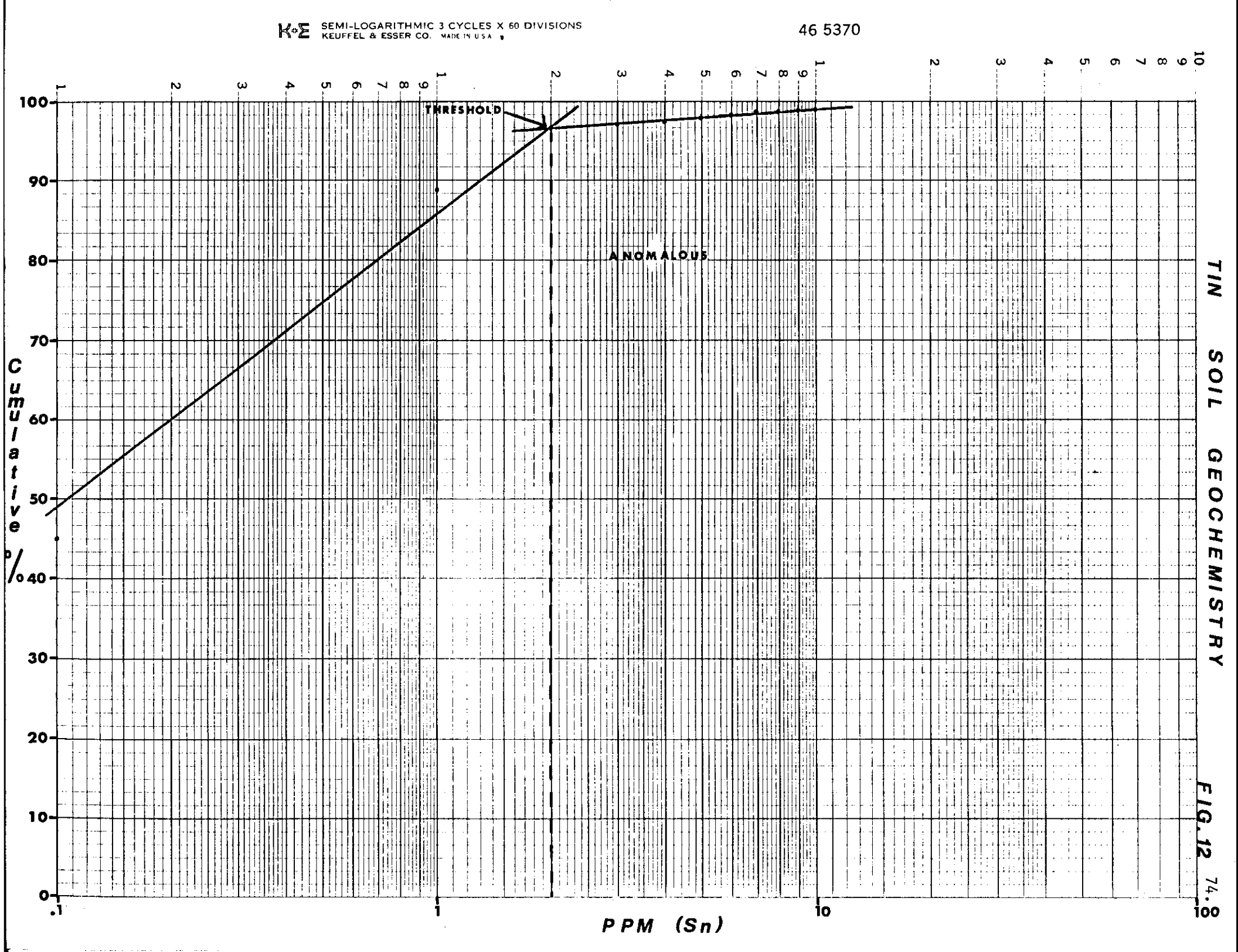


TIN SOIL GEOCHEMISTRY

FIG. 12 74.00

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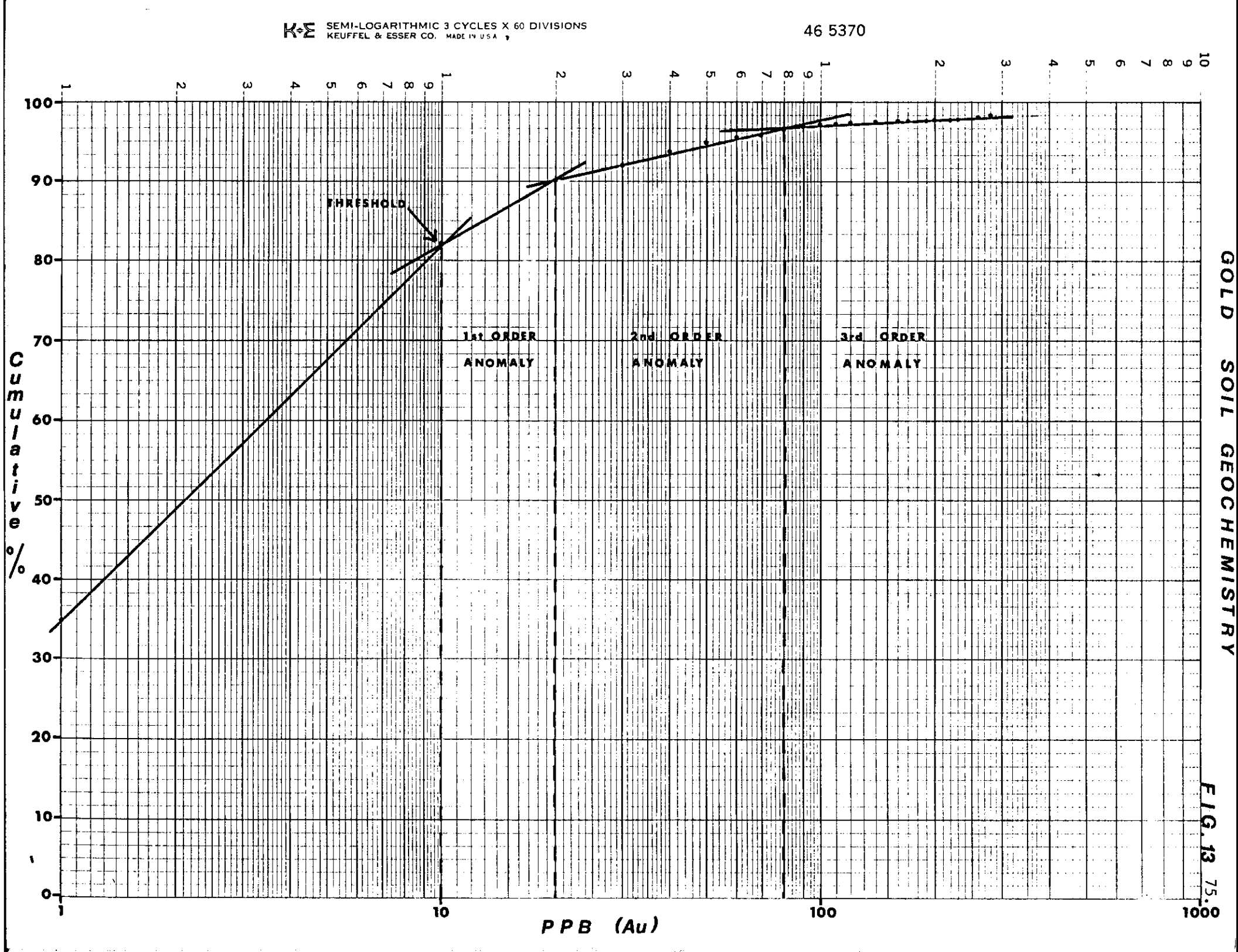


GOLD SOIL GEOCHEMISTRY

FIG. 13

Silver - (see Figure 14 and Map 13)

Background levels for silver in soil samples are less than those in sediment samples. Background values are .1 ppm and less while the threshold break is at .1 ppm. The 1st order anomalies range from .1 to .2 ppm and 2nd order anomalies are greater than .2 ppm.

Only a few anomalies of interest were located. These anomalies rarely have silver values greater than 2 ppm so are not of economic importance.

Four northeasterly trending and parallel anomalies are found on the "Dublin Gulch" grid and cross the Smoky 77, Bob 1, 2 and 3 and R.D. 16 claims. The anomalies are located between Lines 36+700E and 38+050E and between stations 10+400N and 11+100N. These anomalies parallel the major gold bearing vein fault-fissure system on the property.

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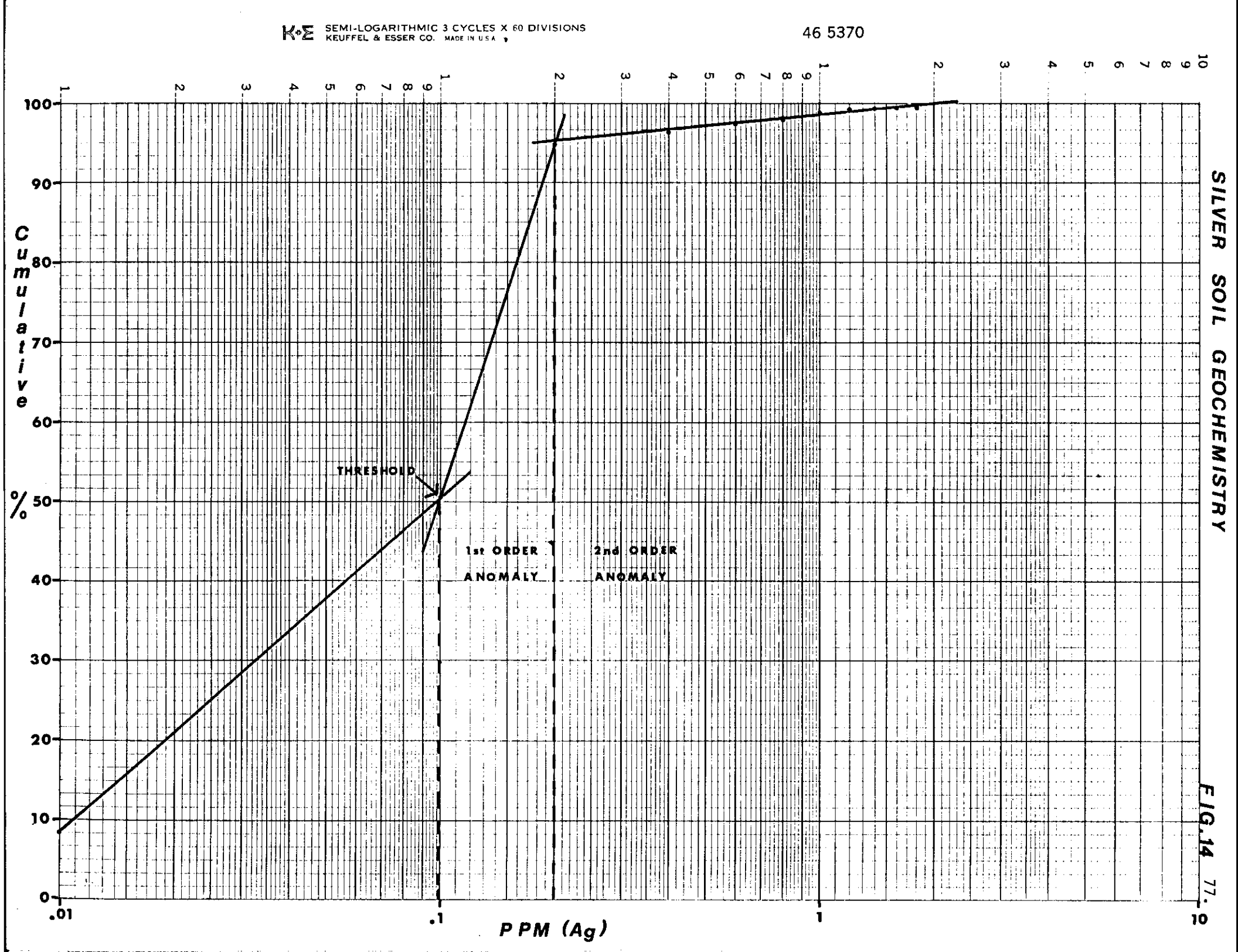


FIG. 14

Three small anomalies are located on the "Ray Gulch" grid. One is located on Line 39+70OE station 9+45ON which is covered by the Mar 5 claim. The second is located on Line 39+85OE station 9+30ON which is covered by the Mar 18 claim. The third and smallest anomaly is located on Line 40+15OE station 9+45ON and is covered by the Mar 16 claim.

All of these anomalies are related to underlying carbonaceous outcrop or rubble. Most of this material is crystalline marble.

Discussion - Soil and Sediment geochemistry can be utilized effectively to locate mineralized areas. Because no soil horizon development exists, the elements are not evenly distributed. As most of the elements have a higher specific gravity and are not easily dissolved they tend to remain close to bedrock. Undulating overburden cover greatly affects the distribution of the material and where one sample taken at 1 meter will be right on bedrock the other sample taken at 1 meter may have 12 more meters of overburden below it before reaching bedrock. Care must be taken so as not to dismiss small one or two sample anomalies until proper mapping is done.

Geophysics

During the summer of 1978, two attempts were made at running a proton magnetometer survey on the grid lines on Dublin Gulch.

These surveys were attempted during the first and last weeks of August. Very erratic readings were obtained at most stations and duplication of readings over a 30 second time period could not be obtained. Variations between two or three readings taken at one station over a period of 15 seconds were as much as 500 gammas.

Checks were made with the government geophysical departments in Victoria, B. C. and Fairbanks, Alaska and they confirmed the presence of magnetic storms caused by increased sun-spot activity during August. No data was plotted due to unreliable readings.

# APPENDIX I

## Petrographic Report - Dublin Gulch and Tin Dome Samples

THIN SECTIONS:

| | Slide No. | Sample No. | Sample Loc. |
|---|---|---|---|
| Dublin Gulch: | | | |
| Metasediments; RAY GULCH AREA | | | |
| Massive and laminated diopside skarn | E.1<br>E.2 | 8DL-0160H | 39+400<br>8+900N, 40+450E |
| Garnet-diopside massive skarn | E.3 | 8DL-0088F | 38+350E, 10+000N |
| Metaquartzite | E.4<br>E.5 | 8DB-0151<br>8DB-0207 | |
| Quartz-biotite schist | E.6<br>E.7 | 8DB-0228<br>8DB-0234 | |
| Contact-metamorphised schist | E.8 | - | 9+500N, 39+050E |
| Meta quartzite with actinolite vein | E.9 | - | 9+100N, 38+550E |
| Intrusives; Ray Gulch - Baseline Area | | | |
| Aplite dike - silicified skarn contact | E.10 | - | 10+00N, 38+500E |
| Early mafic-rich intrusive | E.11 | - | Eagle-Stewart Ridge; 10+200N |
| Metasediments; TIN DOME - NORTH RIDGE AREA | | | |
| Metatuff | E.12 | 8DL-0132 | |
| Metatuff, shattered with quartz veinlets | E.13 | - | North Ridge Road, N38+300E |
| Tin Dome meta quartzite breccia | E.14 | 8DA-0337 | |
| Tin Dome tourmaline vein/breccia | E.15 | 8DL-0089 | |
| Intrusives; Upper Dublin Gulch Area | | | |
| Quartz Monzonite | E.16 | - | Canex #3DDH |
| Very fine grain quartz porphyry (?) | E.17 | 8DP-0013 | |
| SECRET CREEK AREA | | | |
| Foliated quartzite with separation fractures | E.18 | RPSC #4 | |

8DL-1060H Laminated diopside skarn

The laminations in this sample result from alternations in diopside versus plagioclase and kspar contents. Grainsize also varies between layers. The laminations are on the scale of .5 tc 3 mm.

Mode

| | |
|---|---|
| Diopside-hedenbergite | 63 |
| Plagioclase (An 30) | 20 |
| Kspar | 5 |
| Carbonate | 3 |
| Uralite | 3 |
| Epidote, chlorite | 3 |
| Scapolite | 2 |
| Sphene | 1 |
| Allanite | tr |

The pyroxene is a diopside-hedenbergite solid solution, light green in thin section, with a $\gamma$ to z angle of $48^{o}$. It forms granular lamellar-shaped masses. Some larger grains are oriented within the plane of layering. It has been partially replaced by bright green uralitic amphibole. This grows interstitial to the pyroxene, forming partial rims and sometimes surrounding it. These overgrowths tend to parallel the crystallographic orientation of the enclosed pyroxene.
Plagioclase grains are unoriented, but some of the larger ones have elongate morphologies due to constriction between adjacent pyroxene lamellae. They poikilitically enclose pyroxene grains, indicating later development. The largest plagioclase grains have long dimensions approaching 5 mm; by contrast lamellar aggregates of small grains are also present. Some grains show patchy zoning.
Kspar grains form trains parallel to the layering.
Carbonate, of relatively low relief but not reactive to HCl, appears to be a late phase. It occurs interstitially, as small ragged grains within plagioclase, and penetrating plagioclase and scapolite along cleavages.
Epidote and chlorite in ragged dusty aggregates accompany carbonate. In places they are fibrous and may replace scapolite.
Scapolite occurs in the felsic lamellae as large fibrous grains including quartz and plagioclase. Scapolite remnants within plagioclase, of consistent orientation with the enclosing grain, show evidence for replacement by plagioclase.
Sphene clumps occur in the felsic lamellae; larger grains grow in apparent equilibrium with diopside.
A few grains of allanite ( light red-brown pleochroic, moderate birefringence, parallel extinction ) were noted.

Interpretation: The plagioclase in this sample is more Na-rich than that normally encountered in skarns of strictly metamorphic origin. This, along with the presence of Kspar and scapolite, suggests metasomatic involvement.

8+900N,40+450E Laminated diopside skarn

This sample differs from SDL-0160H in having quartz rather than feldspar as the felsic component. Again, laminations involve variations both in composition and grainsize.

Mode

| | |
|---|---|
| Diopside-hedenbergite | 73 |
| Quartz | 15 |
| Calcite | 5 |
| Epidote | 5 |
| Uralite | 2 |
| Sphene | tr |
| Pyrite | tr |
| Wollastonite | tr |
| Apatite | tr |

The pyroxene, very pale brown to green in thin section, forms lepidoblastic to granoblastic lamellar aggregates. Some large skeletal grains are up to 6 mm long. In general the finer grained sections show more distinct laminations.
Quartz grains range up to 5 mm in diameter. They occur in polygonal aggregates interstitial to pyroxene.
Calcite is interstitial to the other phases. It forms large grains elongate parallel to the laminations which poikilitically include both pyroxene and quartz. Some are skeletal.
Epidote mainly concentrates in a single lamination and in a fine cross-cutting vein. The epidote lamination consists of large dusty ragged grains accompanied by calcite. It has a distinctly secondary appearance.
Patches of bright green uralite rim and partially replace pyroxene.
Small grains of sphene, apatite, and pyrite occur in quartz.
A few wollastonite grains are surrounded by pyroxene. The present assemblage contained in this rock lies to the low temperature-high $P_{CO_2}$ side of the reaction calcite + quartz = wollastonite + $CO_2$.

8DL-0088F Massive garnet-diopside skarn

This is the only skarn with visible scheelite. Only a few grains are present; their associations have been detailed below.

Mode

| | |
|---|---|
| Diopside-hedenbergite | 71 |
| Quartz | 10 |
| Garnet | 7 |
| Plagioclase | 4 |
| Kspar | 2 |
| Uralite | 2 |
| Fe-oxides, opaques | 2 |
| Sphene | 1 |
| Epidote | 1 |
| Wollastonite | tr |
| Scheelite | tr |

The pyroxene is a diopside-hedenbergite solid solution, light green and slightly pleochroic in thin section. It has a $\gamma$ to z angle of 44°. It forms a granoblastic to lepidoblastic fabric generally, but grains develop euhedral boundaries against quartz.
Quartz occurs as large interstitial grains to 5 mm diameter. They commonly include small diopside-hedenbergite crystals.
Garnet porphyroblasts average 5 mm diameter. They include numerous small diopside grains scattered evenly from rim to core, indicating that their development postdates that of pyroxene. Reaction or impoverishment rims surround them, composed of plagioclase and Kspar.
Plagioclase and Kspar form clumps of anhedral grains, particularily around garnets.
Bright green uralite patchily replaces diopside-hedenbergite as interstitial material encroaching on grains and as rims. ( It should be noted that the bright green color of the secondary amphibole, indicating abundant iron, is additional evidence for an Fe-Mg pyroxene. Pure diopside would be replaced by clear tremolite. )
Iron oxides, orange to opaque, occur interstitially and along fractures. They appear to be late.
Sphene grains .5 to 1 mm diameter grow in equilibrium with the pyroxene fabric. Smaller euhedral grains occur within quartz.
Dusty epidote partly replaces plagioclase. Epidote veinlets cut across the garnet porphyroblasts.
A few wollastonite grains occur interstitial to pyroxene.
About ten scheelite grains were detected using ultraviolet light on the reject block. They were scattered throughout the block, usually in lighter patches which probably correspond to quartz grains. Only two could be found in the thin section. One was .2 mm diameter, subhedral, surrounded by quartz except for one side which touched pyroxene. The other occurred in the feldspar aggregate surrounding a garnet porphyroblast.

Kspar occurs in layer 1 and in the veins, as large grains interstitial to plagioclase.
Sphene occurs as trains of fine grains in layer 2. Euhedral sphenes grow along one vein selvage. One composite grain shows two successive reactions, rutile-ilmenite-sphene ( see below ).
Rutile ( dark brown acicular prisms and anhedra ) is scattered throughout the section.
Fine continuous opaque trains define the layering in layer 2. Larger cubic to anhedral grains (pyrite?) occur next to one of the veins. Anhedral opaques are surrounded by amphibole in the veins; they also occur in layer 1.
Siderite in a few coarse grains surrounds amphibole in veins. It is probably secondary.
A few scattered grains of tourmaline and apatite occur in layer 2.




$F_2$ fold in schist (layer 1)
muscovite forms polygonal
arcs around fold hinge.

9+100N, 38+550E Interlayered schist/metaarkose with quartz-amphibole veins

This rock is finely layered. Two major lithologies occur within the section:

1) schist - muscovite, biotite, Kspar
2) metaarkose - plagioclase, biotite, chlorite, actinolite, sphene, zoisite, layering defined by fine trains of opaques. A carbonate component is suggested by the calcic minerals and the highly anorthitic plagioclase.

Two early phases of deformation are beautifully demonstrated by rootless isoclines ($F_2$) which refold the foliation ($F_1$). In general $F_1$, $F_2$ and the compositional layering are parallel. $F_3$ shows as a kink in layer 1. The veins contain quartz plus either actinolite or tremolite; they verge on skarn minerology.

Mode

| | |
|---|---|
| Plagioclase (An70) | 21 |
| Quartz | 20 |
| Actinolite/tremolite | 15 |
| Chlorite | 10 |
| Zoisite/clinozoisite | 10 |
| Muscovite | 15 |
| Biotite | 3 |
| Kspar | 3 |
| Sphene, rutile | tr |
| Opaques | 2 |
| Siderite | 1 |
| Apatite, tourmaline | tr |




Plagioclase occurs as equant anhedral grains in layer 2. These are unzoned. Euhedral plagioclase grains growing along vein selvages are in some cases oscillatory-zoned.

Quartz forms aggregates of large clear grains in the veins.

Euhedral amphibole crystals and sprays in the veins poikilitically contain quartz. Tremolite in one vein appears to have partly altered to actinolite. The other veins contain only actinolite. In layer 2, actinolite needles either parallel the foliation or, enclosed within chlorite, show random orientations.

Patches and unoriented plates of chlorite occur in layer 2. A kink in the muscovite-biotite schistosity of layer 1 contains secondary chlorite.

Grey birefringent zoisite flecked with anomalous blue clinozoisite occur as patches in layer 2. Larger grains of clinozoisite are also present, both in layer 2 and in the veins. In one case clinozoisite seams a large actinolite crystal. An opaque phase believed to be pyrite is characteristically mantled by clinozoisite.

Muscovite is the dominant phase in layer 1, locally constituting 90% of the rock. It is well-oriented, defining a strong schistosity.

Oriented biotite plates occur in layer 1 with muscovite. They are also scattered in layer 2.

10+000N, 38+500E Aplite dike - diopside skarn contact

The skarn portion of this slide has a fine granular texture. It consists of diopside with feldspar-rich segregations. These are polygonal aggregates, in contrast to the uneven grain boundaries of the aplite. Uralite forms a discontinuous rim on the skarn where it contacts the dike. Scattered xenocrysts of diopside occur in the dike.

Modes

| Skarn | | Aplite | |
|---|---|---|---|
| Plagioclase (An 60) | 6 | Quartz | 60 |
| Diopside-hedenbergite | 79 | Plagioclase(An 60) | 37 |
| Quartz | 4 | Pyroxene | 2 |
| Carbonate | 4 | Kspar | tr |
| Epidote | 3 | Chlorite,biotite | tr |
| Sphene | 2 | Fe-oxides | tr |
| Uralite | 1 | Zircon | tr |
| Kspar | tr | | |
| Rutile | tr | | |
| Scapolite | tr | | |

Plagioclase forms polygonal aggregates with subsidiary quartz in the skarn; grainsize varies from place to place but is homogeneous locally. Contacts with diopside-rich portions are sharp. In the aplite, plagioclase and quartz intergrow; both are anhedral with uneven grain boundaries. Plagioclase contains symplectic intergrowths of albite but is otherwise unaltered.
The pyroxene is pale green in thin section. It forms a fine grained ( average .05 to .1 mm ) aggregate of polygonal crystals. They develop euhedral outlines against carbonate.
Quartz in the skarn occurs with plagioclase and also as interstitial monomineralic aggregates. Its grainsize in the aplite is variable; there it shows lobate to curving grain boundaries.
Carbonate, interstitial to pyroxene, tends to be elongate parallel to a system of fractures which cut both skarn and aplite. This suggests that it form after intrusion of the dike.
Epidote forms coarse dusty aggregates also elongated parallel to the fractures. Its morphology suggests secondary origin.
Uralite forms along the fractures in the skarn as well as at its contact with the dike.
Kspar is a minor phase in the aplite, occurring along the contact. A few grains accompany plagioclase in the felsic segregations in the skarn.
One grain of rutile ( high relief and birefringence, brown ) is surrounded by sphene. Sphene commonly nucleates on opaque grains. It occurs in the felsic parts of the skarn and as xenocrysts in the aplite.
One fibrous clear grain with parallel extinction interstitial to pyroxene is believed to be scapolite.
Chlorite, biotite and Fe-oxides fill a fracture in the aplite which is continuous with those in the skarn.

8DL-0132 Foliated quartzite

The strong parallel fabric of this metaarenite gives it a tuffaceous appearance in hand sample. However its quartz-rich composition is incompatible with an igneous origin.

Mode

| | |
|---|---|
| Quartz | 87 |
| Muscovite | 5 |
| Plagioclase (albite) | 5 |
| Chlorite | 2 |
| Opaques,iron oxides | 1 |
| Apatite, tourmaline | tr |

Quartz has two habits. Large quartz crystals are lens-shaped, strongly flattened in the foliation. They show extreme undulatory extinction. Some have been polygonalized to finer aggregates of closely-oriented grains. Grain boundaries are irregular to dentate. The second quartz habit is as smaller grains in the matrix. Although these also tend to be flattened in the foliation, they do not show undulatory extinction. Muscovite trains outline original quartz clasts which have recrystallized to aggregates indistinguishable from the matrix. This bimodal occurrence, with strain showed prominently in the coarse grains, is typical of strong deformation accompanied by recrystallization and plastic flow. It has been described both from metamorphic terranes and from the mantle.
Fine wispy muscovite trains parallel the quartz foliation. Original quartz clasts can be distinguished because they, unlike the original matrix, do not contain fine scattered platelets of muscovite and chlorite.
Plagioclase grains are anhedral and lens-shaped. Twins are kinked. Plagioclase recrystallizes less readily than quartz; thus it only occurs as porphyroclasts and not in the matrix as neoblasts. Plagioclase grains are sericitized and partly replaced by fine grained quartz.
Opaque trains parallel the foliation. Iron oxides penetrate along foliation fractures at the edges of the block.
Tourmaline and apatite concentrate in muscovite-chlorite trains.

Eagle-Stewart Ridge: 10+200N  Medium grained biotite granodiorite

The most distinctive feature of this intrusive is its high content of xenoliths which are minerologically identical but compositionally and texturally different than the enclosing rock. They tend to have radial structures, for instance radiating plagioclase or quartz-rich relatively coarse cores, All are more rich in biotite than the matrix; they tend to be finer grained.

Mode

| | |
|---|---|
| Plagioclase (An 45) | 35 |
| Quartz | 33 |
| Kspar | 10 |
| Biotite | 20 |
| Chlorite | 2 |
| Opaques | tr |
| Fe-oxides | tr |
| Zircon, apatite, allanite | tr |

Plagioclase grains show typical euhedral to subhedral plutonic habits. Some form clumps with complicated twinning patterns. Oscillatory zoning is common. The degree of saussuritization and sericitization varies. Within a given grain, it most strongly affects more calcic annuli.
Quartz grains are clear and interstitial.
Kspar grains are large and interstitial. They poikilitically surround all other ohases, including quartz.
The biotite in this sample, like that in the metamorphic rocks, is red brown, an indication of high ferric iron content. It forms plates with several paragenetic relations. Some are enclosed within euhedral plagioclase. Others are epitaxial on it. Still others are skeletal and enclose quartz. Thus biotite crystallization seems to have persisted from liquidus to near-solidus in the rock. Biotite within the inclusions is the same color, presumably the same composition, as that in the matrix.
Chlorite forms mimetically after biotite. It concentrates in one corner of the section, where alteration of plagioclase is correspondingly strong.
Opaque grains, probably ilmenite because of white leucoxene seen in reflected light, are enclosed in biotite plates. Zircon and apatite also occur preferentially within biotite. Zircons are surrounded by prominent pleochroic haloes.
Brown pleochroic allanite is interstitial to quartz.
Iron oxides occmpany chlorite. A few grains of clear interstitial hematite are present.

North Ridge Rd., 10+200N  Metatuff ( rhyolite ) / quartz veinlets

This sample is delicately layered on a scale of .1 to .2 mm. Laminations are enriched in either quartz, Kspar, or Kspar + muscovite. Quartz veinlets run both parallel to and across the laminations. The crosscutting veins appear to be later as they recrystallize material in the conformable veins.

Mode

| | |
|---|---|
| Quartz | 70 |
| Kspar | 23 |
| Muscovite | 5 |
| Chlorite | 1 |
| Zircon, tourmaline, opaques, rutile/cassiterite | 1 |

Quartz both in veins and laminations forms a mosaic of clear grains. In some laminations grains are as wide as the layer.
Kspar forms finer aggregates than quartz. Some areas are very dusty, altered to clay.
Muscovite platelets are aligned parallel to the layering. They tend to accompany Kspar rather than quartz. Iron oxides stain some muscovite trains.
Nearly isotropic chlorite accompanies chlorite in places.
Scattered grains of zircon and tourmaline occur in the metatuff ( not in the veins ). Small interstitial opaques concentrate in the Kspar layers.
Rutile or cassiterite ( dark yellow to reddish brown, high relief, slightly pleochroic, high birefringence ( 3rd order ), parallel extinction ) occurs as prisms and needles in the Kspar layers.

Although this sample shows evidence of thorough metamorphic recrystallization under stress ( muscovite fabric parallels layering ), is does not typify the conditions of extreme strain evidenced in 8DL-0132.

8DA-0337 Quartzite breccia ( metaarenite )

This sample may have resembled 8DL-0132 prior to brecciation. In relatively undisturbed areas it consists of relatively coarse quartz lenses showing undulatory extinction in a matrix of unstrained grains. Mica wisps define the fabric and delineate recrystallized porphyroclasts.

Mode

| | |
|---|---|
| Quartz | 83 |
| Fe-oxides | 10 |
| Muscovite | 7 |
| Zircon | *tr* |

Quartz forms a generally equant microcrystalline mosaic with straight to slightly curving grain boundaries.
Iron oxides fill the fractures between breccia clasts, in some places along with angular shattered quartz fragments.
Muscovite occurs as oriented wisps and as scattered small plates. Many of the latter are skeletal and enclose quartz.
A few scattered dusty zircons were noted.

This sample shows a three-part history:

1) strong plastic deformation, recrystallization of quartz to finer aggregates, development of muscovite foliation
2) healing under static conditions, crystallization of unoriented mica, development of equant polygonal quartz fabric
3) brittle fracturing and brecciation.

8DL-0089 Tourmaline-veined quartzite with breccia zones

This sample may have resembled 8DL-0132 prior to tourmaline metasomatism. The original quartz fabric is bimodal with flattening of grains parallel to the foliation and undulatory extinction in some of the coarser grains. The tourmaline veins cut across the trend of the quartz foliation; relics of it are preserved within the tourmaline. Tourmaline prisms have two orientations, one parallel to the earlier foliation and the other, less pronounced, at a slight angle to it.

Late brittle fractures cut across the sample. Tourmaline veins, parallel to the quartz foliation, are displaced across them. The fractures contain small breccia zones, cemented with iron oxides.

Mode

| | |
|---|---|
| Tourmaline | 48 |
| Quartz | 35 |
| Fe-oxides | 10 |
| Chlorite | 1 |
| Opaques | 5 |
| Rutile/cassiterite | 1 |

Tourmaline forms fine-grained dense masses of brown to green pleochroic crystals. Blue-green pleochroism was noted in a few places. Coarser tourmaline occurs in the remnant quartz-rich layers.
Quartz grains are of variable size with sutured borders.
Fe-oxides fill late breccia-fractures, as in 8DA-0337.
Elongate opaque blebs in tourmaline layers are partly at least composed of iron oxides. They are interstitial to tourmaline.
Rutile or cassiterite ( for description see N. Ridge Rd. sample ) occur as prisms and anhedra in a fine tourmaline segregation in quartz, and within tourmaline-rich layers.

Canex #3DDH Quartz monzonite

This is a coarse grained fairly typical intermediate intrusive. It shows some degree of textural/compositional variation, with relatively fine-grained biotite and plagioclase concentrated to one side of the slide.

Mode

| | |
|---|---|
| Orthoclase | 59 |
| Quartz | 15 |
| Biotite | 5 |
| Chlorite,prehnite | 6 |
| Plagioclase(An25-60) | 4 |
| Carbonate | 4 |
| Sphene | 2 |
| Zircon,allanite | tr |
| Sericite | 4 |
| Rutile | tr |

Orthoclase grains are up to 4 mm in diameter. They are anhedral, dusty, and commonly contain microperthite lamellae. Finer grains are interstitial to other phases.
Quartz is interstitial to orhoclase but shows idiomorphic outlines against carbonate and chlorite.
Red brown biotite plates show color mottling in places. They are partly replaced by chlorite.
Chlorite and prehnite form interstitial radiating masses in what may have been miaroles.
Small euhedral plagioclase crystals show normal and oscillatory zoning.
Carbonate fills discontinuous veinlets and flecks feldspar. Coarse ragged carbonate patches accompany chlorite and sericite after biotite.
Sphene is mostly primary; in a few cases it replaces biotite, growing along the basal cleavage. A few sphene veinlets are present.
Allanite forms a few euhedral prisms which produce pleochroic haloes where they touch biotite.
Rutile is interstitial to prismatic. Clumps of acicular crystals occur in late chlorite patches.
Sericite in coarse aggregates replaces feldspar.

8DP-0013 Hydrothermally altered rhyolite porphyry, scheelite in quartz veins

Mode

| | | |
|---|---|---|
| Zeolite, zircon | tr | |
| Scheelite | tr | |
| Kspar | 65 | |
| Quartz | 20 | |
| Clay | 4 | |
| Plagioclase (albite) | 1 | ( orignally about 7% ) |
| Fe-oxides | 2 | |
| Rutile/cassiterite | 1 | |
| Muscovite | 7 | |

Kspar phenocrysts are subhedral to euhedral and partly sericitized. Kspar forms an interlocking aggregate with quartz in the matrix.
Quartz phenocrysts clump together. They are rounded and embayed.
Except for a few, original euhedral plagioclase phenocrysts have been completely replaced by sericite.
Composite muscovite plates contain abundant opaque inclusions. They may be biotite pseudomorphs. Smaller clear muscovite plates occur in the matrix.
Pockets of radiating clear material with low birefringence and negative relief are probably a zeolite (stilbite?)
Dusty low-birefringent clay accompanies sericite.
Rutile or cassiterite ( high relief, dark brown-yellow brown pleochroic, 3rd order birefringence, parallel extinction ) has an acicular to anhedral habit. It grows inside relict plagioclases, as prismatic aggregates within muscovite plates, and in one very small discontinuous veinlet.
White quartz veins cut the sample. In one of them scheelite ( high relief, low first-order birefringence, uniaxial +, 2 poor cleavages at $90^{\circ}$, slight anomalous extinction ) occurs as a few euhedral prisms rimmed with hematite.
Radiating goethite nucleates on hematite in these veins.
A few grains of zircon were noted.

The complete replacement of plagioclase and biotite, as shown by white mica textures, suggests that this rock has undergone at least mild hydrothermal alteration, probably accompanying the scheelite-bearing quartz veins.

RPSC#4 Foliated quartzite with plastic shear zones

This sample resembles 8DL-0132 in lithology and style of deformation. Coarse lens -shaped quartz porphyroclasts show strong undulatory extinction and recrystallization to subgrains. The smaller quartz crystals in the matrix ( neoblasts ), although flattened, do not show undulatory extinction. Plagioclase porphyroclasts have been completely altered to clay.

Secondary plastic shear zones cut the original foliation at high angles. These have caused recrystallization of quartz and re-alignment of the new grains parallel to themselves.

Fine layers defined by micaceous partings and opaque trains are deformed into tight folds with parasitic minor folds on the scale of the section.

Mode

| | |
|---|---|
| Quartz | 90 |
| Clay | 5 |
| Muscovite | 4 |
| Opaques | 1 |
| Tourmaline | tr |
| Rutile | tr |
| Zircon | tr |

Quartz grains show undulatory extinction except small neoblasts. This texture approaches mylonitic. One quartz polygrain aggregate composed of coarse equant grains may be original. Most aggregates are the result of subgrain formation during strain.
Fine clay replacing plagioclase etches and weathers out easily.
Muscovite platelets parallel the orientation of the trains in which they occur. This foliation is refolded, as noted above.
Fine trains of opaque material ( graphite? ) delineate layering. In viewing the section care must be taken to distinguish original opaques from grinding compound which accumulates along fractures and irregularities.
Tourmaline and zircon tend to concentrate in the mica-opaque trains.
One clump of zircon is surrounded by iron oxide.
Rutile needles within muscovite are oriented within the basal cleavage. A few anhedral rutile grains are also present.

8DB-0151 Quartzite with schistose muscovite partings

This is one of the less deformed quartzites. The quartz fabric is equant, with sparse fine muscovite trains defining a weak foliation. One one side of the section concentration of muscovite indicates an interbedded aluminous ( clay-rich ) sediment. Foliation parallels layering, due to isoclinal folding.

Mode

| | |
|---|---|
| Quartz | 79 |
| Fe-oxides | 7 |
| Chlorite | 5 |
| Plagioclase | 4 |
| Kspar | 1 |
| Tourmaline | 1 |
| Muscovite | 3 |
| Zircon | tr |

Quartz forms an equant mosaic with uneven grain boundaries. Its grainsize shows considerable irregularity, ranging from .1 to 1 mm diameter. This may be a result of poor sedimentary sorting.
Iron oxides fill fractures parallel to the foliation, in many cases staining muscovite. They are mostly dusty and fine grained. Some areas are opaque or strongly reddened.
Chlorite occurs as fine plates or masses interstitial to quartz. In places it mimics earlier muscovite.
Plagioclase ( albite ) grains are scattered within the quartz fabric. They are anhedral. Kspar shows a similar habit.
Tourmaline grains concentrate along the mica trains.
Isolated comparatively large muscovite plates are probably original clasts. The most common role of muscovite is in fine trains parallel to the foliation, and also to the comositional layering, as is shown by the mica-rich layer on one side of the section.

8DB-0207 Schistose quartzite

In this sample, trains of biotite separate quartz-rich lamellae. A large quartz vein parallel to the foliation contains quartz coarser but texturally identical to that in the matrix. A few discontinuous biotite trains remain within it.

Mode

| | |
|---|---|
| Quartz | 88 |
| Biotite | 5 |
| Kspar | 2 |
| Chlorite | 2 |
| Muscovite | 2 |
| Hematite | tr |
| Opaque Fe-oxides | 1 |
| Apatite | tr |
| Zircon | tr |
| Tourmaline | tr |

Quartz forms an equant fabric within lensoid laminae. Grain boundaries are lobate and interlocking. A few grains contain crystallographically oriented rutile needles.
Small plates and aggregates of red-brown biotite form trains between quartz-rich laminae. They are oriented parallel to the foliation. Pleochroic haloes are common.
Kspar grains are concentrated particularly in laminae next to the quartz vein. They are altered partially to clay and sericite. A few isolated grains also occur within the vein.
Chlorite mimetically replaces biotite.
Muscovite accompanies chlorite in pseudomorphs of biotite. Primary muscovite occurs as plates within the biotite trains and as finer oriented grains within quartz.
Iron oxides tend to concentrate in the biotite trains. They form fine grains and clumps with ragged edges, A few large clear hematite grains have grown interstitial to quartz.
Small euhedral prisms of tourmaline, apatite and zircon tend to concentrate in the biotite trains. This may be the result of heavy-mineral concentrations in the parent arenite.

9+500N, 39+050E  Andalusite-kspar-muscovite-biotite schist

Mica orientations show a strong static overprint on the foliation in this sample. Andalusite grains are strongly elongate/flattened within the foliation; however this is likelier to be the result of compositional control than crystallization under strain. The foliation parallels a delicate compositional layering shown by fine opaque ( graphite? ) trains.

Mode

| | |
|---|---|
| Muscovite | 30 |
| Andalusite | 25 |
| Biotite | 25 |
| Kspar | 15 |
| Opaques | 5 |
| Chlorite | tr |
| Tourmaline | tr |

Muscovite reflects the deformation as trains of plates which, along with biotite, define the schistosity. It also forms unoriented intergrowths with biotite and large euhedral plates which cut across the earlier foliation at high angles.
Pink pleochroic andalusites are strongly elongated and show a tendency to crystallographic orientation within the plane of foliation. They include both opaques and biotite. The pleochroism is patchy. It shows a high content of ferric iron. Some andalusites occur as interlocking aggregates of closely oriented grains; this could be the result of annealing.
Intensely red-brown biotite occurs both within and cross-cutting the foliation. It displays prominent pleochroic haloes.
Kspar forms large poikilitic interstitial porphyroblasts.
Opaques, probably iron oxides and graphite, occur throughout the section. Fine opaque trains parallel to the foliation are partly enclosed within andalusite porphyroblasts,
Chlorite replaces biotite in a few places.
A few scattered grains of tourmaline are present.

Interpretation: The quartz-free association andalusite + muscovite + Kspar indicates that this rock was subjected to temperatures above the breakdown of muscovite + quartz but below the maximum stability of muscovite. That quartz was clearly exhausted before muscovite lends support to the interpretation offered for 8DB-0234. In this case no strong retrograde event has taken place. ( Could retrograde metamorphism be controlled by fluid availability through fractures, etc.? ) The high $Fe^{+3}$ content both in andalusite and in biotite ( evidenced by the red color) suggest highly oxidizing, thus near-surface conditions. This agrees with the low pressure inferred from the assemblage in 8DB-0234.

8DB-0228 Quartz-Kspar-biotite-muscovite schist

In this sample mica-rich trains alternate with felsic laminae on a scale of about 3 mm.

Mode

| | |
|---|---|
| Quartz | 45 |
| Kspar | 35 |
| Biotite | 7 |
| Muscovite | 7 |
| Opaques | 3 |
| Chlorite | 2 |
| Tourmaline,zircon | 1 |
| Apatite | tr |
| Hematite | tr |

Quartz forms an equant fabric with lobate interlocking grain boundaries similar to 0207.
Kspar in polygonal aggregates elongate parallel to the foliation is generally finer grained than quartz.
Red-brown biotite plates with prominent dark pleochroic haloes define the foliation. Small round biotite plates occur within quartz.
Muscovite plates, apparently primary, intergrow with biotite. White mica of lower birefringence in finer grained aggregates encroaches on biotite. This type is probably a retrograde phase.
Opaque grains are scattered throughout, tending to accompany biotite. One that touches biotite is a substrate for acicular rutile(?) which radiates into the biotite.
A few scattered anhedral hematite grains were noted.
Chlorite follows some biotite trains selectively, penetrating biotite along cleavages and, in extreme cases, completely pseudomorphing it.
Tourmaline and zircon occur preferentially with biotite. Apatite in irregular grains to .25 mm diameter also accompanies biotite.

Interpretation: The association of muscovite and quartz, both stable during prograde metamorphism of this sample, indicates that temperatures affecting it lay below the reaction :

quartz + muscovite = Kspar + aluminosilicate ( see summary ).

# APPENDIX II

## Canex Placer Diamond Drill Logs

GRID: _____

# CANEX AERIAL EXPLORATION LIMITED

HOLE No. 1
SHEET No. ___ of ___

LOCATION: Line 725 S 9W
BEARING: 0°
LATITUDE: _____
PROPERTY: Potato Hills Venture 127

DATE COLLARED: August 27, 1971
LENGTH: 300'
DEPARTURE: _____
CORE SIZE: B.Q w/l
LOGGED BY: B. Good

DATE COMPLETED: August 30, 1971
DIP: 45°
ELEVATION: _____
SCALE OF LOG: 1" = 10'
DATE: August 29, 1971

| ROCK TYPES & ALTERATION | | | | | | | GRAPHIC LOG | | | | | | | | | | | | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | ∠ to Core Foliation | Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | Sample Number Cu. | Sample Number Mo. | % Cu. | % Mo. | Estimated Grade |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
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FORM 130 - L.S.D. 1

GRID _____

# CANEX AERIAL EXPLORATION LTD.

HOLE No. 1
SHEET No. 1 of 5

| ROCK TYPES & ALTERATION | | | | | | | | GRAPHIC LOG | | | | | | | | | | | | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | Rock Dis. | ∠ to Core Foliation | Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | Sample Number WO3 Cu. | Sample Number Au Mo. | % WO3 Cu. | % Au Mo. | Estimated Grade WO3 |
| | | | | | | | | | 0 | | | | | | | | | | | | | | |
| | | | | | | | | | 10 | | | | | | | | | | | | | | |
| | | | | | | | | | 20 | | | | | | | | | | | | | | |
| | | | | | | | | | 30 | | | | | | | | | 0 | | | | | |
| 40% | 30% | 15% | 15% | med-coarse grained | ~5½ | Quartz Monzonite - equigranular | | | 40 | | 52°-0.2" 75°-0.6" | | trace | 0.5° K-spar 0.6" Sericite | limonite alteration on fractures fracture 35° to core | 31 37 10 | | 70 98 | 29326 | | .01 | | |
| | | | | | | | | | 50 | | 55°-0.05" | | | 0.1" sericite | fracture 35° to core. | 46 | | 65 | 29327 | | .01 | | |
| | | | | | | | | | 60 | | | | | | Sand | 52 | | 25 | 29328 | | .01 | | |
| | | | | | | | | | 70 | | | | | | | 32 | | 30 | 29329 | | .01 | | |

FORM 130-L.S.D. 2

GRID _____ CANEX AERIAL EXPLORATION LTD. HOLE No. _____ SHEET No. 2 of _____

| ROCK TYPES & ALTERATION | | | | | | | ∠ to Core Foliation | GRAPHIC LOG | | | | | | | | | | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Plag. | K-Spar. | Mafic | Texture | Hardness | | | Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | Sample Number Cu. | Sample Number Mo. | % WO3 Cu. | % Mo. | Estimated Grade |
| | | 15% | 10% | medium grained | ~4½ | quartz Monzonite equigranular | | | 80 | | 62°-0.1" | | .2% [illegible] quartz | 0.3" [illegible] kspar | [illegible] | 72 | | 45 | 29330 | | .01 | | |
| | | | | | | | | | 80 | | 80°-0.1 | | quartz | 1.2" kspar | | 80 | | 25 | | | | | |
| | | | | | | | | | | | 57°-0.2" | | quartz | 0.6" kspar | | | | | 29331 | | .01 | | |
| | | | | | | | | | 90 | | 63°-0.025" | | .5% [illegible] quartz | 0.3" kspar | | 92 | | 25 | | | | | |
| | | | | | | | | | | | 80°-0.2" | | quartz | 1.5" kspar | | 95 | | 95 | 29332 | | .01 | | |
| | | | | | | | | | | | 75°-0.1" | | quartz | 1.3" kspar | limonite on fracture | 98 | | 70 | | | | | |
| | | | | | | | | | 100 | | 50°-0.1" | | | 1.2" kspar | | | | | | | | | |
| | | | | | | | | | | | 60°-0.1" | | [illegible] | 1.0 kspar | | 102 | | 95 | | | | | |
| | | | | | | | | | | | 40°-0.4" | | .5% [illegible] quartz | 1.0" kspar | Fracture 70° to core limonite on fracture | | | | | | | | |
| | | | | | | | | | | | 55°-0.5" | | quartz | 1.4" kspar | | | | | 29333 | | .01 | | |
| | | | | | | | | | | | | | | 5.0" kspar | | 108 | | 90 | | | | | |
| | | | | | | | | | 110 | | 80°-.16" | | .3% [illegible] quartz | 0.5" kspar | mafic → limonite moderately to highly [illegible] | 113 | | 90 | | | | | |
| | | | | | | | | | | | 75°-0.02" | | [illegible] | 0.4" kspar | | 115 | | 65 | 29334 | | .07 | | |
| | | | | | | | | | 120 | | 85°-0.05" | | quartz | 0.4" kspar | biotite → pyroxene (?) | | | | | | | | |
| | | | | | | | | | | | 80°-.5" | | quartz | 1.0" kspar | vein cut by fracture 10° to core | 121 | | 98 | | | | | |
| | | | | | | | | | | | 70°-0.1" | | quartz | 0.3" kspar | fracture [illegible] | | | | | | | | |
| | | | | | | | | | | | 80°-0.5" | | [illegible] | 0.3" kspar | limonite alt. & highly [illegible] | | | | | | | | |
| | | | | | | | | | | | 50°-0.2" | | | 0.5" kspar | | 126 | | 95 | 29335 | | .05 | | .1% |
| | | | | | | | | | | | 15°-0.05" | | | — | on fracture set | 128 | | 90 | | | | | |
| | | | | | | -plag. phenocrysts [illegible] <0.2" sq | | | 130 | | 70°-0.5" | | .5% [illegible] quartz [illegible] | 1.0" limonite [illegible] | | | | | | | | | |
| | | | | | | | | | | | 65°-0.1" | | [illegible] | [illegible] | | 132 | | 92 | | | | | |
| | | | | | | | | | | | 58°-0.1" | | | 2.7" kspar | | | | | | | | | |
| | | | | | | | | | | | 55°-0.1" | | [illegible] | 0.3" [illegible] | | 136 | | [illegible] | 29336 | | .01 | | |
| | | | | | | | | | | | 60°-0.2" | | | [illegible] | | | | | | | | | |
| | | | | | | | | | 140 | | [illegible]°-0.1" | | | [illegible] | | | | | | | | | |

130-L.S.D. 2

GRID _____

# CANEX AERIAL EXPLORATION LTD.

HOLE No. 7
SHEET No. 3 of 4

| ROCK TYPES & ALTERATION | | | | | | ∠ to Core Foliation | GRAPHIC LOG: Foliation Alteration | GRAPHIC LOG: Footage | GRAPHIC LOG: Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS: Sample Number | | ASSAY RESULTS: % | | Estimated Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plag. | K-Spar. | Mafic | Texture | Hardness | Rock Descript. | | | | | | | | | | | | | ~~Cu~~ WO3 | ~~Mo~~ Nil | ~~Cu~~ | ~~Mo~~ | |
| 45% | 10% | 10% | med grain | 1½ | Quartz Monzonite [illegible] Pyrite [illegible] ≤5% calcite veining | | | 140 | | 80° - 0.3"<br>65° - 0.45" | | qtz calcite | 1.5" | - [illegible] Calc. in fractures<br>-12° quartzite inclusion | | | 98 | | | | |
| | | | | | | | | | | 65° - 0.1"<br>60° - 0.05" | | | | | 146 | | 99 | 29337 | | .01 | | |
| | | | | | -11- | | | 150 | | 87° - 0.5"<br>75° - 0.15" | | qtz | | | 151 | | 95 | | | | | |
| | | | | | | | | | | 65° - 0A" | | qtz<br>~0.5% sericite | 2" kspar | 1 chlorite alteration | 160 | | 30 | 29338 | | .09 | | |
| | | | v. f. g. | | -11- | | | 160 | | 20° - 0.025" | | quartz | 0.2" kspar | -6" chlorite alteration | 161 | | 95 | 29339 | | .02 | | |
| | | | | | | | | 170 | | 70° - 2" | | qtz, pyrite [illegible] | 1 kspar. | [illegible] | 170 | | 99 | | | | | |
| | | | | | -11- | | | 180 | | 70° - 0.3"<br>70° - 0.5"<br>58° - 0.1"<br>30° - 0.7"<br>53° - 0.2<br>60° - 0.1 | | qtz | 2" kspar.<br>.5" kspar<br>.3" kspar<br>.3" kspar<br>.5" kspar | [illegible] 20% calcite<br>-1" irregular [illegible] | 171<br>175 | | 99 | 29340 | | .01 | | |
| | | | | | -11- | | | 190 | | 60° - 0.05<br>53° - 0.1"<br>70° - 0.3"<br>60° - 0.2" | | qtz & calcite<br>qtz | 3.8"<br>0.5" kspar.<br>0.1" kspar<br>0.5" kspar | [illegible] | 185<br>190 | | 95<br>99<br>97<br>99 | 29341 | | .01 | | |
| | | | | | - " - | | | 200 | | 70° - 0.5"<br>52° - 0.2"<br>63° - 0.2"<br>70° - 0.2" | | qtz<br>qtz<br>qtz | 1.0" kspar<br>0.1" kspar<br>0.2" kspar<br>3" kspar | moderate limonite alteration | 197<br>197 | | 98<br>99 | 29342 | | .01 | | |
| | | | | | | | | 210 | | 65° - 0.1"<br>80° - 0.3"<br>72° - 0.2" | | qtz<br>qtz | 0.5" kspar | [illegible]<br>-fracture 35° to core | 205<br>210 | | 99<br>95 | 29343 | | .01 | | |

130-L.S.D. 2

GRID _____ CANEX AERIAL EXPLORATION LTD. HOLE No. [illegible] SHEET No. [illegible] of [illegible]

| ROCK TYPES & ALTERATION: Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | ∠ to Core Foliation | GRAPHIC LOG: Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS: Sample Number ~~Cu.~~ WO3 | Sample Number ~~Mo.~~ Cu | % ~~Cu.~~ | % ~~Mo.~~ | Estimated Grade WO3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80% | 35% | 20% | 10% | med. coarse grained | 6½ | quartz Monzonite<br>feldspar [illegible]<br>≤ 5% calcite | | | 210<br>220 | | 74°-1.5"<br>70°-0.1"<br>60°-0.3"<br>78°-1.0" | | [illegible]<br>qtz<br>qtz<br>qtz | 0.2" kspar<br>0.2" kspar<br>0.3" kspar<br>0.2" kspar | [illegible]<br>} limonite | 215<br>219 | | 98<br>99 | 29344 | | .01 | | [illegible] |
| | | | | | | -"- | | | 230 | | 55°-0.2"<br>[illegible]<br>35°-0.2"<br>80°-[illegible] | | [illegible]<br>qtz<br>qtz<br>qtz | [illegible]<br>0.2<br>0.3" [illegible]<br>[illegible] | [illegible] | 221<br>226<br>230 | | 95<br>95<br>98 | 29345 | | .01 | | [illegible] |
| | | | | | | -"- | | | 240 | | 40°-0.2"<br>[illegible] | | [illegible] | [illegible]<br>.2 kspar | } limonitic highly indurated rock, [illegible] | 235<br>238 | | 95<br>66 | 29346 | | .01 | | |
| | | | | | | -"- | | | 250 | | 70°-0.15"<br>[illegible]<br>75°-0.05"<br>80°-0.70" | | qtz<br>qtz<br>qtz<br>qtz | 2" kspar<br>0.25" kspar<br>0.40" kspar | | [illegible]<br>[illegible] | | 50<br>60 | 29347 | | .065 | | [illegible] |
| | | | | | | -"- | | | 260 | | 65°-0.05"<br>65°-0.5"<br>72°-0.1"<br>65°-2.0"<br>78°-0.5" | | [illegible]<br>[illegible]<br>[illegible]<br>qtz | [illegible]<br>[illegible]<br>0.30" kspar<br>[illegible] | } [illegible] | [illegible]<br>[illegible]<br>[illegible] | | 98<br>99<br>85 | 29348 | | .01 | | [illegible] |
| | | | | | | -"- | | | 270 | | 70°-0.05"<br>65°-0.7 & 0.2<br>67°-0.05"<br>70°-0.1"<br>60°-0.2"<br>40°-0.2"<br>70°-0.5"<br>[illegible]-0.25" | | qtz<br>[illegible]<br>[illegible] | [illegible]<br>[illegible]<br>[illegible]<br>[illegible] | moderately indurated | [illegible]<br>[illegible] | | 99<br>98 | 29349 | | .43 | | [illegible] |
| | | | | | | -"- | | | 280 | | 80°-0.15"<br>[illegible]<br>70°-0.05"<br>70°-0.1"<br>60°-0.3"<br>75°-1.0"<br>73°-0.05" | | [illegible]<br>[illegible]<br>[illegible]<br>[illegible] | [illegible]<br>[illegible]<br>[illegible]<br>0.2" [illegible] | } [illegible] highly indurated<br>[illegible] | [illegible]<br>[illegible]<br>[illegible] | | 85<br>85<br>98 | 29350 | | .13 | | [illegible] |

M 130-L.S.D. 2

GRID _____

# CANEX AERIAL EXPLORATION LTD.

HOLE No. _____
SHEET No. _____ of _____

| ROCK TYPES & ALTERATION | | | | | | | ∠ to Core Foliation | GRAPHIC LOG | | | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Foliation Alteration | Footage | Structure | | | | | | | | | Sample Number | | % | | Estimated Grade |
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | | | | | | | | | | | | | Cu. | Mo. | $WO_3$ ~~Cu.~~ | Mo. | |
| 30% | 35% | 20% | 10% | m.gr | 6 | [illegible] | | | 280 | | 75° - 0.25"<br>77° - 0.1"<br>[illegible]<br>75° - 0.05"<br>75° - 0.25"<br>70° - 1.25<br>[illegible] | | [illegible]<br>[illegible]<br>[illegible]<br>[illegible]<br>[illegible] 20% [illegible] | [illegible]<br>0.15 kgs<br>0.10 kgs<br>[illegible] | | [illegible] | | 98 | | | | | |
| | | | | | | | | | 290 | | | | | | | 286 | | 98 | 29351 | | .01 | | |
| | | | | | | | | | | | 70° - 0.3<br>[illegible] - 0.1"<br>60° - 0.3"<br>[illegible] - 0.5"<br>[illegible] | | [illegible] | [illegible]<br>[illegible]<br>0.2 kgs<br>[illegible] | | [illegible] | | 98 | | | | | |
| | | | | | | | | | 300 | | | | | | | [illegible] | | 98 | 29352 | | .01 | | |
| | | | | | | | | | | | | | | | | [illegible] | | 90 | | | | | |
| | | | | | | | | | | | | | | | E.O.H. | | | | | | | | |

FORM 130-L.S.D. 2

GRID: _____

# CANEX AERIAL EXPLORATION LIMITED

HOLE No. 2
SHEET No. ___ of ___

LOCATION: Line 765 A 29W
BEARING: 0°
LATITUDE: _____
PROPERTY: Potato Hills Venture 127

DATE COLLARED: August 31, 1971
LENGTH: 301'
DEPARTURE: _____
CORE SIZE: BQ w/l
LOGGED BY: R. Good

DATE COMPLETED: Sept. 2, 1971
DIP: 45°
ELEVATION: _____
SCALE OF LOG: 1" = 10'
DATE: Sept. 1, 1971

| ROCK TYPES & ALTERATION | | | | | | | ∠ to Core Foliation | GRAPHIC LOG | | | | ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qtz. | Plag. | K-Spar. | Matic | Texture | Hardness | | | Foliation Alteration | Footage | Structure | Veins | | | | | | | | | Sample Number | | % | | Estimated Grade |
| | | | | | | | | | | | | | | | | | | | | Cu. | Mo. | Cu. | Mo. | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
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FORM 130-L.S.D. 1

GRID _____

# CANEX AERIAL EXPLORATION LTD.

HOLE No. 2
SHEET No. 1 of [illegible]

| ROCK TYPES & ALTERATION: Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | Rock Description | ∠ to Core Foliation | GRAPHIC LOG: Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS: Sample Number Cu. | Sample Number Mo. | % Cu. | % Mo. | Estimated Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 0 | | | | | | | | | | | | | | |
| | | | | | | | | | 10 | | | | | | | | | | | | | | |
| 40% | 30% | 20% | 10% | [illegible] | 5-6 | Quartz Monzonite plag phenocrysts in places < 1/4" sq | | | | | 65° | 0.1" | qtz | 0.25" Kspar | [illegible] | | | | 29353 | | .01 | | |
| | | | | | | | | | | | 80° | 0.1" | qtz | 0.3" kspar | | | | | | | | | |
| | | | | | | | | | | | 65° | 0.15" | qtz | 0.3" kspar | | | | | | | | | |
| | | | | | | | | | | | 67° | 0.1" | qtz | 0.4" kspar | | | | | | | | | |
| | | | | | | | | | | | 55° | 0.2" | qtz | 0.8" kspar | | | | | | | | | |
| | | | | | | | | | 20 | | 56° | 0.1" | qtz | 0.2" kspar | | | | | | | | | |
| | | | | | | | | | | | 60° | 0.05" | qtz | 0.5" kspar | [illegible] | 21 | | 98 | | | | | |
| | | | | | | -"- | | | | | | ~3 ft (?) | qtz | | | [illegible] | | 20 | 29354 | | .05 | | |
| | | | | | | | | | 30 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | 32 | | 100 | | | | | |
| | | | | | | | | | | | | | | | Core broken as in fracture zone | [illegible] | | 80 | 29355 | | .01 | | |
| | | | | | | -"- | | | | | 56° | 0.6" | qtz | 0.3" sericite | | | | | | | | | |
| | | | | | | | | | | | 60° | 0.3" | qtz | 0.3" sericite | | | | | | | | | |
| | | | | | | | | | | | 60° | 0.2" | qtz | 0.2" sericite | | | | | | | | | |
| | | | | | | | | | | | 65° | 0.2" | qtz | 0.3" sericite | | | | | | | | | |
| | | | | | | | | | | | 65° | 0.2" | qtz | 0.5" kspar | | | | | | | | | |
| | | | | | | | | | 40 | | 75° | 0.25" | qtz | 0.7" Kspar | | | | 97 | | | | | |
| | | | | | | | | | | | 75° | 2.0" | qtz [illegible] | 0.5" sericite | | | | 99 | | | | | |
| | | | | | | | | | | | 70° | 0.3" | qtz | 0.7" sericite | | | | | | | | | |
| | | | | | | -"- | | | | | 65° | 2.3" | qtz | 0.3" sericite | | | | | 29356 | | .01 | | |
| | | | | | | | | | | | 70° | 1.0" | qtz | | | 46 | | | | | | | |
| | | | | | | | | | | | 60° | 0.15" | qtz | 0.5" kspar | | | | | | | | | |
| | | | | | | | | | | | 75° | 0.1" | qtz | 0.1" kspar | | [illegible] | | 95 | | | | | |
| | | | | | | | | | | | 50° | 0.1" | qtz | 0.7" kspar | | | | | | | | | |
| | | | | | | | | | 50 | | 70° | 0.1" | qtz | [illegible] | | | | | | | | | |
| | | | | | | | | | | | 60° | 0.2" | qtz | [illegible] | [illegible] | 51 | | 98 | | | | | |
| | | | | | | -"- | | | | | 65° | 0.25" | qtz | [illegible] | | | | | | | | | |
| | | | | | | | | | | | 65° | 0.2" | qtz | [illegible] | | 55 | | 98 | 29357 | | .01 | | [illegible] |
| | | | | | | | | | | | 65° | 0.25" | qtz | | | | | | | | | | |
| | | | | | | | | | 60 | | | | | | | [illegible] | | 95 | | | | | |
| | | | | | | | | | | | | | | | | [illegible] | | 50 | | | | | |
| | | | | | | | | | | | 65° | 0.3" | qtz | 1" kspar | | | | 95 | | | | | |
| | | | | | | -"- | | | | | | 0.2 | | 0.3" kspar | [illegible] | 57 | | 55 | 29358 | | .01 | | [illegible] |
| | | | | | | | | | | | 65° | 0.2 | | [illegible] | | | | | | | | | |
| | | | | | | | | | 70 | | | | | | | | | | | | | | |

FORM 130-L.S.D. 2

GRID _____

CANEX AERIAL EXPLORATION LTD.

HOLE No. 6
SHEET No. 4 of 5

| ROCK TYPES & ALTERATION | | | | | | | ∠ to Core Foliation | GRAPHIC LOG | | | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS | | | | Estimated Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Foliation Alteration | Footage | Structure | | | | | | | | | Sample Number | | % | | |
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | | | | | | | | | | | | | Au. | Mo. | Au. WO3 | Mo. | |
| 25% | 45% | 15% | 15% | medium grained | 5-6½ | qtz + K-spar veining with pyrite | | | 70 | | 70° (varies) | 0.15" | qtz | 2" Kspar | | 70 | | 75 | | | | | |
| | | | | | | | | | | | 55° | 0.6" | | 0.2" Kspar | - limonite on fracture | | | | | | | | |
| | | | | | | | | | | | 70° | 0.25" | qtz | 0.5" Kspar | 55° to core | | | | | | | | |
| | | | | | | | | | | | 70° | 0.1" | | 0.2" Kspar | | 90 | | 92 | 29359 | | .01 | | |
| | | | | | | | | | | | 70° | 0.1" | " | 0.3" Kspar | | | | | | | | | |
| | | | | | | | | | | | 75° | 0.15" | | | | | | | | | | | | |
| | | | | | | | | | 80 | | 55° | 0.30 | " pyrite | 0.35" Kspar | | | | | | | | | | |
| | | | | | | | | | | | 70° | 0.20" | | 3" Kspar | | 1 | | 93 | | | | | |
| | | | | | | | | | | | 75° | 0.45" | | | | | | | | | | | | |
| | | | | | | | | | | | 70° | 0.3" | | Sericite | - Sparse limonite | | | | | | | | |
| | | | | | | | | | | | 70° | 1.0" | | | | | | | | | | | | |
| | | | | | | | | | | | 55° | 0.2" | | 0.5" Kspar | | 5 | | 99 | 29360 | | .065 | | |
| | | | | | | | | | | | 60° | 0.02" | | | | | | | | | | | | |
| | | | | | | | | | | | 60° | 0.12" | qtz | 0.5" Kspar | | | | | | | | | |
| | | | | | | | | | 90 | | 75° | 0.4" | qtz | 0.7" Kspar | - limonite on fracture 30° to core | | | | | | | | |
| | | | | | | | | | | | 72° | 0.05 | qtz | 0.3" Kspar | | 11 | | 95 | | | | | |
| | | | | | | | | | | | 65° | 2.2" | qtz | 0.5" Kspar | | | | | | | | | |
| | | | | | | | | | | | 70° | 5.0" | qtz | 0.3" Limonite | - extensive limonite on fracture 30° to core | 95 | | 98 | | | | | |
| | | | | | | | | | | | | | | | | 96 | | 98 | 29361 | | .01 | | |
| | | | | | | | | | | | 65° | 0.3" | qtz | 0.9" Limonite | - 6" zone limonite on fracture 30° to core | | | | | | | | |
| | | | | | | | | | 100 | | | | | | - Sericite & limonite on fracture 10° to core | 100 | | 98 | | | | | |
| | | | | | | | | | | | 70° | 7.0" | qtz + 60% pyrite | Sericite | | 102 | | 95 | | | | | |
| | | | | | | | | | | | 70° | 0.2" | | 0.5" Kspar | | | | | | | | | |
| | | | | | | | | | | | 70° | 0.1" | qtz | 1.0" Kspar | | | | | | | | | |
| | | | | | | | | | | | 65° | 0.2" | | 0.5" Kspar | | | | | | | | | |
| | | | | | | | | | | | 70° | 2.0" | qtz | 1.0" Kspar | | 107 | | 99 | 29362 | | .01 | | |
| | | | | | | | | | 110 | | 70° | 1.5" | qtz + moly. (1%) | 0.5" Kspar | | | | | | | | | |
| | | | | | | | | | | | 70° | 0.2" | qtz | 0.3" Kspar | | 113 | | 98 | | | | | |
| | | | | | | | | | | | 70° | 0.2" | qtz + 60% pyrite | 0.7" Kspar | | | | | 29363 | | .01 | | |
| | | | | | | | | | | | 65° | 0.1" | | 0.5" Kspar | - 40% limonite on fracture 30° to core | 118 | | 98 | | | | | |
| | | | | | | | | | 120 | | 65° | 0.3" | qtz | 0.3" Kspar | | | | | | | | | |
| | | | | | | | | | | | 60° | 0.7" | qtz + 5% pyrite | 0.3" Sericite | | | | | | | | | |
| | | | | | | | | | | | 70° | 0.05" | | 0.5" Kspar | | 123 | | 99 | | | | | |
| | | | | | | | | | | | 60° | 0.3" | | 0.3" Kspar | | | | | 29364 | | .01 | | |
| | | | | | | | | | | | 60° | 0.4" | qtz + 25% pyrite | 0.3" Kspar | | | | | | | | | |
| | | | | | | | | | | | 60° | 1.2" | | 0.5" Kspar | | 128 | | 99 | | | | | |
| | | | | | | | | | 130 | | 60° | 0.2 | qtz | 3.2" Kspar | | | | | | | | | |
| | | | | | | | | | | | 60° | 0.2 | qtz | | | | | | | | | | |
| | | | | | | | | | | | 60° | 4.2" | qtz + 1% pyrite | 0.2" Sericite | | | | | | | | | |
| | | | | | | | | | | | 60° | 0.1" | qtz | 2.5" Kspar | | 133 | | 99 | | | | | |
| | | | | | | | | | | | 55° | 0.15" | " | 0.3 Kspar | | | | | | | | | |
| | | | | | | | | | | | 55° | 0.2" | " | 2.0" Kspar | - limonite 1" | | | | | | | | |
| | | | | | | | | | | | 70° | 12/1.5" | qtz | 0.2" Kspar | | 138 | | 99 | 29365 | | .01 | | |
| | | | | | | | | | 140 | | | 2.0" | qtz | | | | | | | | | | |

FORM 130-L.S.D. 2

GRID _____

# CANEX AERIAL EXPLORATION LTD.

HOLE No. _____
SHEET No. 3 of 5

| ROCK TYPES & ALTERATION | | | | | | | ∠ to Core Foliation | GRAPHIC LOG | | | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Foliation Alteration | Footage | Structure | | | | | | | | | Sample Number | | % | | Estimated Grade |
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | | | | | | | | | | | | | Cu. | Mo. | ~~Cu.~~ WO3 | Mo. | |
| 30% | 45% | 20% | 15% | Porphyry | 5-6 | Quartz and carbonate Porphyry ~2% pyrite in places | | | 100 | | 55° 70° 70° 60° 65° | 0.1" 0.5" 0.2" 1.0" 2.7" | qtz ± carb. pyrite qtz qtz ± (trace) arseno. | 0.3" kspar 1.0" sericite 1.0" kspar 0.2" kspar 1.0" kspar | - moderate carb. fractures - 2" qtz vein at 55° to core - [illegible] | 101 | | 100 | 29366 | | .01 | | |
| | | | | | | -"- | | | 150 | | 70° 55° 75° 70° | 0.7" 2.2" 0.05 10" | qtz Arsenopyrite. qtz ± (trace) arseno. | 0.5" kspar 0.1" kspar 0.2 kspar Sericite kspar | - v.fg. ? inclusion | 102 | | 95 99 | 29367 | | .01 | | |
| | | | | | | | | | 170 | | 70° 70° 60° | 0.25 0.2 1.2" | carbon pyrite qtz qtz | 0.2" kspar 1" sericite | moderate to moderate alter. | 120 170 | | 94 99 | 29368 | | .01 | | |
| | | | | | | | | | 190 | | 75° 60° 55° 65° 65° | 0.25 0.1 0.25" 0.10" 0.10" | qtz qtz qtz ± carb. pyrite qtz | 0.2" kspar 0.1" kspar 0.3" kspar | | 175 | | 99 | 29369 | | .01 | | |
| | | | | | | | | | 210 | | 70° 55° 70° 65° 65° | 0.20" 0.5" 0.3 0.5" 0.2" 2.1" | qtz qtz qtz | 1.5" kspar 0.3" kspar 0.3" kspar .3 | | 12 225 | | 95 99 | 29370 | | .01 | | |
| | | | | | | -"- | | | 230 | | 67° 70° 60° 60° 65° | 1.1" 3.0" 1.2" 2.1 2.3" 0.1" 3.4" 3.7" | qtz qtz qtz ± carb. pyrite qtz | 1.5" sericite 1.2" kspar 0.4" kspar 0.3" kspar 3" kspar | | 131 195 | | 98 99 | 29371 | | .01 | | |
| | | | | | | | | | 277 | | | | | | - ¼" inclusion qtz ± Biotite Sericite kspar - ¼" v.fg. ? inclusion | 201 222 | | 97 91 | 29372 | | .01 | | |

FORM 130-L.S.D. 2

GRID _____ CANEX AERIAL EXPLORATION LTD. HOLE No. _____ SHEET No. 1 of 5

| ROCK TYPES & ALTERATION: Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | ∠ to Core Foliation | GRAPHIC LOG: Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS: Sample Number Cu. | Sample Number Mo. | % Cu. WD3 | % Mo. | Estimated Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30% | 40% | 25% | 15% | [illegible] | S-6 | [illegible] | | | 210 | | 70°<br>60° | 7.0"<br>1.5" | qtz [illegible]<br>qtz | - 2" sericite<br>- 2" sericite<br>[illegible] | - 2" vlg. inclusion | [illegible] | | 97<br>98 | 29373 | | .01 | | |
| | | | | | | - " - | | | 230 | | 70°<br>[illegible]<br>[illegible]<br>60° | 0.05"<br>[illegible]<br>0.1"<br>[illegible] | [illegible]<br>[illegible]<br>qtz<br>qtz | [illegible]<br>0.1 Kspar<br>0.3 Kspar<br>[illegible] | [illegible] | [illegible] | | 95<br>99 | 29374 | | .01 | | |
| | | | | | | - " - | | | 230 | | [illegible]<br>65°<br>70°<br>70°<br>70° | [illegible]<br>0.5"<br>0.05"<br>0.05"<br>2.0" | qtz<br>qtz<br>qtz<br>qtz [illegible] | [illegible]<br>[illegible]<br>[illegible] Kspar<br>0.3" Kspar<br>1.5" Kspar | | [illegible] | | 99<br>99. | 29375 | | .01 | | |
| | | | | | | - " - | | | 240 | | 70°<br>[illegible]<br>[illegible]<br>65° | 0.75"<br>0.3"<br>0.7"<br>0.1" | qtz<br>qtz<br>qtz<br>qtz | [illegible]<br>[illegible]<br>0.3" Kspar<br>0.2" Kspar | - [illegible] on fracture [illegible] | 241<br>[illegible] | | 99<br>99 | 29376 | | .01 | | |
| | | | | | | - " - | | | 250 | | [illegible]<br>[illegible]<br>30°<br>65° | 0.2"<br>0.2"<br>[illegible]<br>0.2" | [illegible]<br>qtz<br>qtz<br>[illegible] | [illegible]<br>[illegible]<br>1.0" Kspar<br>[illegible] | [illegible] | 251<br>256 | | 99<br>99. | 29377 | | .01 | | |
| | | | | | | - " - | | | 260 | | 75°<br>70°<br>60°<br>[illegible] | 0.1"<br>0.7"<br>1.55"<br>0.4" | qtz<br>qtz<br>qtz<br>qtz | [illegible] Kspar<br>0.1" Kspar<br>[illegible] Kspar<br>[illegible] Kspar | - limonite on fracture [illegible]<br>} vlg inclusion | 261<br>[illegible] | | 99<br>99 | 29378 | | .01 | | |
| | | | | | | - " - | | | [illegible] | | 60°<br>35°<br>[illegible] | 0.2"<br>0.2"<br>0.3" [illegible] | qtz<br>qtz<br>qtz [illegible] | [illegible]<br>[illegible]<br>Sericite [illegible] | [illegible] 17° to core [illegible]<br>- Sericite on fracture 70% core | 271<br>275 | | [illegible]<br>99. | 29379 | | .01 | | |

FORM 130-L.S.D. 2

GRID _____ CANEX AERIAL EXPLORATION LTD. SHEET No. 4 of 5

| ROCK TYPES & ALTERATION | | | | | | | | GRAPHIC LOG | | | | | | | | | | | | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | ∠ to Core Foliation | Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | Sample Number Cu. | Sample Number Mo. | % Cu. WO3 | % Mo. | Estimated Grade |
| 35% | 40% | 20% | 10% | medgrained ground mass | 4½ to 6 | quartz Moliz. porphyry. 1/4" sq. plag phenocrysts | | | 280 | | 65° (3) | 0.05 (3) | moly & pyrite (3) | pyrite & hbpar | - hyp. [illegible] | [illegible] 285 [illegible] 290 | | 93 85 95 | 29380 | | > .01 | | |
| | | | | | | | | | 290 | | 67° [illegible] 70° [illegible] [illegible] 70° [illegible] | 2.0" [illegible] 1.0" 1.0" 2.15" 3.0" 0.2" [illegible] | [illegible] qtz & 5% pyrite qtz qtz 5% moly (2) qtz qtz | [illegible] 0.5" [illegible] 2.0" sericite 0.2" sericite 0.5" sericite | [illegible] | 295 300 | | 98 99 | 29381 | | .01 | | |
| | | | | | | E.O.H. | | | 300 | | | | | | E.O.H. | [illegible] | | 99 | | | | | |
| | | | | | | | | | 310 | | | | | | | | | | | | | | |

FORM 130-LSD. 2

GRID: _____

# CANEX AERIAL EXPLORATION LIMITED

HOLE No. 3
SHEET No. ___ of ___

LOCATION: Canex Camp | BEARING: 0° | LATITUDE: | PROPERTY: Potato Hills Venture 127
DATE COLLARED: Sept. 2, 1971 | LENGTH: 347' | DEPARTURE: | CORE SIZE: B.Q. w/l | LOGGED BY: B. Good
DATE COMPLETED: Sept. 5, 1971 | DIP: 50° | ELEVATION: | SCALE OF LOG: 1" = 10' | DATE: Sept. 3, 1971

| ROCK TYPES & ALTERATION | | | | | | | GRAPHIC LOG | | | | | | | | | | | | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | ∠ to Core Foliation | Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | Sample Number Cu. | Sample Number Mo. | % Cu. | % Mo. | Estimated Grade |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

FORM 130-L.S.D. 1

GRID _____

# CANEX AERIAL EXPLORATION LTD.

HOLE No. 3
SHEET No. 1 of 5

| ROCK TYPES & ALTERATION: Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | ∠ to Core Foliation | GRAPHIC LOG: Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS: Sample Number ~~Cu.~~ | ~~Mo.~~ Au | % ~~Cu.~~ $WO_3$ | $MoS_2$ | Estimated Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 0 | | | | | | | | | | | | | | |
| | | | | | | | | | 10 | | | | | | | | | | | | | | |
| | | | | | | | | | 20 | | | | | | | | | | | | | | |
| 25% | 40% | 25% | 15% | fine + med grained | 4-6 | [illegible] equipment V. highly altered [illegible] | | | 30 | | ? 60° 60° 75° [illegible] | 8" 0.25" 3" 0.5" 0.5" 1.85" | qtz qtz [illegible] qtz [illegible] | [illegible] | moderate [illegible] [illegible] | [illegible] | | 35 75 [illegible] | 29382 | TR | .01 | .002 | [illegible] |
| | | | | | | " | | | 40 | | 75° 60° 60° 7° 60° | 0.3" 1.5" 0.25" ~10" 0.25" | [illegible] qtz | Kaolin [illegible] | [illegible] | [illegible] | | 98 60 15 [illegible] | 29383 | TR | <.01 | .002 | [illegible] |
| | | | | | | " | | | 50 | | 70° 70° 70° 70° [illegible] | 0.7" [illegible] 0.15" [illegible] | [illegible] <1% Moly. [illegible] | | [illegible] | | | 98 [illegible] 98 65 | 29384 | TR | .01 | .002 | [illegible] |
| | | | | | | | | | 60 | | 70° 70° 60° 60° 60° | 0.2" 0.1" 1.2" [illegible] 0.1" | qtz [illegible] qtz [illegible] qtz | Kaolin [illegible] | | [illegible] | | 60 90 98 [illegible] | 29385 | TR | <.01 | .002 | |
| | | | | | | | | | 70 | | 60° 70° 70° [illegible] | 0.2" 2.0" 0.4" [illegible] | [illegible] qtz | [illegible] | highly [illegible] | [illegible] | | 80 95 75 65 | 29386 | TR | .05 | .002 | [illegible] |

FORM 130-L.S.D. 2

GRID _____

# CANEX AERIAL EXPLORATION LTD.

HOLE No. 3
SHEET No. 2 of 5

| ROCK TYPES & ALTERATION: Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | ∠ to Core Foliation | GRAPHIC LOG: Foliation Alteration | Footage | Structure | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS: Sample Number Cu. | Sample Number Mo. | % Cu. | % $MoS_2$ | Estimated Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 80 | | 55° 60° | 0.3" 5" | qtz 3% Moly 10% (Moly) | | | 75 77 | | 30 95 | 29387 | .24 | .01 | TR | [illegible] |
| | | | | | | | | | 90 | | 70° 80° | 15" 0.7" | qtz | | | 92 | | 35 95 | 29388 | TR | .01 | .002 | |
| | | | | | | | | | 100 | | 70° 60° 50° 50° 45° | 2.6" 0.3" 0.5" | qtz qtz qtz | | | | | 95 99 75 95 95 | 29389 | TR | <.01 | TR | |
| | | | | | | | | | 110 | | 70° 70° 60° 60° | 0.5" 0.3" 0.9" 0.6" | qtz <1% | | | 102 107 | | 90 95 85 80 | 29390 | .06 | <.01 | .002 | |
| | | | | | | | | | 120 | | 70° 7° 70° | .3" ~3" 2" | qtz 5% | | | | | 50 95 95 95 | 29391 | TR | .01 | .005 | |
| | | | | | | | | | 135 | | 70° 70° 65° 70° 40° 80° 50° | 0.4" 0.5" 0.3" 4" 0.4" 0.3" 0.7" | qtz | | | | | 90 95 90 90 90 | 29392 | TR | <.01 | .005 | |
| | | | | | | | | | | | 55° 80° 60° 55° 75° 80° | 0.25" 0.5" 2.0" 0.5" 1.2" | qtz <1% moly | | | | | 99 98 99 99 | 29393 | TR | .035 | .002 | |

FORM 130-L.S.D. 2

GRID _____

CANEX AERIAL EXPLORATION LTD.

HOLE No. 5
SHEET No. 2 of 5

| ROCK TYPES & ALTERATION | | | | | | | ∠ to Core Foliation | GRAPHIC LOG | | | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Foliation Alteration | Footage | Structure | | | | | | | | | Sample Number | | % | | Estimated Grade |
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | | | | | | | | | | | | | Cu. | Mo Au | Gm WO3 | Mo S2 | |
| 30% | 35% | 25% | 10% | | | Coarse Monzonite Very friable shear [illegible] | | | | | 70° ? 80° ? 80° | 0.7" 0.25" 2" 0.5" ? 1" | qtz qtz | | | | | 90 90 75 75 | 29394 | TR | .02 | .003 | |
| | | | | | | -11- | | | | | 70° 70° 65° 65° 60° 60° 55° ? 70° 70° | 0.4" 1.0" 2.5" 2.0" 1.2" 1.5" 2" 0.3" 1" 1" | qtz qtz qtz qtz qtz | | Foliation [illegible] | | | 90 90 95 95 | 29395 | TR | .01 | .002 | |
| | | | | | | -11- | | | | | 55° ? ? 70° | 0.4" 2" 6" 0.7" | qtz qtz qtz | | | | | 95 75 50 | 29396 | TR | .09 | .002 | |
| | | | | | | -11- | | | | | 60° 65° 80° | 0.5" 1.0" 1.2" | qtz qtz | | | | | 75 50 98 99 | 29397 | TR | <.01 | .003 | |
| | | | | | | -11- | | | | | 70° 75° 70° 70° 60° 65° 65° 65° 45° 45° | 2.5" 1.5" 1.2" 1.5" 0.7" 1.2" 6" 5" 4" | qtz qtz qtz qtz qtz | | | | | 95 90 90 90 90 | 29398 | TR | .01 | .002 | |
| | | | | | | -11- | | | | | 60° 65° 50° 75° | 1.2 0.7" 1.4" 0.6" | qtz < 1% Moly qtz qtz qtz | -11- | | | | 95 95 90 90 | 29399 | TR | .06 | TR | |
| | | | | | | -11- | | | | | 60° ? 50° 70° 70° 50° | 0.6" ~2" 0.6" 0.2" 2.0" 1.1" | qtz & 1% Moly qtz qtz & 1% Moly | -11- | | | | 99 99 98 99 90 | 29400 | TR | .01 | .003 | |

FORM 130-L.S.D. 2

GRID _____

# CANEX AERIAL EXPLORATION LTD.

HOLE No. 3
SHEET No. 1 of 5

| ROCK TYPES & ALTERATION | | | | | | | Est. ∠ to Core Foliation | GRAPHIC LOG | | | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Foliation Alteration | Footage | Structure | | | | | | | | | Sample Number | | % | | Estimated Grade |
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | | | | | | | | | | | | | Cu. $WO_3$ | Mo. Au | Cu. $WO_3$ | Mo. $S_2$ | $WO_3$ |
| 25% | 35% | 30% | 10% | fine to medium grained | 2-5 | fine to medium grained equigranular | 2 mm | | 220 | | 70<br>70°<br>40°<br>40°<br>85°<br>60°<br>80° | 1.4"<br>1.3"<br>2.4"<br>0.3"<br>1.0"<br>1.5"<br>1.5" | qtz ± 2-3% Moly.<br>qtz stringers Moly<br>qtz ± arsenic<br>qtz ± 1% Moly<br>qtz | Kaolin<br>Sericite<br>Kaolin<br>Chlorophaeite | - Kaolin - sericite<br>- 75° to core | 211<br>213<br>215<br>218<br>220 | | 98<br>99<br>95<br>95<br>95 | 29401 | TR | <.01 | TR | |
| | | | | | | - 11 - | .02 | | 230 | | 70°<br>70°<br>72°<br>60°<br>55°<br>60° | 2.4"<br>7"<br>10"<br>1"<br>1" | qtz ± 1% Moly (45°)<br>pyrite (arsenopyrite?)<br>pyrite, 1 to 2% Moly, fracture<br>qtz moly (?)<br>qtz ± arsenic Moly (?) | | | 223<br>225<br>228<br>230 | | 95<br>98<br>98<br>95 | 29402 | .005 | .01 | TR | |
| | | | | | | - 11 - | .01 | | 240 | | ?<br>75°<br>50°<br>55°<br>70°<br>65°<br>65° | ~6"<br>2"<br>3"<br>1.2"<br>2.7"<br>2.3"<br>0.7"<br>1.0" | qtz ± 1% magnetite<br>qtz ± 1% moly<br>qtz ± <1% moly<br>qtz ± 1% moly. | | possible moly. ground<br>moly. zone intrusive &<br>mineral with Kaolin | 231<br>233<br>235<br>238<br>240 | | 50<br>75<br>98<br>95<br>98 | 29403 | TR | <.01 | TR | |
| | | | | | | - 11 - | <.01 | | 250 | | ?<br>55°<br>70°<br>?<br>?<br>70° | 2"<br>2.5"<br>1.6"<br>~1.0"<br>1.4"<br>0.3"<br>0.6" | qtz ± 3% (moly + arsenic)<br>qtz ± 1% moly<br>qtz ± 2% Moly<br>qtz<br>qtz <1% Moly | | | 244<br>247<br>249 | | 98<br>95<br>90 | 29404 | TR | .06 | .002 | |
| | | | | | | - 11 - | .01 | | 260 | | 80°<br>60°<br>?<br>45°<br>75°<br>30°<br>65°<br>70°<br>70°<br>65° | 0.8"<br>0.4"<br>1.5"<br>2.1"<br>0.6"<br>1.2"<br>0.5"<br>0.1"<br>0.7"<br>1.6 | qtz<br>qtz ± moly<br>qtz ± 1% moly<br>qtz ± 2% Moly<br>qtz ± 1% Moly<br>qtz | | highly fractured highly<br>fractured 60° to core | 255<br>256 | | 95<br>98 | 29405 | TR | <.01 | .002 | |
| | | | | | | - 11 - | .05? | | 270 | | 50°<br>40°<br>60°<br>75°<br>55°<br>50°<br>70°<br>?<br>65° | 6.9"<br>5.3"<br>2.7"<br>0.7"<br>1.7"<br>0.4"<br>1.6"<br>1.0"<br>1.5" | qtz<br>qtz ± 2% Moly<br>qtz ± 5% (1" hydrothermal)<br>qtz<br>qtz<br>qtz<br>qtz ± 1% Moly | .2" fault | | 262<br>267 | | 99<br>99 | 29406 | .01 | <.01 | .003 | |
| | | | | | | - 11 - | .05? | | 285 | | 70°<br>60°<br>45°<br>50°<br>80°<br>55°<br>60°<br>?<br>?<br>60° | 0.3"<br>0.5"<br>~2.4"<br>0.6"<br>0.3"<br>0.2"<br>6"<br>1.05"<br>2.6"<br>0.15" | qtz ± 4% (arsenopyrite?)<br>qtz<br>qtz ± 4% (arsenopyrite?)<br>qtz ± 1% Moly<br>Moly / arsenic (?) | .5" fault | - Moly/arsenic ? on fracture<br>70° to core | 277<br>275<br>279 | | 98<br>98<br>98 | 29407 | TR | <.01 | .002 | |

FORM 130-L.S.D. 2

GRID _____

CANEX AERIAL EXPLORATION LTD.

HOLE No. 3
SHEET No. 2 of 2

| ROCK TYPES & ALTERATION | | | | | | | Last Core Break ∠ to Core Foliation | GRAPHIC LOG | | | Veins ∠ to Core Axis | Width of Vein | Mineralization | Sericite Zone | Remarks | Footage Blocks. | Composites | Estimated Core Recovery % | ASSAY RESULTS | | | | Estimated Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | Sample Number | | % | | |
| Qtz. | Plag. | K-Spar. | Mafic | Texture | Hardness | | | Foliation Alteration | Footage | Structure | | | | | | | | | ~~Cu~~ | ~~Mo~~ Au | ~~Cu~~ WO3 | $MoS_2$ | |
| 25% | 35% | 30% | 15% | fine grained equigranular | 5-6 (Knife) | Quartz Monzonite | .03(?) | | 280 | | 70°<br>60°<br>50°<br>75°<br>60°<br>80°<br>70°<br>60°<br>70° | .01<br>.2"<br>.5"<br>1.6"<br>0.5"<br>± 5"<br>3.0"<br>0.1"<br>0.7"<br>0.02" | Moly fracture fill<br>qtz ∫ <1% Moly<br>" " 1% moly<br>Moly fracture fill<br>qtz 2% Moly (fracture fill)<br>qtz<br>" ∫ 1% Moly<br>Moly fracture fill | Sericite, kaolin, [illegible] | highly fractured through [illegible] | 288<br>293 | | 98<br>98 | 29408 | TR | .01 | .002 | |
| | | | | —"— | | | .01 | | 300 | | 60°<br>60°<br>70°<br>75°<br>?<br>60°<br>60°<br>?<br>50°<br>45°<br>50°<br>20° | 0.5<br>3.0"<br>1.3"<br>0.3"<br>~1.5"<br>1.0"<br>1.75"<br>1.20"<br>0.25<br>1.3<br>0.35<br>0.05 | qtz<br>qtz ∫ 2% moly fracture fill<br>qtz<br>qtz<br>qtz ∫ 1% Moly<br>qtz ∫ 2% Moly<br>qtz<br>qtz ∫ 1% Moly<br>qtz<br>Moly fracture fill, Pyrite | ~0.1" kaolin silicate [illegible] | qtz vein shows evidence of stress | 296<br>300 | | 98<br>90 | 29409 | .005 | <.01 | .002 | |
| | | | | | | | trace | | 310 | | 90°<br>50°<br>31°<br>80° | 0.1"<br>0.4"<br>0.7"<br>~2" | qtz<br>qtz ∫ <1% Moly<br>qtz ∫ <1% Moly | | evidence of [illegible]<br>Highly indurated<br>Possible Moly (groundmass) on fractured 80° to core. | 301<br>306 | | 98<br>99 | 29410 | TR | <.01 | .002 | |
| | | | | | | | trace | | 320 | | 55°<br>75° | 0.8"<br>0.2" | qtz ∫ 1% Moly.<br>qtz. | | | 312<br>317 | | 97<br>99 | 29411 | TR | <.01 | .002 | |
| | | | 20% | K.f. gr. | 10 | Siliceous Quartzite | trace | 35° | 330 | | | | | | hot contact.<br>Fracture 35° to core<br>Possible .05" Moly(?)<br>highly indurated | 322<br>326<br>327.6 | | 95<br>95<br>95 | 29412 | TR | .06 | TR | |
| | | | 90% | K.f.g. | 6 | Hornfels (argillitic) | trace | | 340 | | 30° | 0.2 | qtz ∫ 1% pyrite | | 8" intrusive in fracture | 331<br>333<br>336<br>340 | | 95<br>98<br>99<br>99 | 29413 | TR | .01 | TR | |
| | | | | | | | trace | | 350 | | 30°<br>90° | 2.5"<br>0.5" | qtz<br>qtz ∫ 2.5% Moly | | | 345<br>347 | | 95<br>90 | 29414 | TR | <.01 | TR | |
| | | | | | | END OF HOLE | | | | | | | | | E.O.H. | | | | | | | | | |

FORM 130-L&D. 2

EVIATION :  57.9023

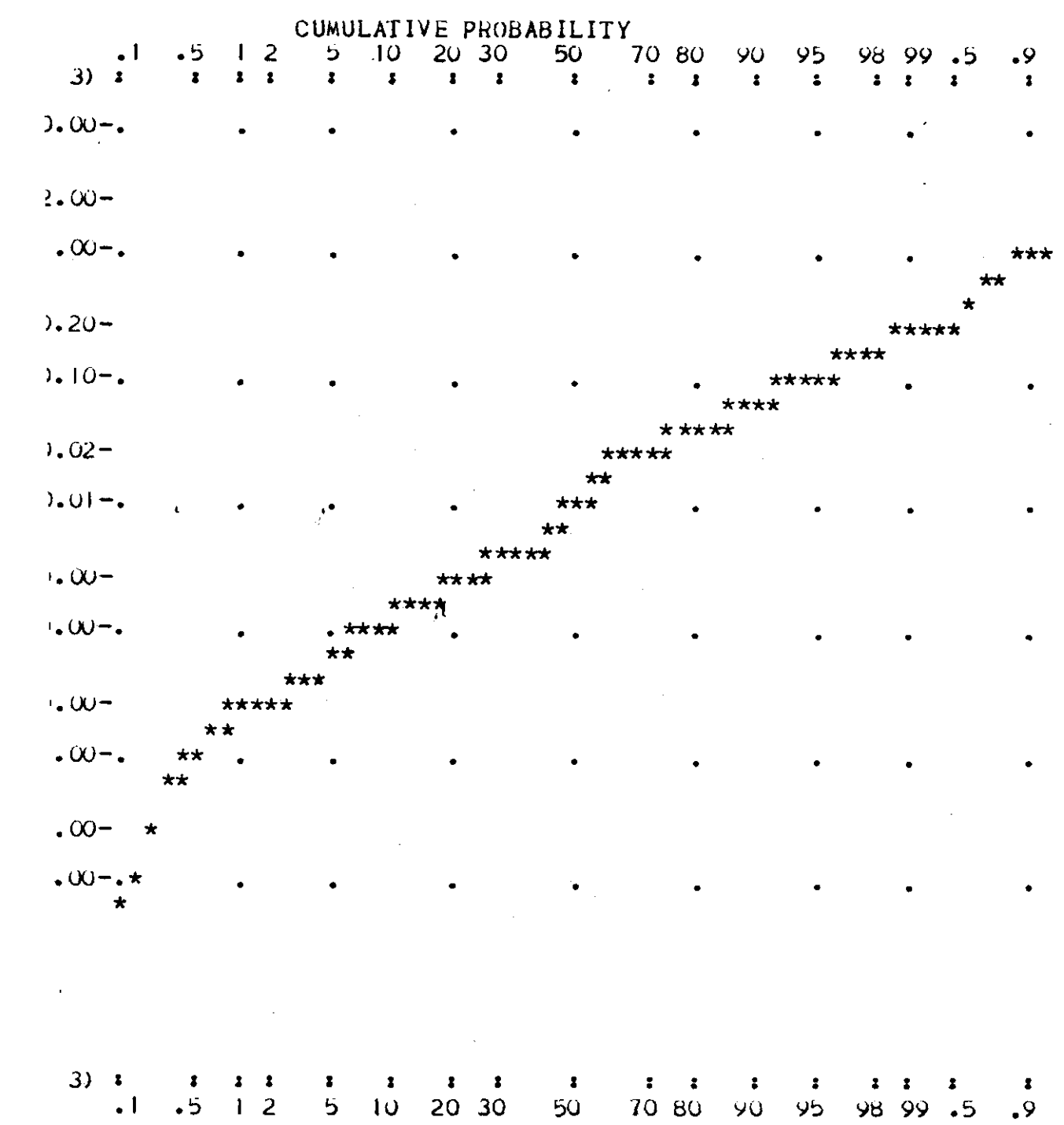
*LOG NORMAL**

SQUARE PARAMETER ESTIMATES FOR WPPM
MEAN  :  9.7162207E-01
STD DEV :  7.1249814E-01

NTILE ESTIMATES
PCTILE

0.20596
0.63010
1.1439
2.3555
9.3075
37.253
76.710
139.26
426.04

LOG NORMAL**



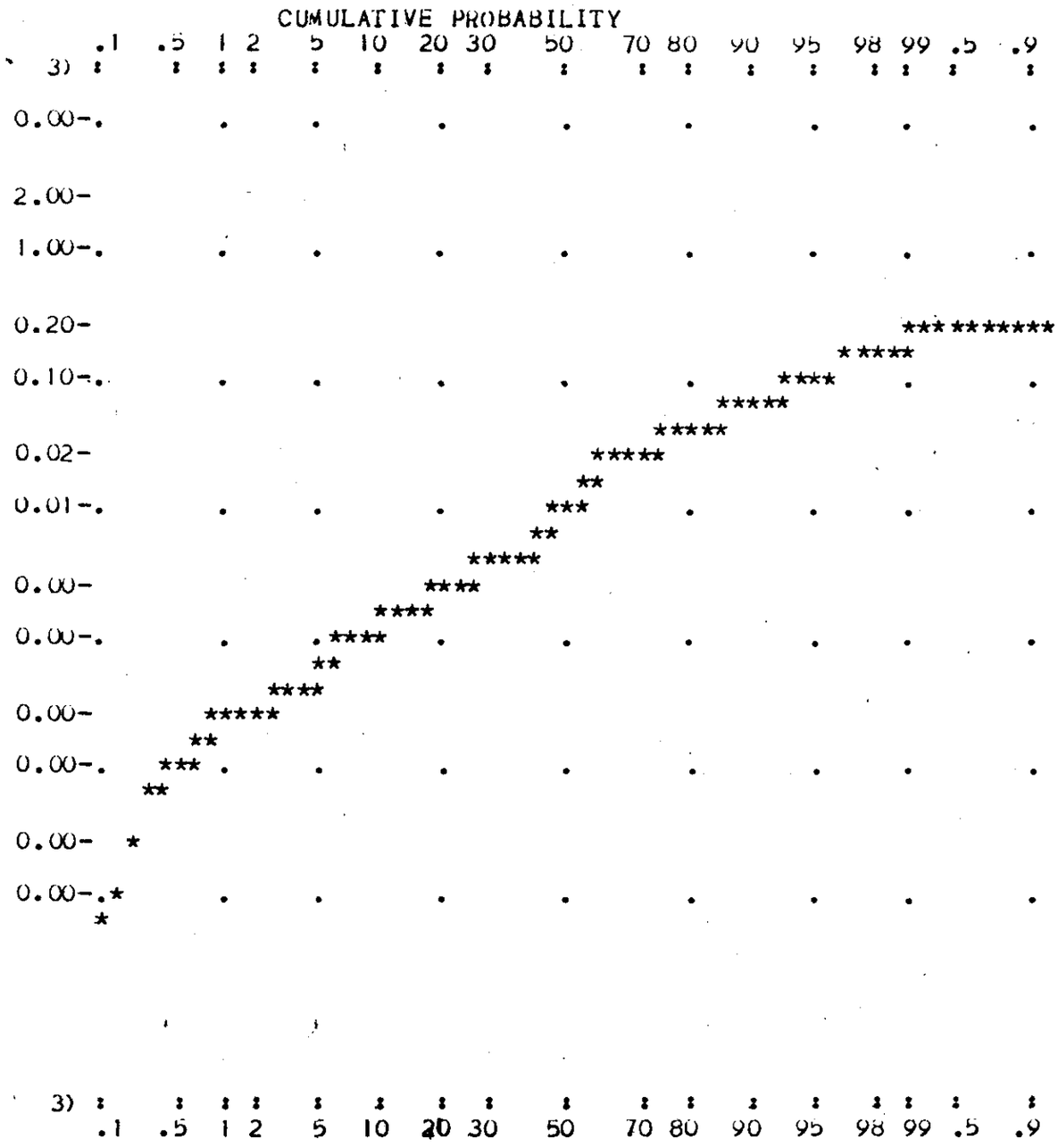

PPM=_>300;EXCLUDE (WPPM)

) MEAN : 9.6350077E-01
) STD DEV : 7.0238290E-01

ENTILE ESTIMATES
PCTILE

0.21341
0.64259
1.1567
2.3576
9.1939
35.853
73.074
131.54
396.09

*LOG NORMAL**




NORMAL (WPPM)

E SUMMARY STATISTICS FOR WPPM

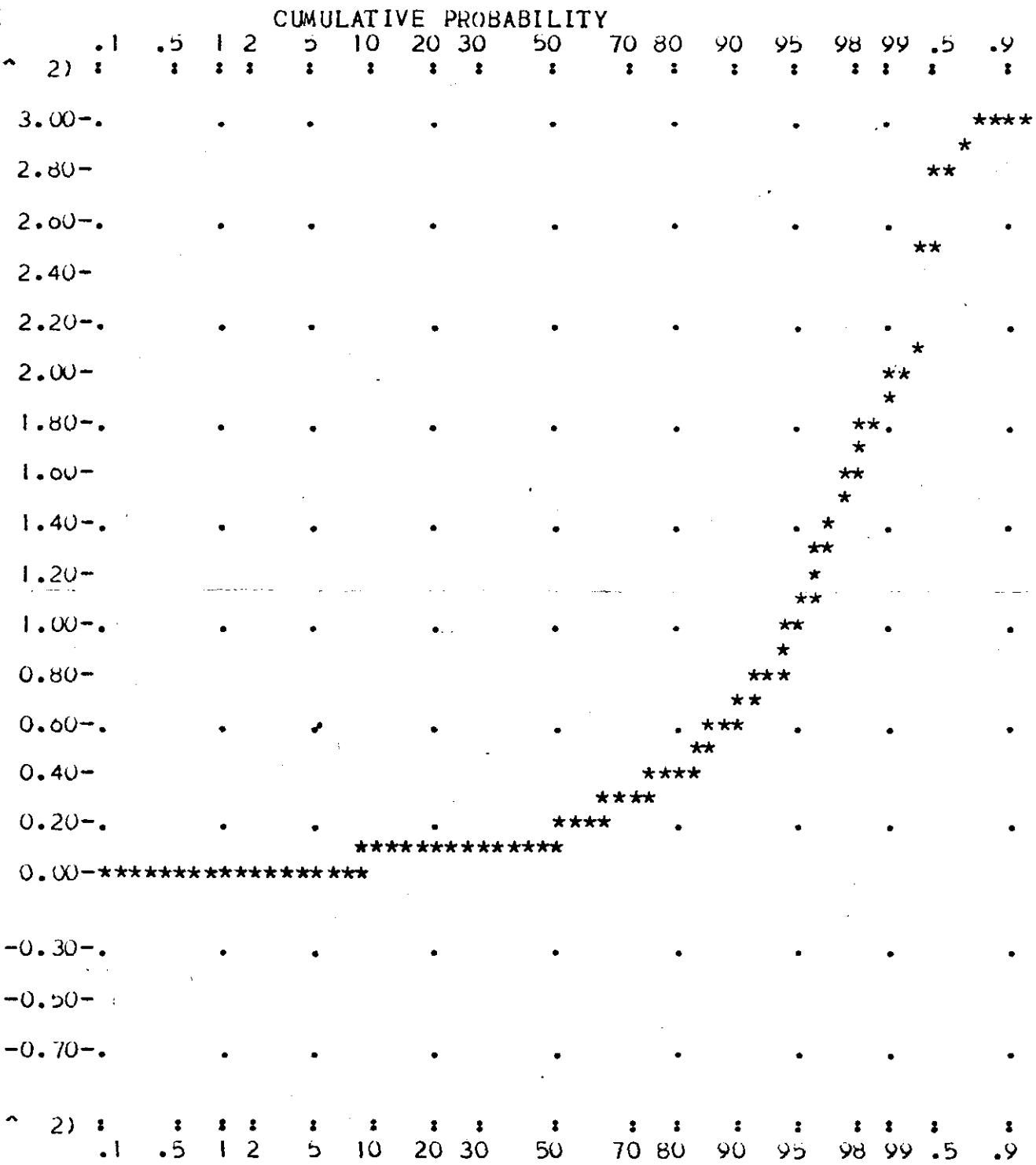
F OBSERVATIONS : 1544
GE : 26.4112
EVIATION : 40.6610

DEV =  3.2470755E+01

ENTILE ESTIMATES
PCTILE

-49.178
-27.046
-15.244
-0.94782
26.375
53.698
67.994
79.796
101.93

*NORMAL**




Y
D (#4, SNPPM._, #1) FROM SFILE BY CASE

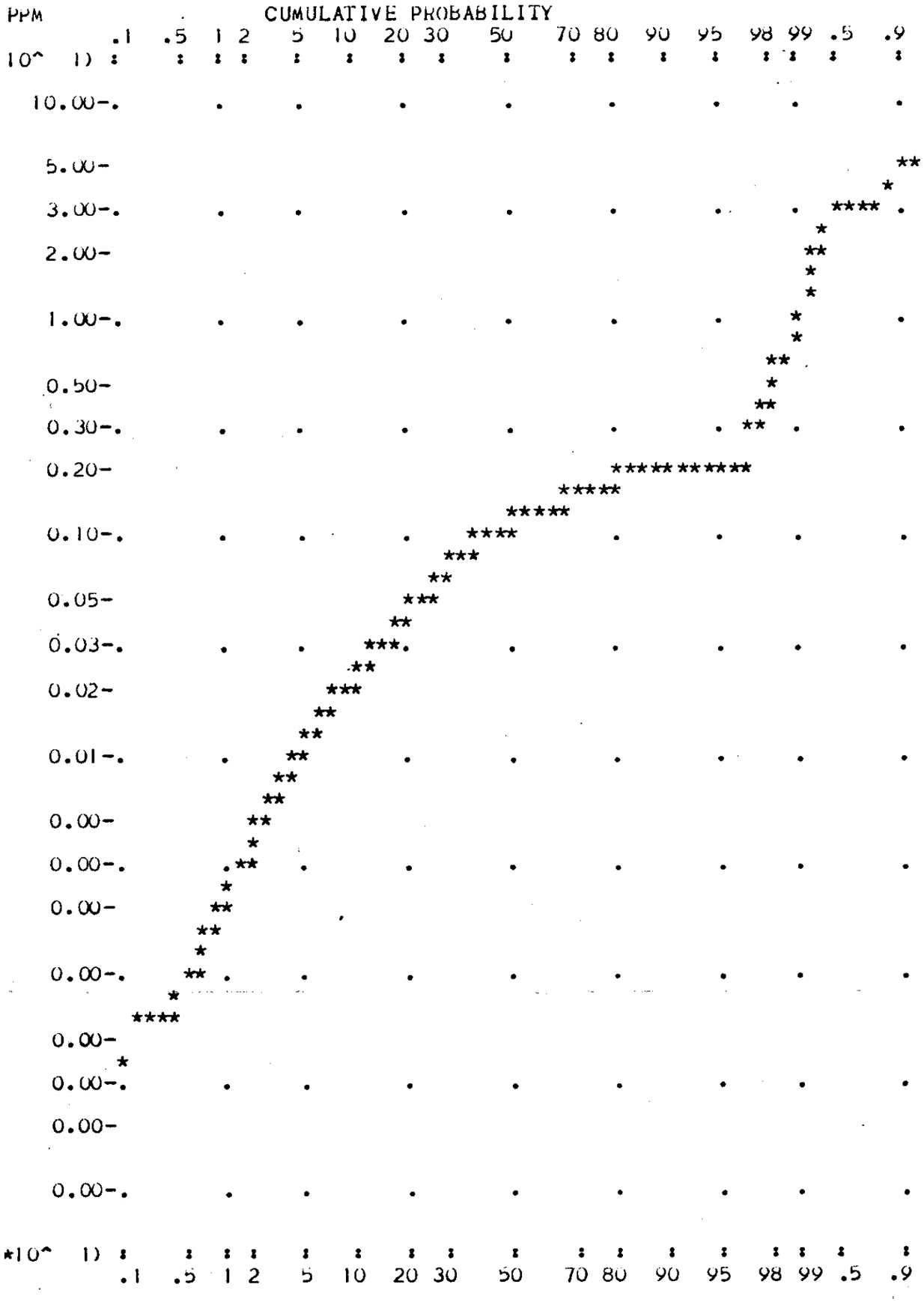
3 CASES READ.

Y
 SNPPM=0;EXCLUDE (SNPPM)

Y
TUS

```
1.      PCTILE

1 0.82597E-01
5       0.16317
0       0.23459
0       0.36416
0       0.84395
0        1.9559
0        3.0362
5        4.3652
9        8.6233
```

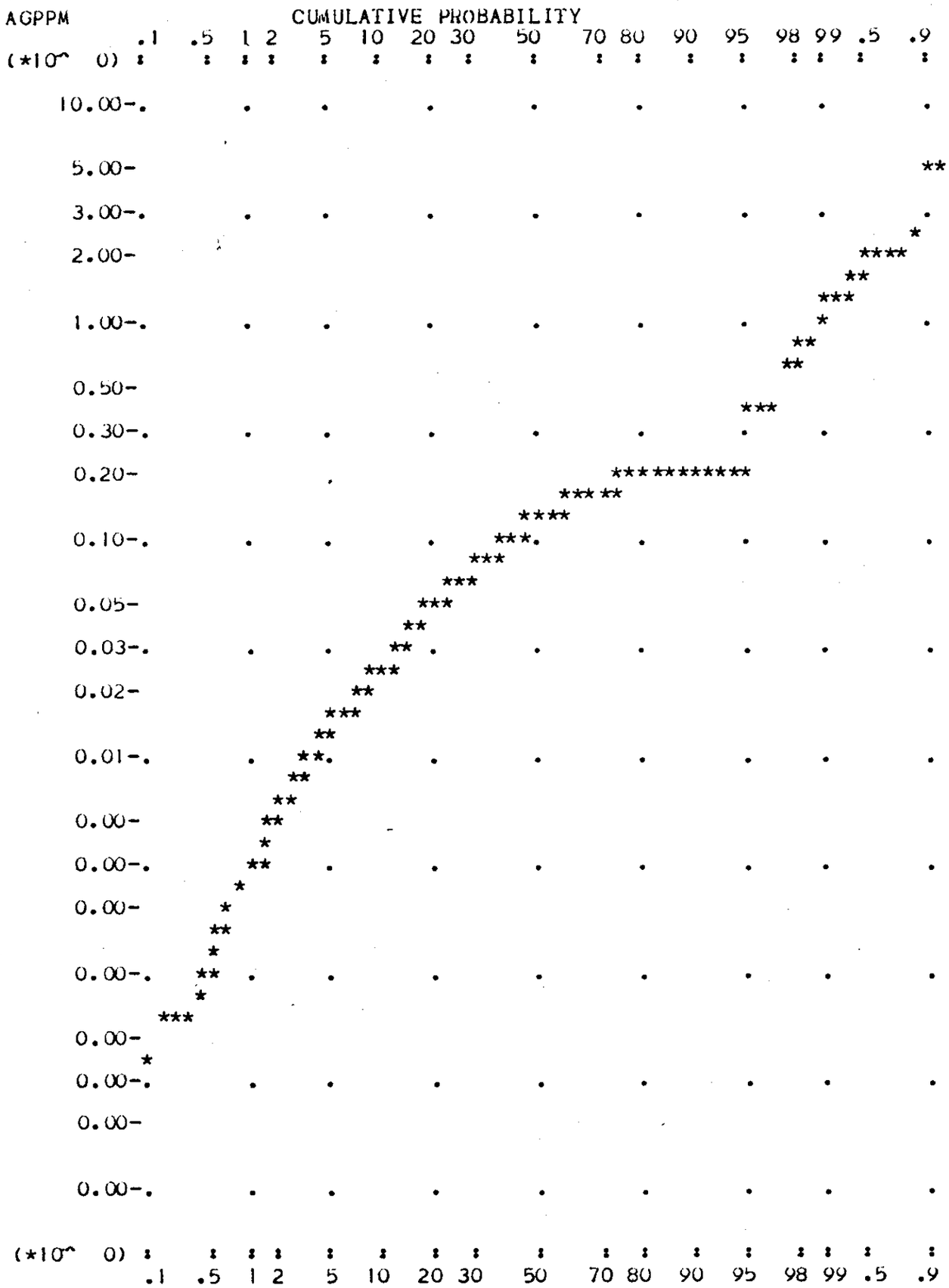
**LOG NORMAL**




```
EADY
REAAD (#3, AUPPB, #2) FROM SFILE BY CASE
```

| | |
|---|---|
| 80 | 0.21472 |
| 90 | 0.33270 |
| 95 | 0.47761 |
| 99 | 0.94081 |

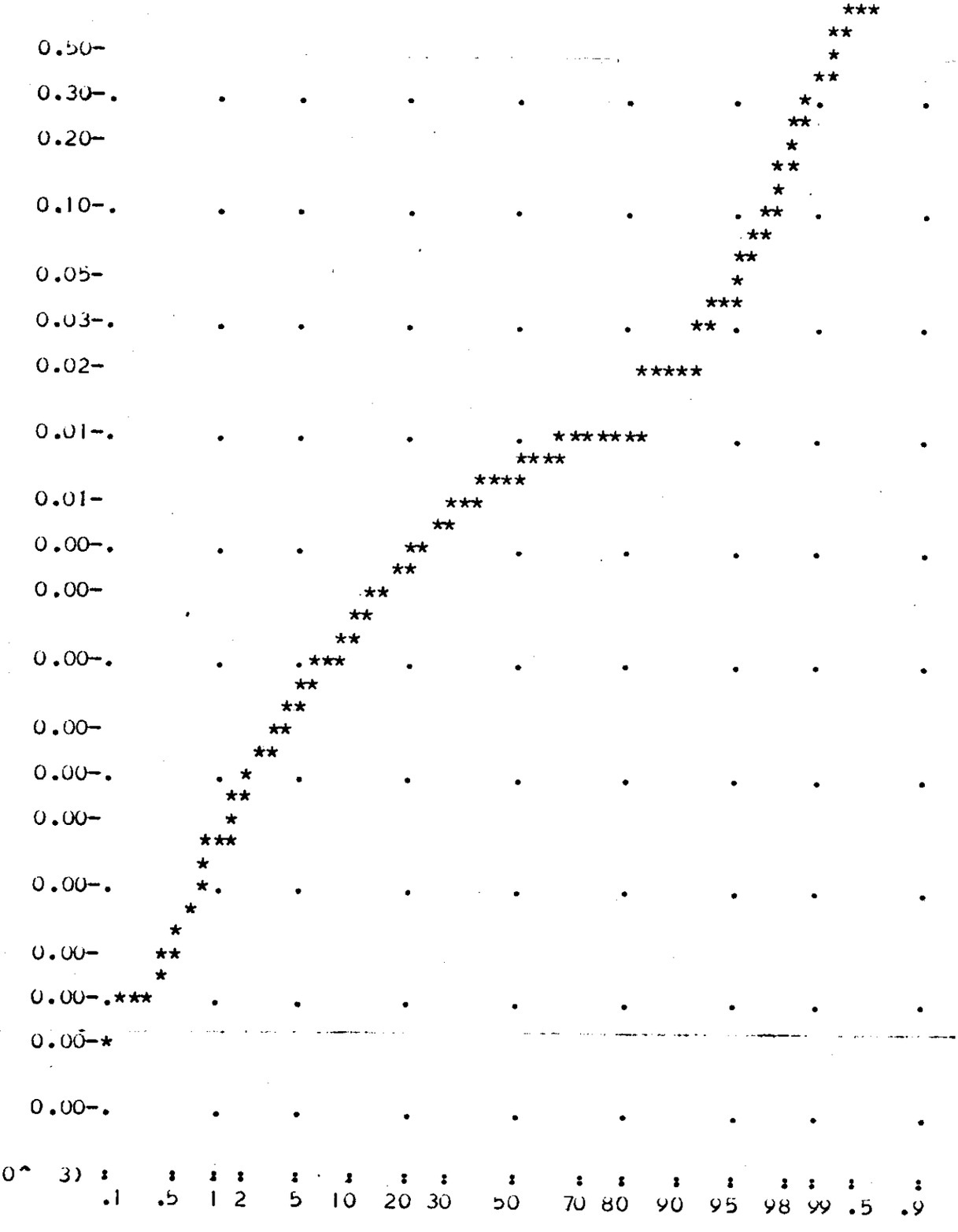
**LOG NORMAL**




READY
?STOP

USED 1044.96 UNITS
OLD SFILE

READY
ISTNH
8310 A0002 S 0.2 -10 1 2




```
READY
?STOP

USED   615.33 UNITS
EDI EXT DGSAMP.4,;(HFILE,);100-380,870-1470,23840

OUTPUT FILE CREATED

READY
LIST HFILE

HFILE          17:47 EST      12/08/78

100  C0136  C  4.0  36337   550        12053
110  C0137  C  3.2  5279
READY
PUR SGSAMP.4;SGSAMP
READY
PUR DGSAMP;DGSAMP.4
DGSAMP   - FILE NOT SAVED
READY
PUR DGSAMP.1

READY
```

?PLOT LOGNORMAL (WPPM)

SAMPLE SUMMARY STATISTICS FOR WPPM

| | | |
|---|---|---|
| F OBSERVATIONS | : | 253 |
| AVERAGE | : | 363.488 |
| STD DEVIATION | : | 991.630 |

**LOG NORMAL**

LEAST SQUARE PARAMETER ESTIMATES FOR WPPM

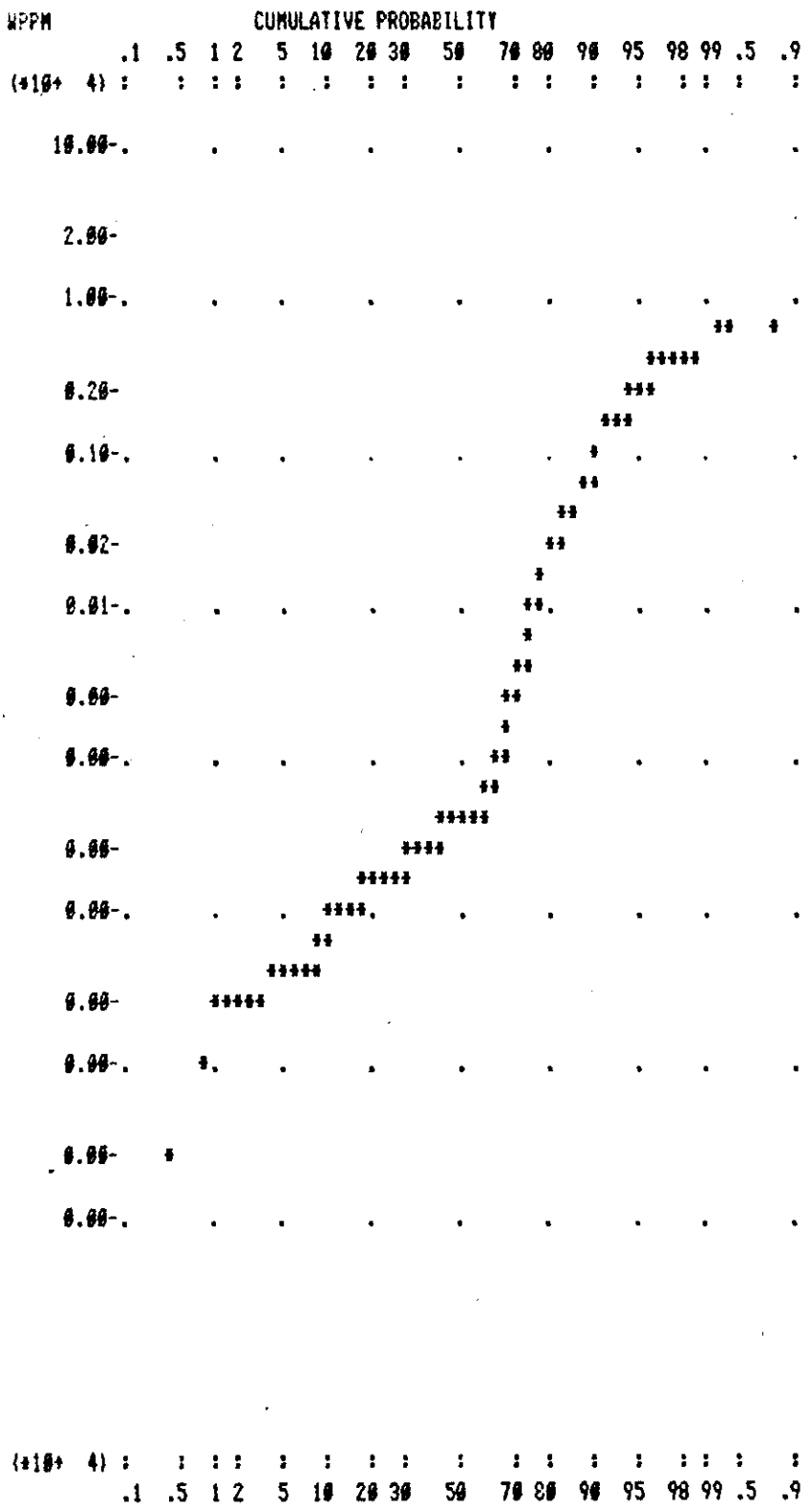
| | | | |
|---|---|---|---|
| LOG10 MEAN | : | 1.052697@E+@@ | 11.287 |
| LOG10 STD DEV | : | 1.162223@E+@@ | 14.527 |

PERCENTILE ESTIMATES

| PCT. | PCTILE |
|---|---|
| 1 | @.22308E-@1 |
| 5 | @.13823 |
| 10 | @.36563 |
| 20 | 1.1878 |
| 50 | 11.290 |
| 80 | 107.31 |
| 90 | 348.62 |
| 95 | 922.15 |
| 99 | 5714.@ |

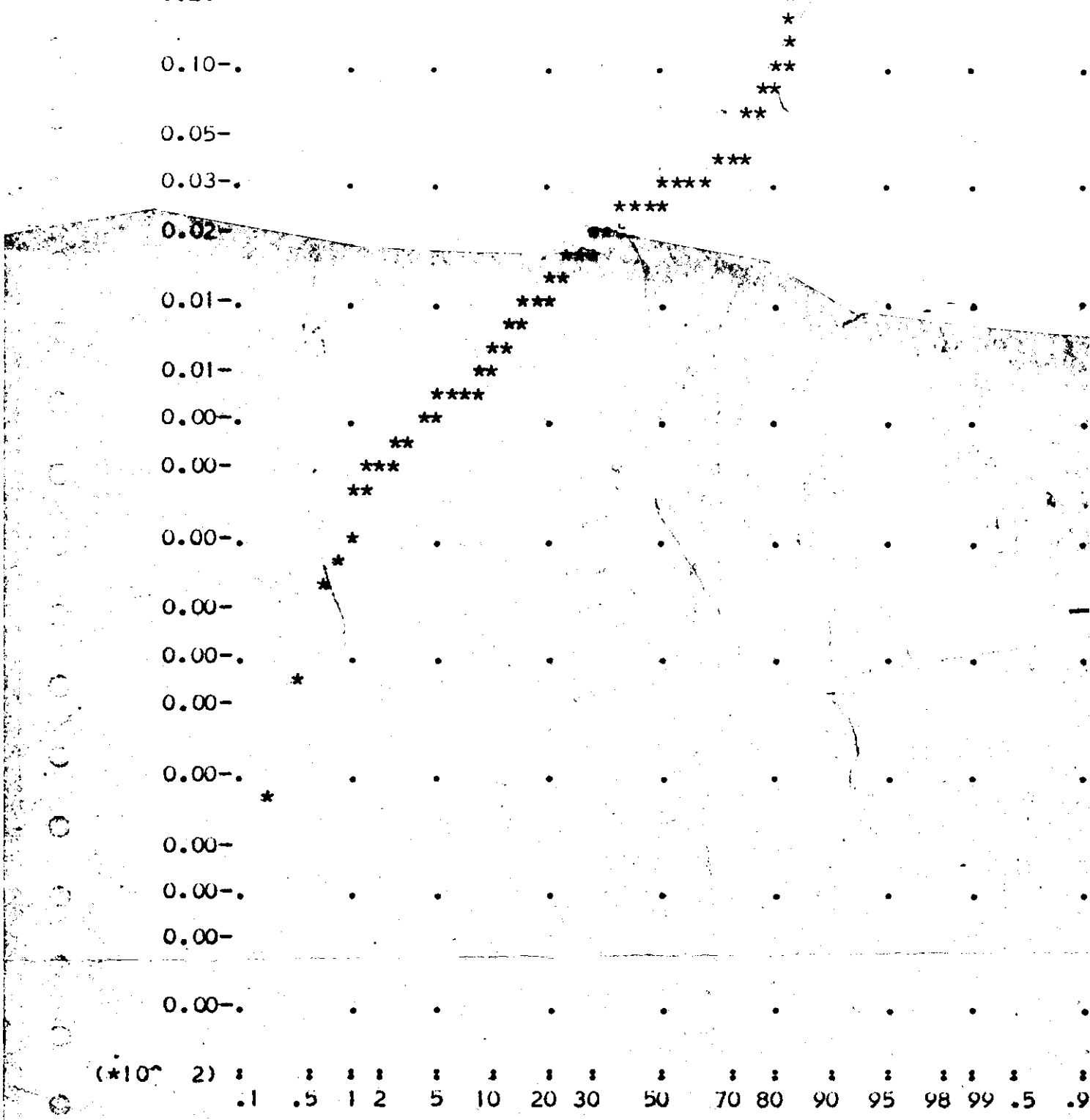
Rock + Float
Rock Sample

**LOG NORMAL**



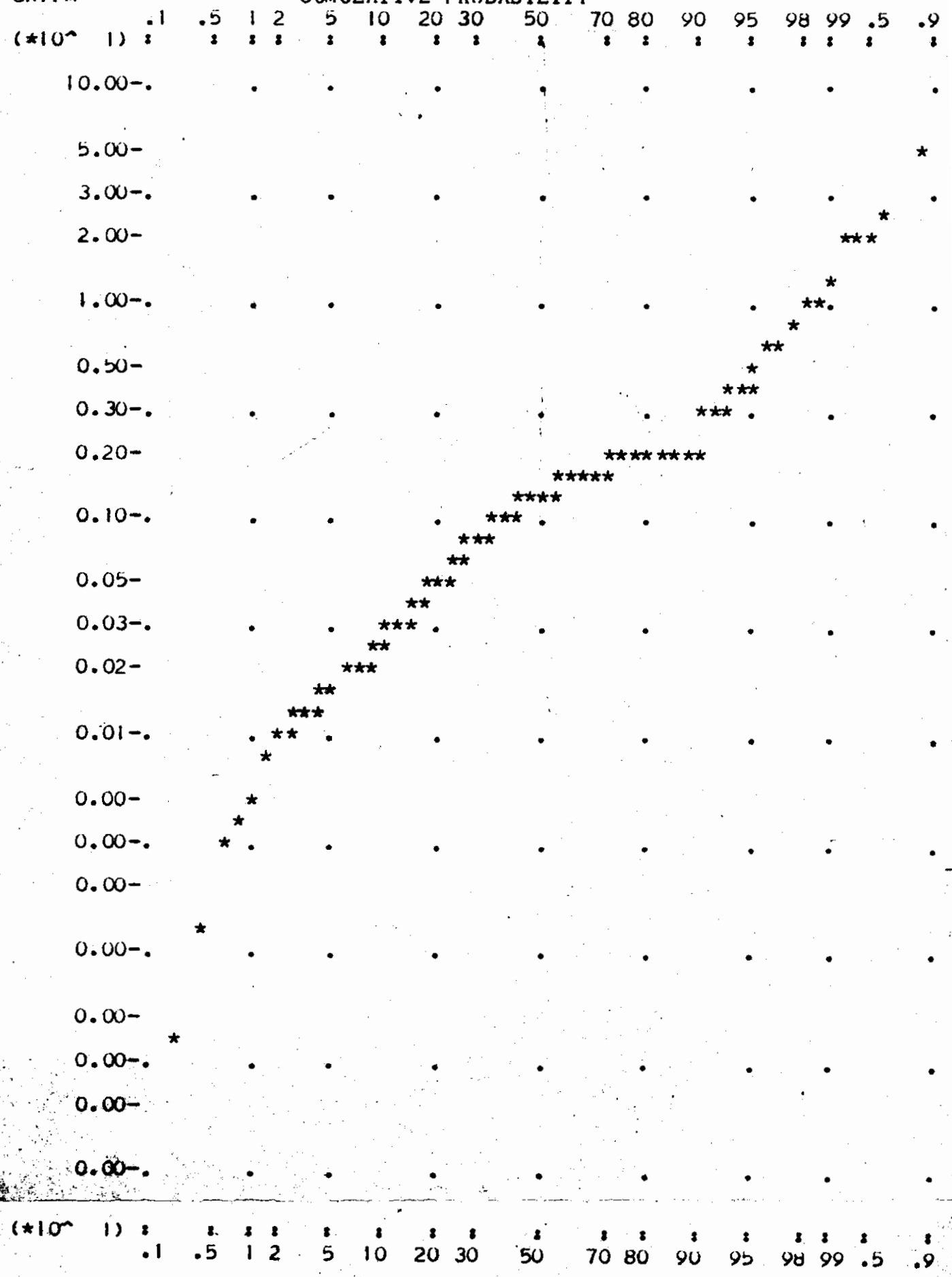

READY
?BYE

ILLEGAL COMMAND: "BYE"




```
READY
?STOP

USED   104.87 UNITS
/STATII***

READY
?READ (#4, SNPPM,_,#1) FROM LFILE BYCASE____ CASE

  466 CASES READ.

READY
?FOR SNPPM=0; EXCLUDE (SNPPM)
```

**LOG NORMAL**

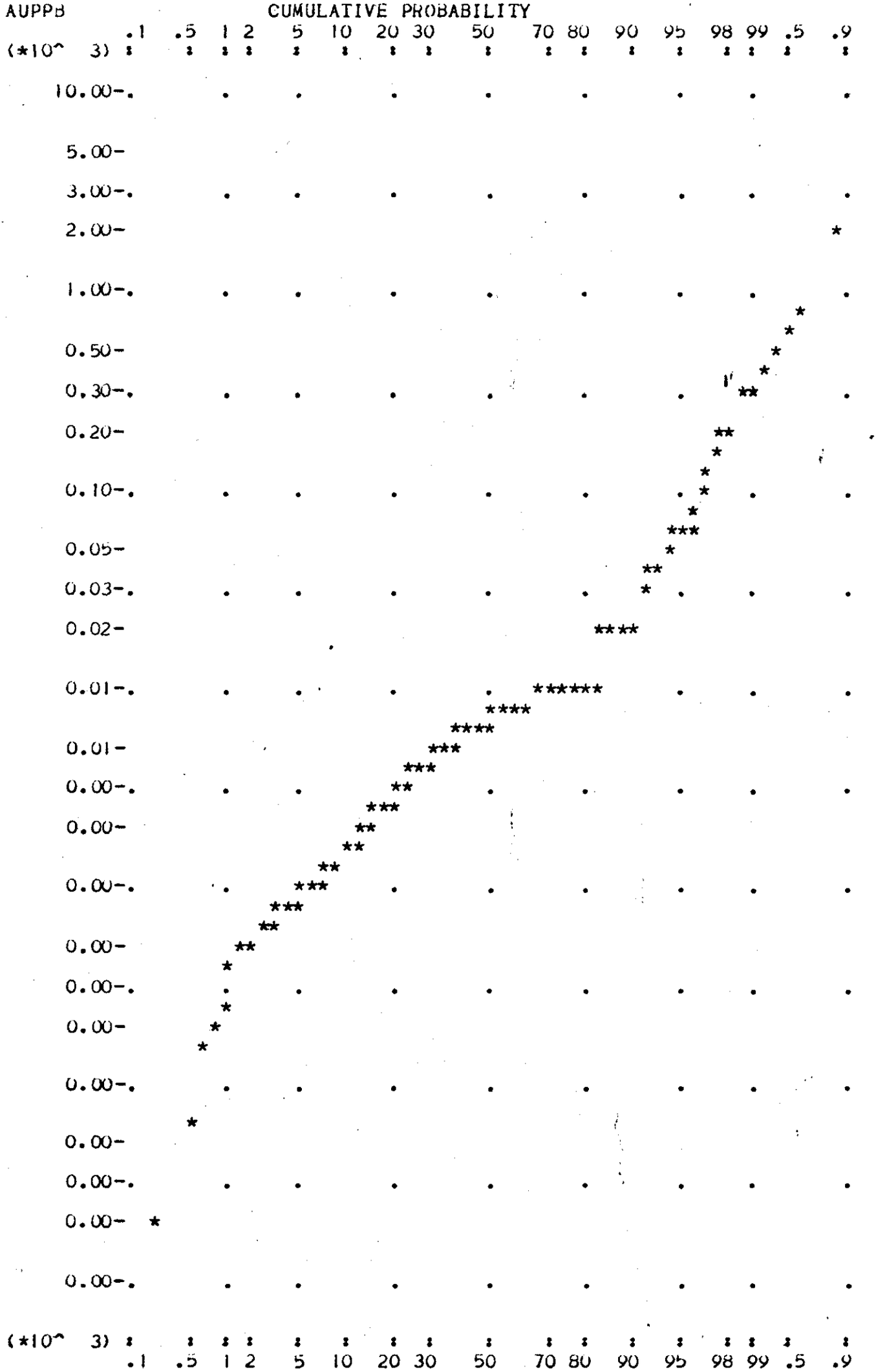



READY
?READ (#3, AUPPB, #2)FROM LFILE BYC_ CASE

95 52.517
99 123.17

Dublen Gulch
Stream
Sediments

**LOG NORMAL**

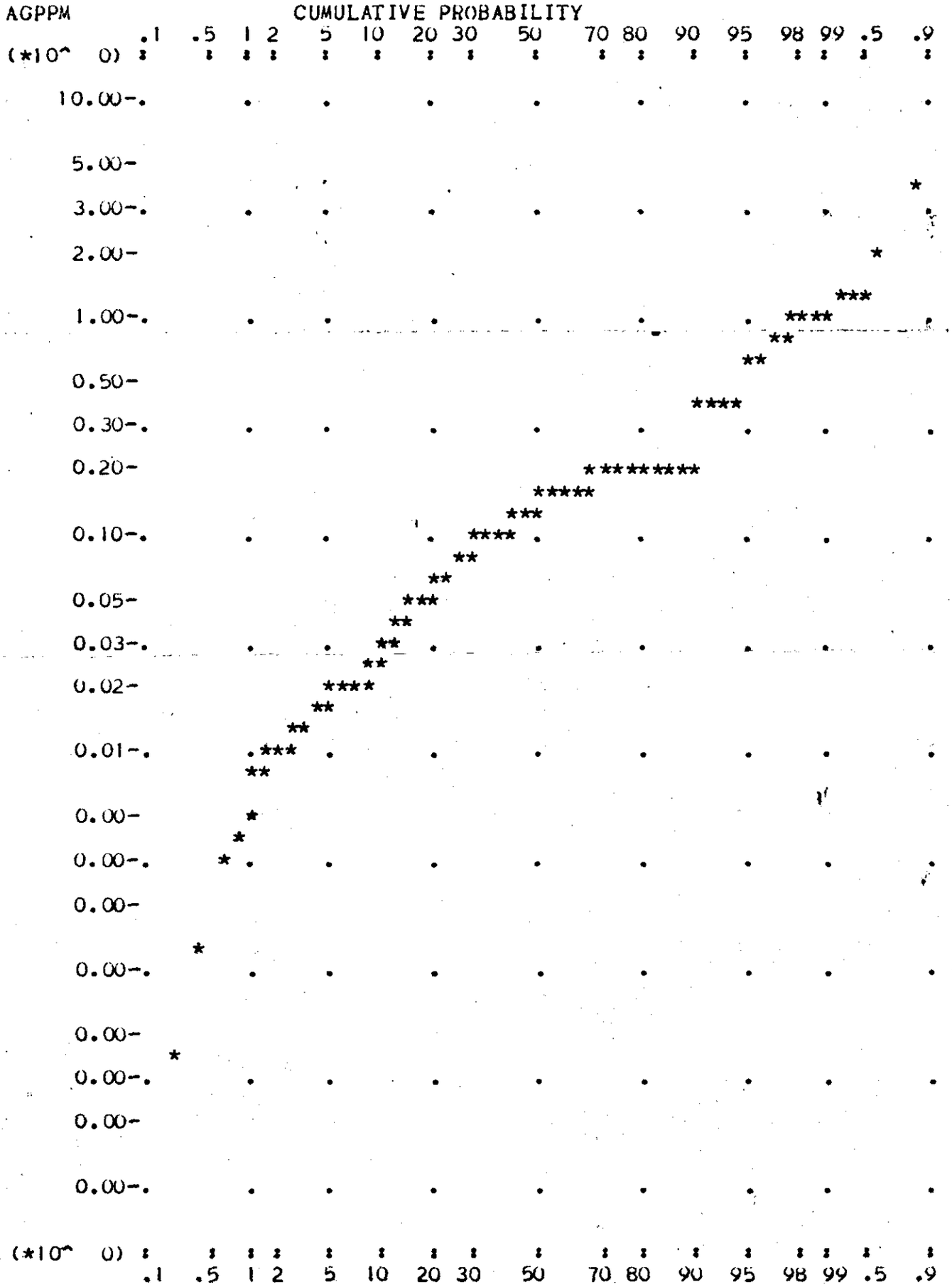



READY
?READ (#2, AGPPM, #3) FROM LFILE BY CASE

| | |
|---|---|
| 1 | 0.10688E-01 |
| 5 | 0.21281E-01 |
| 10 | 0.30724E-01 |
| 20 | 0.47937E-01 |
| 50 | 0.11218 |
| 80 | 0.26250 |
| 90 | 0.40956 |
| 95 | 0.59131 |
| 99 | 1.1773 |

Dublin Gulch
Stream
Sediments

**LOG NORMAL**




READY
?STOP

| | | | | | | |
|---|---|---|---|---|---|---|
| 940 | L0084 | G | 0.1 | -10 | 1 | 2456 |
| 950 | L0085 | G | 0.1 | -10 | 2 | 5471 |
| 960 | L0124 | G | 13. | 260 | 0 | 0 |
| 970 | L0126 | G | 37.7 | 36749 | 0 | 0 |
| 980 | L0131 | G | .0 | 0 | 0 | 0 |
| 990 | L0132 | G | 5.2 | 540 | 0 | 0 |
| 1000 | P0013 | G | .0 | -10 | 0 | 1903 |
| 1010 | B0193 | H | .0 | 0 | 0 | 5313 |
| 1020 | B0196 | H | 0.3 | 0 | 0 | 793 |
| 1030 | B0213 | H | .0 | 0 | 0 | 714 |
| 1040 | L0151 | H | 0.2 | -10 | 0 | 476 |
| 1050 | L0152 | H | 0.1 | -10 | 0 | 238 |
| 1060 | L0153 | H | 0.1 | -10 | 0 | 396 |
| 1070 | L0154 | H | 0.2 | 10 | 0 | 396 |
| 1080 | L0155 | H | 0.1 | 10 | 0 | 555 |
| 1090 | L0156 | H | 0.1 | -10 | 0 | 872 |
| 1100 | L0157 | H | 0.1 | -10 | 0 | 872 |
| 1110 | L0158 | H | 0.1 | -10 | 0 | 476 |
| 1120 | L0159 | H | 0.1 | -10 | 0 | 238 |
| 1130 | L0160 | H | 0.1 | -10 | 0 | 1110 |
| 1140 | L0161 | H | 0.1 | -10 | 0 | 1031 |
| 1150 | L0162 | H | 0.1 | -10 | 0 | 396 |
| 1160 | L0163 | H | 0.1 | -10 | 0 | 952 |
| 1170 | L0164 | H | 0.1 | 40 | 0 | 317 |
| 1180 | L0165 | H | 0.1 | -10 | 0 | 1110 |
| 1190 | L0166 | H | 0.1 | -10 | 0 | 952 |
| 1200 | L0167 | H | 0.1 | -10 | 0 | 476 |
| 1210 | L0168 | H | 0.1 | -10 | 0 | 555 |
| 1220 | L0169 | H | 0.1 | -10 | 0 | 1427 |
| 1230 | L0170 | H | 0.2 | -10 | 0 | 1269 |
| 1240 | L0171 | H | 0.1 | -10 | 0 | 0 |
| 1250 | L0172 | H | 0.1 | -10 | 0 | 159 |
| 1260 | L0173 | H | 0.1 | -10 | 0 | 238 |
| 1270 | L0174 | H | 0.1 | -10 | 0 | 634 |
| 1280 | L0175 | H | 0.2 | -10 | 0 | 238 |
| 1290 | L0176 | H | 0.1 | -10 | 0 | 396 |
| 1300 | L0177 | H | 0.2 | 10 | 0 | 317 |
| 1310 | L0178 | H | 0.1 | -10 | 0 | 634 |
| 1320 | L0179 | H | 0.1 | -10 | 0 | 872 |
| 1330 | L0180 | H | 0.1 | -10 | 0 | 714 |
| 1340 | L0181 | H | 0.1 | 10 | 0 | 1427 |
| 1350 | L0182 | H | 0.2 | -10 | 0 | 1269 |
| 1360 | L0183 | H | 0.1 | -10 | 0 | 634 |
| 1370 | L0184 | H | 0.1 | 10 | 0 | 1189 |
| 1380 | L0185 | H | 0.1 | 10 | 0 | 1031 |
| 1390 | L0186 | H | 0.1 | -10 | 0 | 159 |
| 1400 | L0187 | H | 0.1 | -10 | 0 | 238 |
| 1410 | L0188 | H | 0.1 | -10 | 0 | 317 |
| 1420 | L0189 | H | 0.1 | -10 | 0 | 79 |
| 1430 | L0190 | H | 0.1 | -10 | 0 | 79 |
| 1440 | L0191 | H | 0.1 | -10 | 0 | 2300 |
| 1450 | L0192 | H | 0.1 | -10 | 0 | 159 |
| 1460 | L0193 | H | 0.1 | -10 | 0 | 634 |
| 1470 | L0194 | H | 0.1 | -10 | 0 | 555 |
| 23840 | C0143 | V | 1.2 | 22694 | 32 | 2617 |

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|---|---|---|---|---|---|---|
| 6160 | L0038 | F | 0.1 | -10 | 0 | 5154 |
| 6170 | L0125 | F | 4.2 | 4800 | 0 | 0 |
| 6180 | L0133 | F | 0.2 | 40 | 0 | 324 |
| 6190 | L0134 | F | 0.4 | 40 | 0 | 750 |
| 6200 | L0135 | F | 0.2 | -10 | 0 | 2 |
| 6210 | L0136 | F | 0.2 | 280 | 0 | 2775 |
| 6220 | L0137 | F | 0.1 | 100 | 0 | 4520 |
| 6230 | L0138 | F | 0.4 | 1260 | 0 | 5630 |
| 6240 | L0139 | F | 0.2 | -10 | 0 | 35 |
| 6250 | L0140 | F | 0.4 | 40 | 0 | 600 |
| 6260 | L0141 | F | 20 | 10000 | 0 | 0 |
| 6140 | A0001 | R | 0.1 | -10 | 1 | 2 |
| 6150 | A0003 | R | 0.1 | 10 | 1 | 2 |
| 6160 | A0005 | R | 0.1 | -10 | 1 | 2 |
| 6170 | A0013 | R | 0.1 | -10 | 1 | 2 |
| 6180 | A0015 | R | 0.1 | 10 | 1 | 2 |
| 6190 | A0028 | R | 0.1 | -10 | 1 | 2 |
| 6200 | A0037 | R | 0.1 | 10 | 1 | 2 |
| 6210 | A0038 | R | 0.1 | -10 | 1 | 2 |
| 6220 | A0039 | R | 0.1 | -10 | 1 | 2 |
| 6230 | A0040 | R | 0.2 | -10 | 3 | 4282 |
| 6240 | A0041 | R | 0.8 | -10 | 1 | 2 |
| 6250 | A0042 | R | 0.1 | -10 | 2 | 2 |
| 6260 | A0043 | R | 0.1 | -10 | 1 | 2 |
| 6270 | A0044 | R | 0.1 | 10 | 1 | 2 |
| 6280 | A0045 | R | 0.2 | 10 | 1 | 25 |
| 6290 | A0046 | R | 0.1 | -10 | 1 | 2 |
| 6300 | A0047 | R | 0.1 | -10 | 1 | 2 |
| 6310 | A0058 | R | 0.1 | -10 | 1 | 2 |
| 6320 | A0060 | R | 0.2 | -10 | 1 | 2 |
| 6330 | A0064 | R | 0.4 | -10 | 1 | 8 |
| 6340 | A0068 | R | 0.2 | -10 | 2 | 4 |
| 6350 | A0096 | R | .0 | 0 | 0 | 0 |
| 6360 | A0265 | R | 0.1 | -10 | 1 | 330 |
| 6370 | A0266 | R | 0.1 | -10 | 1 | 2379 |
| 6380 | A0267 | R | 0.1 | -10 | 1 | 1427 |
| 6390 | A0268 | R | 0.1 | -10 | 1 | 1269 |
| 6400 | A0269 | R | 0.1 | -10 | 2 | 1586 |
| 6410 | A0270 | R | 0.1 | -10 | 1 | 1507 |
| 6420 | A0271 | R | 0.1 | -10 | 1 | 800 |
| 6430 | A0272 | R | 0.1 | -10 | 1 | 3013 |
| 6440 | A0273 | R | 0.1 | -10 | 1 | 1189 |
| 6450 | A0274 | R | 0.1 | -10 | 1 | 400 |
| 6460 | A0277 | R | 0.1 | -10 | 1 | 150 |
| 6470 | A0278 | R | 0.1 | -10 | 1 | 40 |
| 6480 | A0279 | R | 0.1 | -10 | 1 | 45 |
| 6490 | A0280 | R | 0.1 | -10 | 1 | 500 |
| 6500 | A0281 | R | 0.1 | -10 | 1 | 450 |
| 6510 | A0282 | R | 0.1 | -10 | 1 | 2141 |
| 6520 | A0283 | R | 0.1 | -10 | 1 | 55 |
| 6530 | A0284 | R | 0.1 | -10 | 1 | 375 |
| 6540 | A0285 | R | 0.1 | -10 | 1 | 1745 |
| 6550 | A0286 | R | 0.1 | -10 | 1 | 3727 |
| 6560 | A0287 | R | 0.1 | -10 | 1 | 2379 |
| 6570 | A0288 | R | 0.1 | -10 | 1 | 650 |
| 6580 | A0289 | R | 0.1 | -10 | 1 | 375 |
| 6590 | A0291 | R | 0.1 | 20 | 1 | 310 |
| 6600 | A0307 | R | 0.2 | -10 | 10 | 375 |
| 6610 | A0308 | R | 0.1 | -10 | 1 | 6 |
| 6620 | A0309 | R | 0.4 | -10 | 24 | 8 |
| 6630 | A0310 | R | 0.1 | -10 | 10 | 2 |
| 6640 | A0311 | R | 0.2 | -10 | 2 | 2 |

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|---|---|---|---|---|---|---|
| 1020 | 30037 | R | 0.1 | 20 | 1 | 2 |
| 1030 | 30039 | R | 0.1 | 10 | 1 | 2 |
| 1040 | 30047 | R | 0.2 | -10 | 2 | 2 |
| 1050 | 30048 | R | 0.1 | -10 | 1 | 6 |
| 1060 | 30054 | R | 0.1 | -10 | 1 | 2 |
| 1070 | 30060 | R | 0.1 | -10 | 1 | 18 |
| 1080 | 30066 | R | 0.1 | -10 | 1 | 2 |
| 1090 | 30071 | R | 0.1 | -10 | 1 | 2 |
| 1100 | 30075 | R | 0.1 | -10 | 1 | 2 |
| 1110 | 30077 | R | 0.1 | -10 | 1 | 29 |
| 1120 | 30078 | R | 0.1 | -10 | 1 | 4 |
| 1130 | 30080 | R | 0.1 | 80 | 1 | 250 |
| 1140 | 30084 | R | 0.1 | 10 | 2 | 2 |
| 1150 | 30092 | R | 0.1 | -10 | 1 | 2 |
| 1160 | 30094 | R | 0.1 | -10 | 1 | 2 |
| 1170 | 30107 | R | 0.1 | 10 | 1 | 2 |
| 1180 | 30111 | R | 0.1 | 20 | 1 | 2 |
| 1190 | 30112 | R | 0.1 | -10 | 2 | 2 |
| 1200 | 30113 | R | 0.1 | -10 | 1 | 2 |
| 1210 | 30114 | R | 0.1 | -10 | 1 | 2 |
| 1220 | 30117 | R | 0.1 | 10 | 2 | 2 |
| 1230 | 30119 | R | 0.1 | 10 | 1 | 2 |
| 1240 | 30123 | R | 0.1 | -10 | 2 | 2 |
| 1250 | 30148 | R | 1.2 | -10 | 2 | 2 |
| 1260 | 30149 | R | 0.1 | -10 | 2 | 2 |
| 1270 | 30150 | R | 0.1 | -10 | 1 | 2 |
| 1280 | 30151 | R | 0.1 | 10 | 1 | 2 |
| 1290 | 30152 | R | 0.1 | -10 | 2 | 2 |
| 1300 | 30153 | R | 0.1 | -10 | 3 | 2 |
| 1310 | 30154 | R | 0.1 | -10 | 1 | 2 |
| 1320 | 30177 | R | 0.1 | -10 | 2 | 80 |
| 1330 | 30178 | R | 0.1 | -10 | 2 | 12 |
| 1340 | 30179 | R | 0.1 | -10 | 1 | 2 |
| 1350 | 30180 | R | 0.1 | -10 | 1 | 2 |
| 1360 | 30181 | R | 0.1 | -10 | 1 | 4 |
| 1370 | 30188 | R | 0.2 | -10 | 1 | 6502 |
| 1380 | 30190 | R | 0.2 | -10 | 1 | 70 |
| 1390 | 30191 | R | 0.2 | -10 | 1 | 30 |
| 1400 | 30192 | R | 0.2 | -10 | 1 | 300 |
| 1410 | 30194 | R | 0.4 | -10 | 1 | 125 |
| 1420 | 30195 | R | 0.2 | -10 | 2 | 800 |
| 1430 | 30197 | R | 0.1 | -10 | 1 | 2 |
| 1440 | 30198 | R | 0.1 | -10 | 1 | 275 |
| 1450 | 30199 | R | 0.1 | -10 | 1 | 2 |
| 1460 | 30200 | R | 0.1 | -10 | 1 | 6 |
| 1470 | 30201 | R | 0.1 | -10 | 1 | 2 |
| 1480 | 30202 | R | 0.1 | -10 | 1 | 2 |
| 1490 | 30203 | R | 0.1 | -10 | 1 | 140 |
| 1500 | 30204 | R | 0.1 | -10 | 1 | 6 |
| 1510 | 30205 | R | 0.1 | -10 | 1 | 2 |
| 1520 | 30206 | R | 0.1 | -10 | 1 | 2 |
| 1530 | 30207 | R | 0.1 | -10 | 8 | 2 |
| 1540 | 30208 | R | 0.1 | -10 | 1 | 60 |
| 1550 | 30209 | R | 0.1 | -10 | 2 | 125 |
| 1560 | 30210 | R | 0.1 | -10 | 1 | 2 |
| 1570 | 30211 | R | 0.1 | -10 | 1 | 400 |
| 1580 | 30212 | R | 0.1 | -10 | 2 | 2 |
| 1590 | 30213 | R | 0.1 | -10 | 1 | 10 |
| 1600 | 30220 | R | 0.1 | -10 | 1 | 38 |
| 1610 | 30221 | R | 0.1 | -10 | 1 | 2 |
| 1620 | 30222 | R | 0.1 | -10 | 1 | 2 |
| 1630 | 30223 | R | 0.2 | -10 | 1 | 2 |

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|---|---|---|---|---|---|---|
| 3000 | G0021 | R | 0.1 | 10 | 4 | 1 |
| 3010 | G0023 | R | 0.2 | 10 | 2 | 1 |
| 3020 | G0024 | R | 0.1 | 10 | 2 | 1 |
| 3030 | G0025 | R | 0.1 | 10 | 2 | 1 |
| 3040 | G0027 | R | 0.1 | 10 | 2 | 1 |
| 3050 | G0028 | R | 0.1 | 10 | 2 | 1 |
| 3060 | G0033 | R | 0.1 | 10 | 2 | 1 |
| 3070 | G0035 | R | 0.1 | 10 | 10 | 1 |
| 3080 | G0037 | R | 0.1 | 10 | 2 | 2 |
| 3090 | G0042 | R | 0.1 | 10 | 2 | 1 |
| 3100 | G0044 | R | 0.1 | 10 | 2 | 1 |
| 3110 | G0045 | R | 0.1 | 10 | 2 | 2 |
| 3120 | G0047 | R | 0.1 | 10 | 2 | 1 |
| 3130 | G0049 | R | 0.1 | 10 | 2 | 1 |
| 3140 | G0051 | R | 0.1 | 10 | 2 | 1 |
| 3150 | G0053 | R | 0.1 | 10 | 2 | 1 |
| 3160 | G0105 | R | 0.1 | 30 | 1 | 2 |
| 3170 | G0134 | R | 0.1 | -10 | 4 | 2 |
| 3180 | G0137 | R | 0.1 | 10 | 1 | 2 |
| 3190 | G0138 | R | 0.1 | 10 | 1 | 2 |
| 3200 | G0307 | R | 0.1 | 10 | 1 | 2 |
| 3210 | H0004 | R | 0.1 | 20 | 1 | 2 |
| 3220 | H0005 | R | 0.1 | -10 | 1 | 4 |
| 3230 | H0011 | R | 0.1 | -10 | 1 | 2 |
| 3240 | H0013 | R | 0.1 | -10 | 1 | 210 |
| 3250 | H0015 | R | 0.1 | -10 | 1 | 2 |
| 3260 | H0016 | R | 0.1 | 40 | 1 | 2 |
| 3270 | L0004 | R | 0.1 | -10 | 17 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3300 | L0090 | R | .0 | -10 | 400 | 634 |

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|---|---|---|---|---|---|---|
| 1850 | A0078 | L | 0.2 | -10 | 1 | 10 |
| 1860 | A0079 | L | 0.1 | 10 | 8 | 150 |
| 1870 | A0090 | L | 0.1 | -10 | 1 | 2 |
| 1880 | A0091 | L | 0.1 | -10 | 1 | 2 |
| 1890 | A0092 | L | 0.1 | -10 | 1 | 2 |
| 1900 | A0093 | L | 0.1 | -10 | 1 | 2 |
| 1910 | A0094 | L | 0.1 | -10 | 1 | 2 |
| 1920 | A0095 | L | 0.1 | -10 | 1 | 2 |
| 1930 | A0097 | L | 0.1 | -10 | 1 | 2 |
| 1940 | A0098 | L | 0.1 | -10 | 1 | 2 |
| 1950 | A0099 | L | 0.1 | -10 | 1 | 2 |
| 1960 | A0100 | L | 0.1 | -10 | 1 | 2 |
| 1970 | A0102 | L | 0.1 | -10 | 1 | 2 |
| 1980 | A0103 | L | 0.1 | 20 | 1 | 2 |
| 1990 | A0115 | L | 0.1 | -10 | 1 | 2 |
| 2000 | A0116 | L | 0.1 | -10 | 1 | 2 |
| 2010 | A0117 | L | 0.1 | -10 | 2 | 2 |
| 2020 | A0118 | L | 0.1 | -10 | 1 | 2 |
| 2030 | A0119 | L | 0.1 | -10 | 1 | 2 |
| 2040 | A0120 | L | 1.2 | -10 | 2 | 2 |
| 2050 | A0121 | L | 0.1 | -10 | 1 | 2 |
| 2060 | A0122 | L | 0.2 | 10 | 1 | 2 |
| 2070 | A0128 | L | 0.1 | -10 | 1 | 2 |
| 2080 | A0129 | L | 0.1 | -10 | 2 | 2 |
| 2090 | A0130 | L | 0.4 | -10 | 1 | 2 |
| 2100 | A0131 | L | 0.2 | -10 | 1 | 2 |
| 2110 | A0132 | L | 0.1 | -10 | 1 | 2 |
| 2120 | A0134 | L | 0.1 | -10 | 1 | 2 |
| 2130 | A0136 | L | 0.1 | -10 | 1 | 2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2150 | A0153 | L | 0.1 | -10 | 2 | 2 |
| 2160 | A0154 | L | 0.2 | -10 | 1 | 2 |
| 2170 | A0155 | L | 0.1 | -10 | 1 | 2 |
| 2180 | A0156 | L | 0.1 | -10 | 2 | 2 |
| 2190 | A0160 | L | 0.1 | -10 | 1 | 2 |
| 2200 | A0161 | L | 0.1 | -10 | 1 | 2 |
| 2210 | A0162 | L | 0.1 | -10 | 1 | 2 |
| 2220 | A0163 | L | 0.1 | -10 | 1 | 2 |
| 2230 | A0164 | L | 0.1 | -10 | 1 | 2 |
| 2240 | A0165 | L | 0.1 | -10 | 1 | 2 |
| 2250 | A0167 | L | 0.2 | -10 | 1 | 2 |
| 2260 | A0168 | L | 0.1 | -10 | 1 | 2 |
| 2270 | A0169 | L | 0.1 | -10 | 1 | 2 |
| 2280 | A0170 | L | 0.1 | -10 | 1 | 2 |
| 2290 | A0171 | L | 0.1 | -10 | 1 | 2 |
| 2300 | A0172 | L | 0.1 | -10 | 1 | 2 |
| 2310 | A0173 | L | 0.1 | -10 | 1 | 2 |
| 2320 | A0174 | L | 0.1 | -10 | 1 | 2 |
| 2330 | A0175 | L | 0.1 | -10 | 1 | 2 |
| 2340 | A0176 | L | 0.1 | -10 | 1 | 2 |
| 2350 | A0180 | L | 0.1 | 20 | 1 | 2 |
| 2360 | A0182 | L | 0.2 | 10 | 1 | 2 |
| 2370 | A0184 | L | 0.1 | -10 | 1 | 2 |
| 2380 | A0185 | L | 0.1 | -10 | 1 | 2 |
| 2390 | A0186 | L | 0.1 | -10 | 1 | 2 |
| 2400 | A0187 | L | 0.1 | -10 | 1 | 2 |
| 2410 | A0188 | L | 0.2 | -10 | 1 | 2 |
| 2420 | A0189 | L | 0.1 | -10 | 1 | 2 |
| 2430 | A0192 | L | 0.2 | -10 | 1 | 2 |
| 2440 | A0193 | L | 0.2 | -10 | 2 | 2 |
| 2450 | A0196 | L | 0.1 | -10 | 1 | 2 |
| 2460 | A0197 | L | 0.1 | -10 | 1 | 2 |
| 2470 | A0198 | L | 0.1 | 10 | 1 | 2 |

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|---|---|---|---|---|---|---|
| 2830 | A0246 | L | 0.2 | 0 | 1 | 25 |
| 2840 | A0247 | L | 0.4 | -10 | 2 | 2 |
| 2850 | A0248 | L | 0.1 | -10 | 1 | 2 |
| 2860 | A0249 | L | 0.2 | -10 | 1 | 2 |
| 2870 | A0250 | L | 0.1 | -10 | 1 | 2 |
| 2880 | A0251 | L | 0.2 | 40 | 1 | 2 |
| 2890 | A0252 | L | 0.1 | -10 | 1 | 2 |
| 2900 | A0253 | L | 0.1 | -10 | 1 | 2 |
| 2910 | A0254 | L | 0.1 | -10 | 1 | 2 |
| 2920 | A0255 | L | 0.1 | -10 | 1 | 2 |
| 2930 | A0256 | L | 0.2 | -10 | 5 | 2 |
| 2940 | A0257 | L | 0.2 | -10 | 1 | 4 |
| 2950 | A0258 | L | .0 | 0 | 0 | 2 |
| 2960 | A0259 | L | 0.1 | -10 | 1 | 2 |
| 2970 | A0260 | L | 0.1 | -10 | 1 | 2 |
| 2980 | A0261 | L | 0.1 | -10 | 1 | 2 |
| 2990 | A0262 | L | 0.1 | -10 | 2 | 2 |
| 3000 | A0263 | L | 0.1 | -10 | 1 | 2 |
| 3010 | A0264 | L | 0.1 | -10 | 1 | 2 |
| 3020 | B0011 | L | 0.1 | -10 | 2 | 35 |
| 3030 | B0012 | L | 0.1 | -10 | 1 | 55 |
| 3040 | B0013 | L | 0.1 | -10 | 1 | 60 |
| 3050 | B0023 | L | 0.2 | 40 | 1 | 2 |
| 3060 | B0025 | L | 0.1 | 20 | 1 | 2 |
| 3070 | B0026 | L | 0.1 | 10 | 1 | 2 |
| 3080 | B0033 | L | 0.1 | -10 | 1 | 10 |
| 3090 | B0034 | L | 0.1 | -10 | 1 | 6 |
| 3100 | B0036 | L | 0.1 | 40 | 1 | 2 |
| 3110 | B0038 | L | 0.2 | -10 | 1 | 2 |
| 3120 | B0040 | L | 0.1 | 20 | 1 | 2 |
| 3130 | B0042 | L | 0.1 | -10 | 2 | 2 |
| 3140 | B0043 | L | 0.1 | -10 | 1 | 2 |
| 3150 | B0044 | L | 0.1 | -10 | 1 | 2 |
| 3160 | B0045 | L | 0.1 | -10 | 1 | 2 |
| 3170 | B0049 | L | 0.2 | 10 | 1 | 150 |
| 3180 | B0050 | L | 0.1 | -10 | 1 | 55 |
| 3190 | B0051 | L | 0.1 | -10 | 1 | 160 |
| 3200 | B0053 | L | 0.1 | 10 | 1 | 55 |
| 3210 | B0055 | L | 0.1 | 10 | 1 | 50 |
| 3220 | B0056 | L | 0.1 | 30 | 1 | 60 |
| 3230 | B0057 | L | 0.1 | -10 | 1 | 25 |
| 3240 | B0058 | L | 0.1 | -10 | 1 | 25 |
| 3250 | B0059 | L | 0.1 | 20 | 4 | 60 |
| 3260 | B0063 | L | 0.1 | 40 | 1 | 25 |
| 3270 | B0064 | L | 0.1 | -10 | 1 | 40 |
| 3280 | B0065 | L | 0.2 | -10 | 1 | 30 |
| 3290 | B0067 | L | 0.1 | 10 | 1 | 30 |
| 3300 | B0068 | L | 0.1 | 20 | 1 | 2 |
| 3310 | B0069 | L | 0.1 | 20 | 1 | 12 |
| 3320 | B0070 | L | 0.1 | -10 | 1 | 2 |
| 3330 | B0072 | L | 0.1 | -10 | 1 | 2 |
| 3340 | B0073 | L | 0.1 | -10 | 1 | 12 |
| 3350 | B0074 | L | 0.1 | -10 | 1 | 15 |
| 3360 | B0076 | L | 0.1 | -10 | 1 | 4 |
| 3370 | B0089 | L | 0.1 | -10 | 1 | 20 |
| 3380 | B0090 | L | 0.1 | 480 | 1 | 40 |
| 3390 | B0091 | L | 0.1 | -10 | 2 | 6 |
| 3400 | B0093 | L | 0.2 | -10 | 1 | 6 |
| 3410 | B0095 | L | 0.1 | -10 | 1 | 6 |
| 3420 | B0098 | L | 0.1 | -10 | 1 | 2 |
| 3430 | B0099 | L | 0.1 | -10 | 1 | 2 |
| 3440 | B0100 | L | 0.1 | -10 | 2 | 2 |
| 3450 | B0101 | L | 0.1 | -10 | 2 | 2 |

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|---|---|---|---|---|---|---|
| 3820 | B0157 | L | 0.1 | -10 | 1 | 2 |
| 3830 | B0158 | L | 0.1 | -10 | 2 | 2 |
| 3840 | B0159 | L | 0.1 | -10 | 3 | 2 |
| 3850 | B0160 | L | 0.1 | 20 | 2 | 2 |
| 3860 | B0161 | L | 0.1 | -10 | 2 | 2 |
| 3870 | B0162 | L | 0.1 | 10 | 1 | 2 |
| 3880 | B0163 | L | 0.1 | 10 | 5 | 2 |
| 3890 | B0164 | L | 0.1 | 20 | 2 | 2 |
| 3900 | B0165 | L | 0.4 | -10 | 3 | 2 |
| 3910 | B0166 | L | 0.4 | 10 | 2 | 2 |
| 3920 | B0168 | L | 0.1 | -10 | 3 | 2 |
| 3930 | B0169 | L | 0.1 | -10 | 4 | 2 |
| 3940 | B0170 | L | 0.1 | -10 | 11 | 2 |
| 3950 | B0171 | L | 0.1 | -10 | 9 | 2 |
| 3960 | B0172 | L | 0.1 | -10 | 4 | 2 |
| 3970 | B0173 | L | 0.1 | -10 | 19 | 2 |
| 3980 | B0174 | L | 0.2 | -10 | 6 | 2 |
| 3990 | B0175 | L | 0.2 | -10 | 1 | 2 |
| 4000 | B0176 | L | 0.1 | 440 | 6 | 2 |
| 4010 | B0182 | L | 0.1 | 20 | 2 | 8 |
| 4020 | B0183 | L | 0.1 | -10 | 2 | 10 |
| 4030 | B0184 | L | 0.1 | 20 | 2 | 25 |
| 4040 | B0185 | L | 0.1 | -10 | 2 | 15 |
| 4050 | B0186 | L | 0.1 | -10 | 2 | 20 |
| 4060 | B0187 | L | 0.6 | 700 | 1 | 155 |
| 4070 | B0189 | L | 0.8 | -10 | 1 | 125 |
| 4080 | C0005 | L | 0.1 | -10 | 1 | 2 |
| 4090 | C0006 | L | 0.1 | -10 | 1 | 2 |
| 4100 | C0008 | L | 0.1 | -10 | 2 | 2 |
| 4110 | C0010 | L | 0.1 | -10 | 1 | 2 |
| ~~4120~~ | ~~C0012~~ | ~~L~~ | ~~0.1~~ | ~~-10~~ | ~~1~~ | ~~2~~ |
| 4130 | C0013 | L | 0.1 | -10 | 1 | 2 |
| 4140 | C0014 | L | 0.1 | -10 | 1 | 2 |
| 4150 | C0016 | L | 0.2 | 10 | 1 | 2 |
| 4160 | C0017 | L | 0.1 | 10 | 1 | 2 |
| 4170 | C0018 | L | 0.1 | -10 | 1 | 2 |
| 4180 | C0019 | L | 0.1 | -10 | 1 | 2 |
| 4190 | C0020 | L | 0.2 | -10 | 1 | 2 |
| 4200 | C0021 | L | 0.1 | -10 | 1 | 2 |
| 4210 | C0022 | L | 0.1 | -10 | 1 | 2 |
| 4220 | C0023 | L | 0.2 | -10 | 1 | 2 |
| 4230 | C0025 | L | 0.1 | -10 | 1 | 2 |
| 4240 | C0029 | L | 0.2 | -10 | 1 | 2 |
| 4250 | C0030 | L | 0.6 | -10 | 1 | 2 |
| 4260 | C0031 | L | 0.1 | 10 | 1 | 2 |
| 4270 | C0032 | L | 0.1 | 20 | 1 | 2 |
| 4280 | C0034 | L | 0.2 | -10 | 1 | 2 |
| 4290 | C0035 | L | 0.2 | 80 | 1 | 2 |
| 4300 | C0037 | L | 0.1 | -10 | 1 | 2 |
| 4310 | C0038 | L | 0.1 | -10 | 1 | 2 |
| 4320 | C0039 | L | 0.1 | -10 | 1 | 2 |
| 4330 | C0040 | L | 0.1 | -10 | 1 | 2 |
| 4340 | C0041 | L | 0.1 | -10 | 1 | 2 |
| 4350 | C0043 | L | 0.1 | -10 | 1 | 2 |
| 4360 | C0044 | L | 0.1 | 60 | 1 | 2 |
| 4370 | C0045 | L | 0.1 | -10 | 1 | 2 |
| 4380 | C0047 | L | 0.1 | -10 | 2 | 2 |
| 4390 | C0048 | L | 0.2 | -10 | 1 | 2 |
| 4400 | C0049 | L | 0.2 | -10 | 1 | 4 |
| 4410 | C0050 | L | 0.1 | -10 | 1 | 2 |
| 4420 | C0051 | L | 0.1 | 20 | 1 | 2 |
| 4430 | C0052 | L | 0.2 | -10 | 1 | 2 |
| 4440 | C0053 | L | 0.1 | -10 | 1 | 2 |

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|---|---|---|---|---|---|---|
| 4810 | C0157 | L | 0.1 | -10 | 1 | 2 |
| 4820 | C0159 | L | 0.1 | -10 | 1 | 2 |
| 4830 | C0161 | L | 0.8 | -10 | 1 | 2 |
| 4840 | C0162 | L | 0.2 | -10 | 1 | 2 |
| 4850 | C0163 | L | 0.2 | -10 | 1 | 2 |
| 4860 | C0164 | L | 0.1 | 10 | 1 | 2 |
| 4870 | C0165 | L | 3.8 | 70 | 1 | 2 |
| 4880 | C0166 | L | 0.1 | 10 | 1 | 2 |
| 4890 | C0167 | L | 0.2 | -10 | 1 | 2 |
| 4900 | C0168 | L | 0.1 | -10 | 1 | 8 |
| 4910 | C0169 | L | 0.1 | 10 | 1 | 10 |
| 4920 | C0170 | L | 0.1 | -10 | 1 | 2 |
| 4930 | C0171 | L | 0.1 | -10 | 1 | 2 |
| 4940 | C0172 | L | 0.1 | -10 | 1 | 6 |
| 4950 | C0173 | L | 0.1 | 10 | 1 | 22 |
| 4960 | C0174 | L | 0.1 | -10 | 1 | 2 |
| 4970 | C0175 | L | 0.1 | -10 | 1 | 2 |
| 4980 | C0180 | L | 0.1 | -10 | 1 | 2 |
| 4990 | C0182 | L | 0.1 | -10 | 1 | 2 |
| 5000 | C0183 | L | 0.1 | -10 | 2 | 2 |
| 5010 | C0184 | L | 0.1 | -10 | 1 | 2 |
| 5020 | G0120 | L | 0.1 | 10 | 1 | 25 |
| 5030 | G0180 | L | 0.1 | -10 | 1 | 24 |
| 5040 | G0215 | L | 0.1 | 100 | 1 | 300 |
| 5050 | G0217 | L | 0.1 | 70 | 1 | 350 |
| 5060 | G0292 | L | 0.1 | -10 | 1 | 125 |
| 5070 | G0294 | L | 0.1 | 800 | 1 | 375 |
| 5080 | I0028 | L | 0.2 | -10 | 1 | 140 |
| 5090 | I0186 | L | 0.1 | -10 | 1 | 60 |
| 5100 | I0221 | L | 0.2 | 20 | 1 | 40 |
| 5110 | J0040 | L | 0.1 | -10 | 1 | 160 |
| 5120 | J0041 | L | 0.1 | 160 | 1 | 275 |
| 5130 | J0042 | L | 0.1 | -10 | 1 | 65 |
| 5140 | J0043 | L | 0.1 | -10 | 1 | 55 |
| 5150 | J0044 | L | 0.1 | 200 | 1 | 125 |
| 5160 | J0045 | L | 0.1 | 20 | 1 | 150 |
| 5170 | J0046 | L | 1.0 | 60 | 1 | 22 |
| 5180 | J0047 | L | 0.1 | 80 | 1 | 350 |
| 5190 | J0048 | L | 0.6 | -10 | 4 | 12 |
| 5200 | J0049 | L | 0.2 | 20 | 1 | 25 |
| 5210 | J0050 | L | 0.1 | 30 | 1 | 22 |
| 5220 | J0051 | L | 0.1 | -10 | 1 | 2 |
| 5230 | J0052 | L | 0.8 | -10 | 1 | 2 |
| 5240 | J0053 | L | 0.1 | -10 | 2 | 2 |
| 5250 | J0054 | L | 0.2 | -10 | 1 | 2 |
| 5260 | J0055 | L | 0.1 | 20 | 1 | 2 |
| 5270 | J0056 | L | 0.1 | 20 | 1 | 2 |
| 5280 | J0057 | L | 0.1 | -10 | 1 | 2 |
| 5290 | J0058 | L | 0.1 | 10 | 2 | 2 |
| 5300 | J0059 | L | 0.1 | -10 | 19 | 2 |
| 5310 | J0060 | L | 0.1 | -10 | 27 | 2 |
| 5320 | J0061 | L | 0.1 | 10 | 2 | 2 |
| 5330 | J0062 | L | 0.1 | -10 | 12 | 2 |
| 5340 | J0063 | L | 0.1 | -10 | 2 | 2 |
| 5350 | J0064 | L | 0.1 | -10 | 3 | 2 |
| 5360 | J0065 | L | 0.1 | -10 | 8 | 2 |
| 5370 | J0066 | L | 0.1 | 10 | 4 | 2 |
| 5380 | J0067 | L | 0.1 | 10 | 4 | 2 |
| 5390 | J0068 | L | 0.1 | -10 | 1 | 2 |
| 5400 | L0002 | L | 0.1 | -10 | 1 | 2 |
| 5410 | L0005 | L | 0.1 | 10 | 1 | 2 |
| 5420 | L0006 | L | 0.1 | 10 | 1 | 2 |

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|---|---|---|---|---|---|---|
| 5800 | L0074 | L | 0.1 | -10 | 1 | 2 |
| 5810 | L0075 | L | 0.2 | 10 | 1 | 4 |
| 5820 | L0076 | L | 0.1 | -10 | 4 | 2 |
| 5830 | P0007 | L | 0.1 | -10 | 1 | 2 |
| 5840 | S0504 | L | 0.1 | -10 | 1 | 10 |
| 5850 | S0722 | L | 0.1 | 1960 | 1 | 65 |
| 5860 | S0723 | L | 0.1 | -10 | 1 | 60 |
| 5870 | S0724 | L | 0.1 | 20 | 1 | 32 |
| 5880 | S0725 | L | 0.1 | -10 | 1 | 18 |
| 5890 | S0726 | L | 0.1 | 20 | 1 | 35 |
| 5900 | S0727 | L | 0.1 | -10 | 1 | 2 |
| 5910 | S0728 | L | 0.1 | -10 | 1 | 2 |
| 5920 | S0729 | L | 0.1 | 10 | 1 | 2 |
| 5930 | S0730 | L | 0.1 | 20 | 1 | 2 |
| 5940 | S0731 | L | 0.1 | 20 | 1 | 2 |
| 5950 | S0732 | L | 0.1 | -10 | 1 | 2 |
| 5960 | S0777 | L | 0.8 | -10 | 46 | 2 |
| 5970 | S0778 | L | 1.0 | -10 | 18 | 2 |
| 5980 | S0779 | L | 0.1 | -10 | 1 | 2 |
| 5990 | S0780 | L | 0.1 | -10 | 6 | 2 |
| 6000 | S0781 | L | 0.1 | 20 | 6 | 2 |
| 6010 | S0782 | L | 0.1 | 10 | 1 | 2 |
| 6020 | S0783 | L | 0.1 | -10 | 7 | 2 |
| 6030 | S0784 | L | 0.1 | -10 | 1 | 2 |
| 6040 | S0785 | L | 0.1 | -10 | 9 | 22 |
| 6050 | S0786 | L | 0.1 | -10 | 5 | 10 |
| 6060 | S0787 | L | 0.1 | 20 | 7 | 4 |
| 6070 | S0788 | L | 0.1 | -10 | 3 | 2 |
| 6080 | S0789 | L | 0.1 | -10 | 4 | 6 |
| 6090 | S0790 | L | 0.2 | -10 | 4 | 2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6110 | S0792 | L | 0.1 | -10 | 4 | 2 |
| 6120 | S0793 | L | 0.1 | 30 | 6 | 2 |
| 6130 | S0794 | L | 0.1 | 20 | 11 | 2 |

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|---|---|---|---|---|---|---|
| 37 | B0004 | S | 0.1 | 10 | 1 | 2 |
| 38 | B0005 | S | 0.1 | 5 | 1 | 20 |
| 39 | B0007 | S | 0.1 | 5 | 1 | 20 |
| 40 | B0008 | S | 0.1 | 5 | 1 | 2 |
| 41 | B0009 | S | 0.1 | 5 | 6 | 50 |
| 42 | B0010 | S | 0.1 | 5 | 2 | 22 |
| 43 | B0016 | S | 0.1 | 5 | 1 | 2 |
| 44 | B0017 | S | 0.1 | 40 | 1 | 2 |
| 45 | B0018 | S | 0.1 | 5 | 1 | 4 |
| 46 | B0020 | S | 0.4 | 20 | 1 | 2 |
| 47 | B0021 | S | 0.2 | 60 | 1 | 2 |
| 48 | B0022 | S | 0.2 | 5 | 1 | 2 |
| 49 | B0027 | S | 0.1 | 5 | 1 | 8 |
| 50 | B0028 | S | .0 | 0 | 1 | 2 |
| 51 | B0029 | S | 0.4 | 20 | 1 | 2 |
| 52 | B0031 | S | 0.2 | 5 | 1 | 2 |
| 53 | B0041 | S | 0.2 | 5 | 7 | 2 |
| 54 | B0046 | S | 0.1 | 5 | 1 | 6 |
| 55 | B0052 | S | 0.1 | 5 | 1 | 2 |
| 56 | B0061 | S | 0.1 | 5 | 1 | 12 |
| 57 | B0062 | S | 0.1 | 5 | 2 | 15 |
| 58 | B0079 | S | 0.1 | 10 | 1 | 25 |
| 59 | B0081 | S | 0.1 | 5 | 1 | 90 |
| 60 | B0082 | S | 0.1 | 5 | 1 | 30 |
| 61 | B0083 | S | 0.1 | 5 | 1 | 100 |
| 62 | B0085 | S | 0.1 | 5 | 1 | 8 |
| 63 | B0086 | S | 0.1 | 5 | 1 | 75 |
| 64 | B0087 | S | 0.1 | 5 | 1 | 18 |
| 65 | B0088 | S | 0.1 | 5 | 1 | 6 |
| 66 | B0096 | S | 0.1 | 5 | 2 | 2 |
| 67 | B0097 | S | 0.1 | 10 | 1 | 2 |
| 68 | B0108 | S | 0.1 | 5 | 1 | 2 |
| 69 | B0109 | S | 0.1 | 5 | 3 | 2 |
| 70 | B0115 | S | 0.1 | 5 | 3 | 2 |
| 71 | B0156 | S | 0.1 | 5 | 1 | 2 |
| 72 | B0167 | S | 0.1 | 20 | 2 | 2 |
| 73 | C0003 | S | 0.1 | 20 | 1 | 2 |
| 74 | C0027 | S | 0.1 | 20 | 1 | 2 |
| 75 | C0056 | S | 0.2 | 10 | 1 | 2 |
| 76 | C0057 | S | 0.1 | 10 | 1 | 2 |
| 77 | C0058 | S | 0.1 | 5 | 1 | 2 |
| 78 | C0059 | S | 0.4 | 5 | 1 | 2 |
| 79 | C0095 | S | 0.2 | 5 | 1 | 8 |
| 80 | C0096 | S | 0.2 | 5 | 1 | 18 |
| 81 | C0097 | S | 0.2 | 5 | 1 | 15 |
| 82 | C0098 | S | 0.4 | 5 | 1 | 8 |
| 83 | C0099 | S | 0.4 | 5 | 1 | 2 |
| 84 | C0100 | S | 0.2 | 5 | 1 | 2 |
| 85 | C0101 | S | 0.1 | 5 | 1 | 2 |
| 86 | C0102 | S | 0.1 | 5 | 1 | 2 |
| 87 | C0103 | S | 0.2 | 5 | 1 | 4 |
| 88 | C0104 | S | 0.2 | 5 | 1 | 10 |
| 89 | C0105 | S | 0.6 | 5 | 1 | 6 |
| 90 | C0106 | S | 0.4 | 5 | 1 | 4 |
| 91 | C0107 | S | 0.2 | 5 | 1 | 2 |
| 92 | C0108 | S | 0.2 | 5 | 1 | 6 |
| 93 | C0109 | S | 1.4 | 5 | 1 | 8 |
| 94 | C0110 | S | 0.2 | 5 | 1 | 10 |
| 95 | C0112 | S | 0.1 | 5 | 1 | 140 |
| 96 | C0113 | S | 0.1 | 5 | 1 | 40 |
| 97 | C0114 | S | 0.4 | 5 | 1 | 25 |
| 98 | C0115 | S | 0.2 | 0 | 0 | 30 |
| 99 | C0116 | S | 0.2 | 5 | 1 | 2 |

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|---|---|---|---|---|---|---|
| 134 | G0016 | S | 0.1 | 10 | 1 | 1 |
| 135 | G0017 | S | 0.1 | 10 | 1 | 2 |
| 136 | G0020 | S | 0.1 | 10 | 1 | 2 |
| 137 | G0022 | S | 0.1 | 10 | 1 | 2 |
| 138 | G0026 | S | 0.2 | 10 | 1 | 2 |
| 139 | G0029 | S | 0.1 | 10 | 2 | 2 |
| 140 | G0030 | S | 0.2 | 10 | 1 | 2 |
| 141 | G0031 | S | 0.1 | 10 | 2 | 24 |
| 142 | G0032 | S | 0.1 | 10 | 2 | 8 |
| 143 | G0034 | S | 0.1 | 10 | 1 | 2 |
| 144 | G0036 | S | 0.2 | 10 | 1 | 2 |
| 145 | G0038 | S | 0.4 | 10 | 1 | 2 |
| 146 | G0039 | S | 0.1 | 10 | 1 | 2 |
| 147 | G0040 | S | 0.1 | 10 | 2 | 2 |
| 148 | G0041 | S | 0.1 | 10 | 1 | 2 |
| 149 | G0043 | S | 0.1 | 10 | 2 | 2 |
| 150 | G0046 | S | 0.2 | 10 | 1 | 10 |
| 151 | G0048 | S | 0.1 | 20 | 1 | 2 |
| 152 | G0050 | S | 1.8 | 10 | 1 | 4 |
| 153 | G0052 | S | 0.1 | 10 | 1 | 6 |
| 154 | G0054 | S | 0.1 | 10 | 1 | 2 |
| 155 | G0055 | S | 0.1 | 10 | 1 | 10 |
| 156 | G0054 | S | 0.1 | 5 | 1 | 2 |
| 157 | G0055 | S | 0.1 | 5 | 1 | 10 |
| 158 | G0056 | S | 0.1 | 5 | 1 | 4 |
| 159 | G0057 | S | 0.1 | 5 | 2 | 6 |
| 160 | G0058 | S | 0.1 | 5 | 1 | 10 |
| 161 | G0059 | S | 0.1 | 10 | 1 | 10 |
| 162 | G0060 | S | 0.1 | 5 | 2 | 36 |
| 163 | G0061 | S | 0.1 | 10 | 1 | 8 |
| 164 | G0062 | S | 0.1 | 5 | 1 | 32 |
| 165 | G0063 | S | 0.1 | 5 | 1 | 20 |
| 166 | G0064 | S | 0.2 | 5 | 2 | 26 |
| 167 | G0065 | S | 0.1 | 5 | 1 | 12 |
| 168 | G0066 | S | 0.1 | 5 | 1 | 4 |
| 169 | G0067 | S | 0.1 | 5 | 1 | 6 |
| 170 | G0068 | S | 0.1 | 5 | 2 | 4 |
| 171 | G0069 | S | 0.1 | 5 | 2 | 2 |
| 172 | G0070 | S | 0.1 | 5 | 1 | 4 |
| 173 | G0071 | S | 0.1 | 5 | 1 | 4 |
| 174 | G0072 | S | 0.1 | 5 | 1 | 2 |
| 175 | G0073 | S | 0.1 | 5 | 1 | 2 |
| 176 | G0074 | S | 0.1 | 5 | 2 | 2 |
| 177 | G0075 | S | 0.1 | 5 | 2 | 4 |
| 178 | G0076 | S | 0.1 | 5 | 1 | 4 |
| 179 | G0077 | S | 0.1 | 5 | 1 | 2 |
| 180 | G0078 | S | 0.1 | 5 | 1 | 6 |
| 181 | G0079 | S | 0.1 | 5 | 1 | 2 |
| 182 | G0080 | S | 0.1 | 5 | 1 | 2 |
| 183 | G0081 | S | 0.1 | 20 | 1 | 4 |
| 184 | G0082 | S | 0.1 | 5 | 1 | 14 |
| 185 | G0083 | S | 0.1 | 5 | 1 | 4 |
| 186 | G0084 | S | 0.1 | 5 | 2 | 30 |
| 187 | G0085 | S | 0.2 | 5 | 1 | 15 |
| 188 | G0086 | S | 0.2 | 5 | 1 | 12 |
| 189 | G0087 | S | 0.1 | 5 | 1 | 28 |
| 190 | G0088 | S | 0.1 | 5 | 1 | 22 |
| 191 | G0089 | S | 0.1 | 5 | 1 | 15 |
| 192 | G0090 | S | 0.2 | 5 | 1 | 12 |
| 193 | G0091 | S | 0.1 | 5 | 1 | 20 |
| 194 | G0092 | S | 0.1 | 5 | 1 | 28 |
| 195 | G0093 | S | 0.1 | 5 | 1 | 20 |
| 196 | G0094 | S | 0.1 | 5 | 1 | 35 |

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|---|---|---|---|---|---|---|
| 232 | G0132 | S | 0.1 | 5 | 1 | 12 |
| 233 | G0133 | S | 0.1 | 5 | 1 | 15 |
| 234 | G0135 | S | 0.1 | 5 | 1 | 4 |
| 235 | G0136 | S | 0.1 | 5 | 1 | 8 |
| 236 | G0139 | S | 0.1 | 5 | 1 | 45 |
| 237 | G0140 | S | 0.1 | 5 | 0 | 2 |
| 238 | G0141 | S | 0.1 | 5 | 0 | 0 |
| 239 | G0142 | S | 0.2 | 5 | 2 | 6 |
| 240 | G0143 | S | 0.1 | 5 | 2 | 26 |
| 241 | G0144 | S | 0.1 | 5 | 2 | 4 |
| 242 | G0145 | S | 0.1 | 5 | 1 | 30 |
| 243 | G0146 | S | 0.1 | 5 | 1 | 8 |
| 244 | G0147 | S | 0.2 | 5 | 1 | 12 |
| 245 | G0148 | S | 0.1 | 5 | 2 | 14 |
| 246 | G0149 | S | 0.1 | 5 | 1 | 65 |
| 247 | G0150 | S | 0.2 | 10 | 2 | 60 |
| 248 | G0151 | S | 0.2 | 5 | 1 | 10 |
| 249 | G0152 | S | 0.1 | 5 | 1 | 8 |
| 250 | G0153 | S | 0.1 | 5 | 1 | 6 |
| 251 | G0154 | S | 0.1 | 110 | 1 | 8 |
| 252 | G0155 | S | 0.1 | 60 | 1 | 12 |
| 253 | G0156 | S | 0.1 | 20 | 2 | 30 |
| 254 | G0157 | S | 0.2 | 5 | 2 | 30 |
| 255 | G0158 | S | 0.1 | 5 | 1 | 10 |
| 256 | G0159 | S | 0.1 | 5 | 1 | 34 |
| 257 | G0160 | S | 0.1 | 5 | 1 | 48 |
| 258 | G0161 | S | 0.1 | 5 | 1 | 32 |
| 259 | G0162 | S | 0.2 | 5 | 2 | 20 |
| 260 | G0163 | S | 0.1 | 5 | 2 | 26 |
| 261 | G0164 | S | 0.1 | 5 | 1 | 40 |
| 262 | G0165 | S | 0.1 | 5 | 2 | 46 |
| 263 | G0166 | S | 0.2 | 120 | 1 | 150 |
| 264 | G0167 | S | 0.1 | 1740 | 1 | 120 |
| 265 | G0168 | S | 0.2 | 5 | 1 | 48 |
| 266 | G0169 | S | 0.1 | 5 | 1 | 28 |
| 267 | G0170 | S | 0.1 | 20 | 1 | 75 |
| 268 | G0171 | S | 0.1 | 5 | 1 | 40 |
| 269 | G0172 | S | 0.1 | 10 | 1 | 80 |
| 270 | G0173 | S | 0.1 | 5 | 1 | 50 |
| 271 | G0174 | S | 0.1 | 100 | 1 | 80 |
| 272 | G0175 | S | 0.1 | 5 | 1 | 110 |
| 273 | G0176 | S | 0.1 | 10 | 1 | 100 |
| 274 | G0177 | S | 0.2 | 840 | 2 | 160 |
| 275 | G0178 | S | 0.4 | 40 | 2 | 140 |
| 276 | G0179 | S | 0.2 | 20 | 1 | 30 |
| 277 | G0181 | S | 0.4 | 30 | 1 | 14 |
| 278 | G0182 | S | 0.1 | 5 | 2 | 14 |
| 279 | G0183 | S | 0.1 | 5 | 2 | 20 |
| 280 | G0184 | S | 0.1 | 5 | 2 | 32 |
| 281 | G0185 | S | 0.1 | 5 | 1 | 20 |
| 282 | G0186 | S | 0.1 | 5 | 1 | 18 |
| 283 | G0187 | S | 0.1 | 5 | 1 | 26 |
| 284 | G0188 | S | 0.1 | 5 | 1 | 8 |
| 285 | G0189 | S | 0.1 | 5 | 2 | 100 |
| 286 | G0190 | S | 0.1 | 5 | 2 | 75 |
| 287 | G0191 | S | 0.1 | 5 | 1 | 70 |
| 288 | G0192 | S | 0.1 | 5 | 2 | 85 |
| 289 | G0193 | S | 0.1 | 5 | 3 | 52 |
| 290 | G0194 | S | 0.1 | 5 | 1 | 140 |
| 291 | G0195 | S | 0.4 | 5 | 2 | 200 |
| 292 | G0196 | S | 0.2 | 5 | 2 | 36 |
| 293 | G0197 | S | 0.2 | 5 | 2 | 32 |
| 294 | G0198 | S | 0.1 | 5 | 1 | 32 |

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|---|---|---|---|---|---|---|
| 332 | G0239 | S | 0.1 | 5 | 1 | 75 |
| 333 | G0240 | S | 0.1 | 5 | 1 | 4 |
| 334 | G0241 | S | 0.1 | 10 | 2 | 6 |
| 335 | G0242 | S | 0.1 | 30 | 1 | 28 |
| 336 | G0243 | S | 1.0 | 230 | 1 | 50 |
| 337 | G0244 | S | 0.1 | 5 | 1 | 6 |
| 338 | G0245 | S | 0.1 | 5 | 3 | 6 |
| 339 | G0246 | S | 0.1 | 5 | 1 | 14 |
| 340 | G0247 | S | 0.1 | 20 | 1 | 30 |
| 341 | G0248 | S | 0.1 | 100 | 1 | 20 |
| 342 | G0249 | S | 0.1 | 190 | 1 | 34 |
| 343 | G0250 | S | 0.1 | 20 | 1 | 55 |
| 344 | G0251 | S | 0.1 | 5 | 1 | 18 |
| 345 | G0252 | S | 0.1 | 10 | 1 | 4 |
| 346 | G0253 | S | 0.1 | 5 | 1 | 20 |
| 347 | G0254 | S | 0.2 | 5 | 1 | 2 |
| 348 | G0255 | S | 0.1 | 50 | 1 | 26 |
| 349 | G0256 | S | 0.1 | 20 | 1 | 2 |
| 350 | G0257 | S | 0.1 | 70 | 1 | 6 |
| 351 | G0258 | S | 0.2 | 30 | 1 | 2 |
| 352 | G0259 | S | 0.4 | 20 | 1 | 28 |
| 353 | G0260 | S | 0.2 | 20 | 1 | 80 |
| 354 | G0261 | S | 0.1 | 5 | 1 | 4 |
| 355 | G0262 | S | 0.4 | 10 | 1 | 25 |
| 356 | G0263 | S | 0.1 | 5 | 1 | 28 |
| 357 | G0264 | S | 0.1 | 5 | 1 | 50 |
| 358 | G0265 | S | 0.1 | 5 | 1 | 6 |
| 359 | G0266 | S | 0.2 | 20 | 1 | 55 |
| 360 | G0267 | S | 0.1 | 5 | 1 | 4 |
| 361 | G0268 | S | 0.2 | 5 | 1 | 22 |
| 362 | G0269 | S | 0.2 | 100 | 1 | 15 |
| 363 | G0270 | S | 0.1 | 5 | 1 | 2 |
| 364 | G0271 | S | 0.1 | 5 | 1 | 2 |
| 365 | G0272 | S | 0.4 | 5 | 1 | 2 |
| 366 | G0273 | S | 0.1 | 5 | 1 | 2 |
| 367 | G0274 | S | 0.1 | 5 | 1 | 2 |
| 368 | G0275 | S | 0.1 | 5 | 1 | 2 |
| 369 | G0276 | S | 0.1 | 5 | 1 | 2 |
| 370 | G0277 | S | 0.1 | 5 | 1 | 32 |
| 371 | G0278 | S | 0.1 | 10 | 1 | 6 |
| 372 | G0279 | S | 0.1 | 5 | 1 | 15 |
| 373 | G0280 | S | 0.1 | 20 | 1 | 65 |
| 374 | G0281 | S | 0.1 | 20 | 1 | 60 |
| 375 | G0282 | S | 0.1 | 5 | 1 | 14 |
| 376 | G0283 | S | 0.1 | 40 | 1 | 28 |
| 377 | G0284 | S | 0.1 | 40 | 1 | 28 |
| 378 | G0285 | S | 0.1 | 20 | 1 | 10 |
| 379 | G0286 | S | 0.1 | 5 | 1 | 12 |
| 380 | G0287 | S | 0.1 | 5 | 1 | 12 |
| 381 | G0288 | S | 0.1 | 20 | 1 | 4 |
| 382 | G0289 | S | 0.2 | 5 | 1 | 2 |
| 383 | G0290 | S | 0.2 | 5 | 1 | 35 |
| 384 | G0291 | S | 0.2 | 5 | 1 | 22 |
| 385 | G0293 | S | 0.1 | 20 | 1 | 140 |
| 386 | G0295 | S | 0.1 | 20 | 1 | 2 |
| 387 | G0296 | S | 0.1 | 5 | 1 | 2 |
| 388 | G0297 | S | 0.1 | 90 | 1 | 2 |
| 389 | G0298 | S | 0.1 | 5 | 1 | 35 |
| 390 | G0299 | S | 0.1 | 5 | 1 | 110 |
| 391 | G0300 | S | 0.1 | 5 | 1 | 2 |
| 392 | G0301 | S | 0.1 | 20 | 1 | 2 |
| 393 | G0302 | S | 0.2 | 5 | 1 | 8 |

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|---|---|---|---|---|---|---|
| 431 | H0010 | S | 0.1 | 20 | 1 | 50 |
| 432 | H0012 | S | 0.1 | 5 | 1 | 35 |
| 433 | H0014 | S | 0.1 | 60 | 1 | 60 |
| 434 | H0017 | S | 0.1 | 5 | 1 | 55 |
| 435 | H0018 | S | 0.1 | 5 | 1 | 90 |
| 436 | H0019 | S | 0.1 | 20 | 1 | 2 |
| 437 | H0020 | S | 0.1 | 5 | 1 | 70 |
| 438 | H0021 | S | 0.1 | 20 | 1 | 75 |
| 439 | H0022 | S | 0.1 | 5 | 1 | 25 |
| 440 | H0023 | S | 0.1 | 5 | 1 | 55 |
| 441 | H0024 | S | 0.1 | 5 | 1 | 22 |
| 442 | H0025 | S | 0.1 | 5 | 1 | 10 |
| 443 | H0026 | S | 0.1 | 5 | 1 | 30 |
| 444 | I0001 | S | 0.1 | 5 | 1 | 2 |
| 445 | I0002 | S | 0.1 | 5 | 1 | 2 |
| 446 | I0003 | S | 0.1 | 5 | 1 | 2 |
| 447 | I0004 | S | 0.1 | 5 | 1 | 2 |
| 448 | I0005 | S | 0.2 | 5 | 1 | 2 |
| 449 | I0006 | S | 0.2 | 5 | 1 | 2 |
| 450 | I0007 | S | 0.1 | 5 | 1 | 2 |
| 451 | I0008 | S | 0.1 | 5 | 1 | 2 |
| 452 | I0009 | S | 0.2 | 5 | 1 | 2 |
| 453 | I0010 | S | 0.1 | 5 | 1 | 4 |
| 454 | I0011 | S | 0.1 | 5 | 1 | 2 |
| 455 | I0012 | S | 0.1 | 5 | 1 | 2 |
| 456 | I0013 | S | 0.1 | 5 | 1 | 2 |
| 457 | I0014 | S | 0.2 | 5 | 1 | 4 |
| 458 | I0015 | S | 0.2 | 5 | 1 | 2 |
| 459 | I0016 | S | 0.2 | 5 | 1 | 2 |
| 460 | I0017 | S | 0.4 | 5 | 1 | 2 |
| 461 | I0018 | S | 0.2 | 5 | 1 | 4 |
| 462 | I0019 | S | 0.2 | 5 | 1 | 2 |
| 463 | I0020 | S | 0.1 | 5 | 1 | 6 |
| 464 | I0021 | S | 0.1 | 5 | 2 | 4 |
| 465 | I0022 | S | 0.4 | 5 | 1 | 4 |
| 466 | I0023 | S | 0.1 | 5 | 1 | 2 |
| 467 | I0024 | S | 0.1 | 5 | 1 | 2 |
| 468 | I0025 | S | 0.2 | 5 | 1 | 4 |
| 469 | I0026 | S | 0.1 | 5 | 1 | 2 |
| 470 | I0027 | S | 0.1 | 5 | 1 | 200 |
| 471 | I0029 | S | 0.1 | 5 | 1 | 300 |
| 472 | I0030 | S | 0.2 | 5 | 1 | 70 |
| 473 | I0031 | S | 0.4 | 5 | 1 | 200 |
| 474 | I0032 | S | 0.1 | 5 | 1 | 32 |
| 475 | I0033 | S | 0.1 | 5 | 2 | 40 |
| 476 | I0034 | S | 0.1 | 5 | 2 | 2 |
| 477 | I0035 | S | 0.1 | 20 | 1 | 52 |
| 478 | I0036 | S | 0.1 | 10 | 1 | 120 |
| 479 | I0037 | S | 0.4 | 5 | 1 | 110 |
| 480 | I0038 | S | 0.2 | 5 | 1 | 80 |
| 481 | I0039 | S | 0.1 | 5 | 1 | 70 |
| 482 | I0040 | S | 0.1 | 5 | 1 | 130 |
| 483 | I0041 | S | 0.1 | 5 | 1 | 200 |
| 484 | I0042 | S | 0.1 | 5 | 1 | 4 |
| 485 | I0043 | S | 0.1 | 5 | 1 | 90 |
| 486 | I0044 | S | 0.1 | 5 | 1 | 6 |
| 487 | I0045 | S | 0.1 | 20 | 1 | 180 |
| 488 | I0046 | S | 0.1 | 10 | 1 | 300 |
| 489 | I0047 | S | 0.1 | 5 | 1 | 800 |
| 490 | I0048 | S | 0.1 | 5 | 1 | 75 |
| 491 | I0049 | S | 0.2 | 5 | 1 | 12 |
| 492 | I0050 | S | 0.8 | 5 | 1 | 34 |
| 493 | I0051 | S | 0.4 | 270 | 1 | 75 |

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|---|---|---|---|---|---|---|
| 529 | I0087 | S | 0.2 | 30 | 1 | 55 |
| 530 | I0088 | S | 0.1 | 10 | 1 | 130 |
| 531 | I0089 | S | 0.1 | 5 | 1 | 800 |
| 532 | I0090 | S | 0.1 | 5 | 1 | 150 |
| 533 | I0091 | S | 0.1 | 5 | 1 | 48 |
| 534 | I0092 | S | 0.1 | 5 | 1 | 210 |
| 535 | I0093 | S | 0.1 | 5 | 1 | 55 |
| 536 | I0094 | S | 0.1 | 5 | 1 | 145 |
| 537 | I0095 | S | 0.1 | 5 | 1 | 80 |
| 538 | I0096 | S | 0.1 | 5 | 1 | 155 |
| 539 | I0097 | S | 0.1 | 5 | 1 | 28 |
| 540 | I0098 | S | 0.1 | 5 | 1 | 115 |
| 541 | I0099 | S | 0.1 | 5 | 1 | 180 |
| 542 | I0100 | S | 0.1 | 5 | 1 | 120 |
| 543 | I0101 | S | 0.1 | 20 | 1 | 55 |
| 544 | I0102 | S | 0.1 | 5 | 1 | 80 |
| 545 | I0103 | S | 0.4 | 5 | 1 | 40 |
| 546 | I0104 | S | 0.1 | 10 | 1 | 35 |
| 547 | I0105 | S | 0.1 | 20 | 1 | 275 |
| 548 | I0106 | S | 2.4 | 1420 | 1 | 55 |
| 549 | I0107 | S | 0.1 | 20 | 10 | 35 |
| 550 | I0108 | S | 1.8 | 40 | 1 | 30 |
| 551 | I0109 | S | 0.1 | 50 | 1 | 60 |
| 552 | I0110 | S | 1.6 | 2400 | 1 | 550 |
| 553 | I0111 | S | 0.2 | 460 | 1 | 28 |
| 554 | I0112 | S | 0.1 | 1320 | 1 | 15 |
| 555 | I0113 | S | 0.1 | 20 | 1 | 2 |
| 556 | I0114 | S | 0.1 | 20 | 1 | 6 |
| 557 | I0115 | S | 0.1 | 140 | 1 | 40 |
| 558 | I0116 | S | 0.1 | 10 | 1 | 110 |
| 559 | I0117 | S | 0.1 | 5 | 1 | 18 |
| 560 | I0118 | S | 0.1 | 5 | 1 | 65 |
| 561 | I0119 | S | 0.1 | 5 | 1 | 38 |
| 562 | I0120 | S | 0.1 | 200 | 1 | 125 |
| 563 | I0121 | S | 0.1 | 10 | 1 | 55 |
| 564 | I0122 | S | 0.1 | 5 | 1 | 95 |
| 565 | I0123 | S | 0.1 | 5 | 1 | 40 |
| 566 | I0124 | S | 0.1 | 5 | 1 | 38 |
| 567 | I0125 | S | 0.1 | 5 | 1 | 85 |
| 568 | I0126 | S | 0.1 | 5 | 1 | 150 |
| 569 | I0127 | S | 0.1 | 5 | 1 | 190 |
| 570 | I0128 | S | 0.1 | 5 | 1 | 35 |
| 571 | I0129 | S | 0.1 | 5 | 1 | 145 |
| 572 | I0130 | S | 0.1 | 5 | 1 | 130 |
| 573 | I0131 | S | 0.1 | 5 | 1 | 300 |
| 574 | I0132 | S | 0.1 | 5 | 1 | 18 |
| 575 | I0133 | S | 0.1 | 5 | 1 | 65 |
| 576 | I0134 | S | 0.1 | 5 | 1 | 20 |
| 577 | I0135 | S | 0.4 | 40 | 1 | 15 |
| 578 | I0136 | S | 0.1 | 5 | 1 | 60 |
| 579 | I0137 | S | 0.1 | 5 | 1 | 15 |
| 580 | I0138 | S | 0.1 | 30 | 1 | 2 |
| 581 | I0139 | S | 0.1 | 90 | 1 | 2 |
| 582 | I0140 | S | 0.6 | 580 | 1 | 2 |
| 583 | I0141 | S | 0.1 | 70 | 1 | 2 |
| 584 | I0142 | S | 0.1 | 20 | 1 | 2 |
| 585 | I0143 | S | 0.1 | 400 | 1 | 2 |
| 586 | I0144 | S | 0.1 | 20 | 1 | 25 |
| 587 | I0145 | S | 0.1 | 5 | 1 | 120 |
| 588 | I0146 | S | 0.1 | 5 | 1 | 60 |
| 589 | I0147 | S | 0.1 | 5 | 1 | 40 |
| 590 | I0148 | S | 0.1 | 5 | 1 | 90 |
| 591 | I0149 | S | 0.1 | 5 | 1 | 50 |

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|---|---|---|---|---|---|---|
| 628 | I0187 | S | 0.1 | 5 | 1 | 25 |
| 629 | I0188 | S | 0.1 | 5 | 1 | 65 |
| 630 | I0189 | S | 0.1 | 5 | 1 | 55 |
| 631 | I0190 | S | 0.1 | 5 | 1 | 28 |
| 632 | I0191 | S | 0.1 | 5 | 1 | 22 |
| 633 | I0192 | S | 0.1 | 200 | 1 | 90 |
| 634 | I0193 | S | 0.1 | 20 | 1 | 35 |
| 635 | I0194 | S | 0.1 | 30 | 1 | 200 |
| 636 | I0195 | S | 0.1 | 5 | 1 | 125 |
| 637 | I0196 | S | 0.1 | 5 | 1 | 40 |
| 638 | I0197 | S | 0.1 | 5 | 2 | 120 |
| 639 | I0198 | S | 0.1 | 10 | 2 | 20 |
| 640 | I0199 | S | 0.1 | 5 | 1 | 25 |
| 641 | I0200 | S | 0.1 | 5 | 1 | 25 |
| 642 | I0201 | S | 0.1 | 10 | 1 | 80 |
| 643 | I0202 | S | 0.1 | 5 | 1 | 40 |
| 644 | I0203 | S | 0.1 | 5 | 1 | 22 |
| 645 | I0204 | S | 0.1 | 5 | 1 | 55 |
| 646 | I0205 | S | 0.1 | 5 | 1 | 55 |
| 647 | I0206 | S | 0.1 | 5 | 1 | 14 |
| 648 | I0207 | S | 0.1 | 5 | 1 | 32 |
| 649 | I0208 | S | 0.1 | 5 | 2 | 55 |
| 650 | I0209 | S | 0.1 | 5 | 1 | 80 |
| 651 | I0210 | S | 0.1 | 5 | 1 | 38 |
| 652 | I0211 | S | 0.1 | 5 | 1 | 40 |
| 653 | I0212 | S | 0.1 | 5 | 1 | 60 |
| 654 | I0213 | S | 0.1 | 5 | 1 | 2 |
| 655 | I0214 | S | 0.1 | 30 | 1 | 200 |
| 656 | I0215 | S | 0.1 | 5 | 1 | 55 |
| 657 | I0216 | S | 0.1 | 5 | 1 | 25 |
| 658 | I0217 | S | 0.1 | 5 | 1 | 2 |
| 659 | I0218 | S | 0.1 | 5 | 1 | 2 |
| 660 | I0219 | S | 0.1 | 5 | 1 | 2 |
| 661 | I0220 | S | 0.1 | 5 | 1 | 6 |
| 662 | I0222 | S | 0.1 | 5 | 1 | 95 |
| 663 | I0223 | S | 0.1 | 5 | 1 | 4 |
| 664 | I0224 | S | 0.1 | 5 | 1 | 10 |
| 665 | I0225 | S | 0.1 | 100 | 1 | 22 |
| 666 | I0226 | S | 0.1 | 20 | 1 | 12 |
| 667 | I0227 | S | 0.1 | 5 | 1 | 2 |
| 668 | I0228 | S | 0.1 | 5 | 1 | 2 |
| 669 | I0229 | S | 0.1 | 5 | 1 | 8 |
| 670 | I0230 | S | 0.1 | 5 | 1 | 4 |
| 671 | I0231 | S | 0.1 | 20 | 1 | 12 |
| 672 | I0232 | S | 0.1 | 5 | 1 | 22 |
| 673 | I0233 | S | 0.1 | 5 | 1 | 12 |
| 674 | I0234 | S | 0.1 | 5 | 1 | 45 |
| 675 | I0235 | S | 0.1 | 70 | 1 | 80 |
| 676 | I0236 | S | 0.1 | 5 | 1 | 22 |
| 677 | I0237 | S | 0.1 | 5 | 1 | 4 |
| 678 | I0238 | S | 0.1 | 5 | 1 | 40 |
| 679 | I0239 | S | 0.1 | 5 | 1 | 20 |
| 680 | I0240 | S | 0.1 | 5 | 1 | 50 |
| 681 | I0241 | S | 0.1 | 5 | 1 | 110 |
| 682 | I0242 | S | 0.1 | 5 | 1 | 10 |
| 683 | I0243 | S | 0.1 | 5 | 1 | 18 |
| 684 | I0244 | S | 0.2 | 10 | 1 | 65 |
| 685 | I0245 | S | 0.1 | 5 | 1 | 55 |
| 686 | I0246 | S | 0.1 | 5 | 1 | 80 |
| 687 | I0247 | S | 0.1 | 5 | 1 | 75 |
| 688 | I0248 | S | 0.1 | 5 | 1 | 68 |
| 689 | I0249 | S | 0.1 | 5 | 1 | 70 |
| 690 | I0250 | S | 0.1 | 5 | 1 | 50 |

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|---|---|---|---|---|---|---|
| 727 | J0017 | S | 0.1 | 20 | 3 | 2 |
| 728 | J0018 | S | 0.1 | 10 | 2 | 2 |
| 729 | J0019 | S | 0.1 | 20 | 1 | 2 |
| 730 | J0020 | S | 0.1 | 10 | 1 | 4 |
| 731 | J0021 | S | 0.1 | 20 | 1 | 2 |
| 732 | J0022 | S | 0.1 | 10 | 1 | 8 |
| 733 | J0023 | S | 0.1 | 5 | 1 | 6 |
| 734 | J0024 | S | 0.1 | 5 | 1 | 10 |
| 735 | J0025 | S | 0.1 | 5 | 1 | 22 |
| 736 | J0026 | S | 0.1 | 5 | 1 | 28 |
| 737 | J0027 | S | 0.4 | 5 | 1 | 22 |
| 738 | J0028 | S | 0.1 | 5 | 1 | 25 |
| 739 | J0029 | S | 0.1 | 5 | 1 | 32 |
| 740 | J0030 | S | 0.1 | 5 | 1 | 22 |
| 741 | J0031 | S | 0.1 | 5 | 1 | 20 |
| 742 | J0032 | S | 0.1 | 5 | 1 | 22 |
| 743 | J0033 | S | 0.1 | 5 | 1 | 20 |
| 744 | J0034 | S | 0.1 | 5 | 1 | 60 |
| 745 | J0035 | S | 0.1 | 5 | 2 | 55 |
| 746 | J0036 | S | 0.1 | 5 | 1 | 35 |
| 747 | J0037 | S | 0.1 | 5 | 1 | 28 |
| 748 | J0038 | S | 0.1 | 20 | 1 | 110 |
| 749 | J0039 | S | 0.1 | 5 | 1 | 55 |
| 750 | L0001 | S | 0.1 | 40 | 1 | 18 |
| 751 | L0003 | S | 0.1 | 5 | 1 | 2 |
| 752 | L0051 | S | 0.1 | 10 | 1 | 2 |
| 753 | L0056 | S | 0.1 | 5 | 1 | 2 |
| 754 | L0057 | S | 0.6 | 5 | 3 | 2 |
| 755 | L0061 | S | 0.1 | 5 | 1 | 2 |
| 756 | L0064 | S | 0.2 | 5 | 1 | 2 |
| 757 | L0101 | S | 0.1 | 5 | 1 | 2 |
| 758 | L0102 | S | 0.1 | 5 | 1 | 4 |
| 759 | L0103 | S | 0.1 | 5 | 1 | 2 |
| 760 | L0104 | S | 0.1 | 5 | 1 | 2 |
| 761 | L0105 | S | 0.1 | 5 | 1 | 2 |
| 762 | L0106 | S | 0.1 | 5 | 1 | 2 |
| 763 | L0107 | S | 0.1 | 5 | 1 | 2 |
| 764 | L0108 | S | 0.1 | 5 | 2 | 2 |
| 765 | L0109 | S | 0.1 | 5 | 1 | 2 |
| 766 | L0110 | S | 0.2 | 5 | 1 | 2 |
| 767 | L0111 | S | 0.1 | 5 | 1 | 2 |
| 768 | L0112 | S | 0.1 | 10 | 1 | 2 |
| 769 | L0113 | S | 0.1 | 5 | 1 | 2 |
| 770 | L0114 | S | 0.1 | 10 | 1 | 28 |
| 771 | L0115 | S | 0.1 | 5 | 1 | 12 |
| 772 | L0116 | S | 0.1 | 120 | 1 | 6 |
| 773 | L0117 | S | 0.1 | 70 | 1 | 8 |
| 774 | L0118 | S | 0.1 | 20 | 1 | 40 |
| 775 | L0119 | S | 0.1 | 5 | 1 | 2 |
| 776 | L0120 | S | 0.1 | 5 | 1 | 6 |
| 777 | L0121 | S | 0.1 | 5 | 1 | 12 |
| 778 | L0122 | S | 0.1 | 20 | 1 | 8 |
| 779 | L0123 | S | 0.1 | 5 | 1 | 10 |
| 780 | P0001 | S | 0.1 | 80 | 1 | 55 |
| 781 | P0003 | S | 0.1 | 10 | 1 | 4 |
| 782 | P0004 | S | 0.1 | 20 | 1 | 2 |
| 783 | P0005 | S | 0.1 | 5 | 1 | 2 |
| 784 | P0006 | S | 0.1 | 5 | 1 | 2 |
| 785 | P0008 | S | 0.1 | 10 | 1 | 2 |
| 786 | P0009 | S | 0.1 | 5 | 1 | 2 |
| 787 | P0010 | S | 0.1 | 5 | 1 | 2 |
| 788 | P0011 | S | 0.1 | 10 | 1 | 2 |
| 789 | P0012 | S | 0.1 | 20 | 1 | 2 |

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| 826 | S0037 | S | 0.1 | 5 | 1 | 4 |
| 827 | S0038 | S | 0.1 | 5 | 1 | 15 |
| 828 | S0039 | S | 0.1 | 5 | 1 | 6 |
| 829 | S0040 | S | 0.1 | 5 | 1 | 2 |
| 830 | S0041 | S | 0.1 | 5 | 1 | 2 |
| 831 | S0042 | S | 0.1 | 5 | 1 | 4 |
| 832 | S0043 | S | 0.1 | 5 | 1 | 2 |
| 833 | S0044 | S | 0.1 | 5 | 1 | 25 |
| 834 | S0045 | S | 0.1 | 5 | 1 | 12 |
| 835 | S0046 | S | 0.1 | 5 | 1 | 2 |
| 836 | S0047 | S | 0.1 | 20 | 1 | 2 |
| 837 | S0048 | S | 0.1 | 5 | 1 | 4 |
| 838 | S0049 | S | 0.1 | 5 | 1 | 2 |
| 839 | S0050 | S | 0.1 | 10 | 1 | 4 |
| 840 | S0051 | S | 0.1 | 5 | 1 | 2 |
| 841 | S0052 | S | 0.1 | 5 | 1 | 4 |
| 842 | S0053 | S | 0.1 | 60 | 1 | 2 |
| 843 | S0054 | S | 0.1 | 5 | 1 | 2 |
| 844 | S0055 | S | 0.1 | 5 | 1 | 2 |
| 845 | S0056 | S | 0.1 | 5 | 1 | 6 |
| 846 | S0057 | S | 0.2 | 10 | 1 | 2 |
| 847 | S0058 | S | 0.1 | 5 | 1 | 2 |
| 848 | S0059 | S | 0.1 | 20 | 1 | 2 |
| 849 | S0060 | S | 0.1 | 5 | 1 | 2 |
| 850 | S0061 | S | 0.1 | 5 | 1 | 2 |
| 851 | S0062 | S | 0.1 | 10 | 1 | 2 |
| 852 | S0063 | S | 0.1 | 10 | 1 | 2 |
| 853 | S0064 | S | 0.2 | 5 | 1 | 2 |
| 854 | S0065 | S | 0.1 | 5 | 1 | 2 |
| 855 | S0066 | S | 0.2 | 5 | 1 | 2 |
| 856 | S0067 | S | 0.1 | 5 | 1 | 2 |
| 857 | S0068 | S | 0.1 | 5 | 1 | 2 |
| 858 | S0069 | S | 0.1 | 5 | 1 | 6 |
| 859 | S0070 | S | 0.1 | 10 | 1 | 4 |
| 860 | S0071 | S | 0.4 | 5 | 1 | 2 |
| 861 | S0072 | S | 0.2 | 20 | 1 | 4 |
| 862 | S0073 | S | 0.1 | 5 | 1 | 10 |
| 863 | S0074 | S | 0.1 | 5 | 1 | 12 |
| 864 | S0075 | S | 0.4 | 5 | 1 | 45 |
| 865 | S0076 | S | 0.1 | 10 | 1 | 2 |
| 866 | S0077 | S | 0.2 | 5 | 1 | 80 |
| 867 | S0078 | S | 0.1 | 20 | 1 | 625 |
| 868 | S0079 | S | 0.1 | 5 | 1 | 175 |
| 869 | S0080 | S | 0.1 | 5 | 1 | 8 |
| 870 | S0081 | S | 0.2 | 5 | 1 | 2 |
| 871 | S0082 | S | 0.1 | 5 | 1 | 8 |
| 872 | S0083 | S | 0.1 | 5 | 1 | 2 |
| 873 | S0084 | S | 0.2 | 5 | 1 | 2 |
| 874 | S0085 | S | 0.1 | 5 | 1 | 2 |
| 875 | S0086 | S | 0.1 | 10 | 1 | 2 |
| 876 | S0087 | S | 0.1 | 5 | 1 | 10 |
| 877 | S0088 | S | 0.1 | 5 | 1 | 2 |
| 878 | S0089 | S | 0.1 | 5 | 1 | 2 |
| 879 | S0090 | S | 0.1 | 5 | 1 | 2 |
| 880 | S0091 | S | 0.1 | 20 | 1 | 6 |
| 881 | S0092 | S | 0.1 | 5 | 1 | 6 |
| 882 | S0093 | S | 0.1 | 5 | 1 | 2 |
| 883 | S0094 | S | 0.1 | 40 | 35 | 1 |
| 884 | S0095 | S | 0.1 | 5 | 2 | 1 |
| 885 | S0096 | S | 0.1 | 5 | 2 | 1 |
| 886 | S0097 | S | 0.1 | 10 | 6 | 1 |
| 887 | S0098 | S | 0.1 | 5 | 45 | 1 |
| 888 | S0099 | S | 0.2 | 5 | 8 | 1 |

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|---|---|---|---|---|---|---|
| 925 | S0136 | S | 0.1 | 5 | 1 | 75 |
| 926 | S0137 | S | 0.1 | 5 | 1 | 22 |
| 927 | S0138 | S | 0.1 | 5 | 1 | 55 |
| 928 | S0139 | S | 0.1 | 5 | 1 | 18 |
| 929 | S0140 | S | 0.1 | 5 | 1 | 35 |
| 930 | S0141 | S | 0.1 | 5 | 1 | 2 |
| 931 | S0142 | S | 1.0 | 5 | 1 | 45 |
| 932 | S0143 | S | 0.8 | 5 | 1 | 35 |
| 933 | S0144 | S | 0.1 | 5 | 1 | 2 |
| 934 | S0145 | S | 0.1 | 5 | 1 | 2 |
| 935 | S0146 | S | 0.1 | 5 | 1 | 4 |
| 936 | S0147 | S | 0.1 | 5 | 1 | 2 |
| 937 | S0148 | S | 0.2 | 5 | 1 | 4 |
| 938 | S0149 | S | 0.1 | 5 | 1 | 2 |
| 939 | S0150 | S | 0.8 | 5 | 1 | 6 |
| 940 | S0151 | S | 0.1 | 20 | 1 | 2 |
| 941 | S0152 | S | 0.1 | 5 | 1 | 2 |
| 942 | S0153 | S | 0.1 | 5 | 1 | 65 |
| 943 | S0154 | S | 0.1 | 5 | 1 | 25 |
| 944 | S0155 | S | 0.1 | 5 | 1 | 4 |
| 945 | S0156 | S | 0.1 | 5 | 1 | 6 |
| 946 | S0157 | S | 0.2 | 5 | 1 | 6 |
| 947 | S0158 | S | 0.1 | 5 | 1 | 2 |
| 948 | S0159 | S | 0.1 | 10 | 1 | 2 |
| 949 | S0160 | S | 0.1 | 5 | 1 | 4 |
| 950 | S0161 | S | 0.1 | 440 | 1 | 2 |
| 951 | S0162 | S | 0.1 | 5 | 1 | 2 |
| 952 | S0163 | S | 0.1 | 340 | 1 | 2 |
| 953 | S0164 | S | 0.1 | 5 | 1 | 2 |
| 954 | S0165 | S | 0.1 | 5 | 1 | 2 |
| 955 | S0166 | S | 0.1 | 30 | 1 | 2 |
| 956 | S0167 | S | 0.1 | 5 | 1 | 4 |
| 957 | S0168 | S | 0.1 | 5 | 1 | 2 |
| 958 | S0169 | S | 0.1 | 20 | 1 | 2 |
| 959 | S0170 | S | 0.1 | 5 | 1 | 2 |
| 960 | S0171 | S | 0.1 | 10 | 1 | 2 |
| 961 | S0172 | S | 0.1 | 30 | 1 | 2 |
| 962 | S0173 | S | 0.1 | 20 | 1 | 2 |
| 963 | S0174 | S | 0.1 | 5 | 1 | 2 |
| 964 | S0175 | S | 0.1 | 5 | 1 | 2 |
| 965 | S0176 | S | 0.1 | 5 | 1 | 2 |
| 966 | S0177 | S | 0.1 | 5 | 1 | 4 |
| 967 | S0178 | S | 0.1 | 10 | 1 | 2 |
| 968 | S0179 | S | 0.1 | 5 | 1 | 2 |
| 969 | S0180 | S | 0.1 | 5 | 1 | 4 |
| 970 | S0181 | S | 0.1 | 5 | 1 | 2 |
| 971 | S0182 | S | 0.1 | 5 | 1 | 2 |
| 972 | S0183 | S | 0.1 | 5 | 1 | 2 |
| 973 | S0184 | S | 0.1 | 5 | 1 | 2 |
| 974 | S0185 | S | 0.1 | 5 | 1 | 2 |
| 975 | S0186 | S | 0.1 | 5 | 1 | 2 |
| 976 | S0187 | S | 0.1 | 5 | 1 | 2 |
| 977 | S0188 | S | 0.1 | 5 | 1 | 2 |
| 978 | S0189 | S | 0.1 | 5 | 1 | 2 |
| 979 | S0190 | S | 0.1 | 10 | 1 | 2 |
| 980 | S0191 | S | 0.1 | 5 | 2 | 2 |
| 981 | S0192 | S | 0.2 | 10 | 1 | 2 |
| 982 | S0193 | S | 0.1 | 10 | 1 | 15 |
| 983 | S0194 | S | 0.1 | 5 | 1 | 2 |
| 984 | S0195 | S | 0.1 | 10 | 1 | 6 |
| 985 | S0196 | S | 0.2 | 5 | 2 | 2 |
| 986 | S0197 | S | 0.2 | 5 | 1 | 2 |

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|---|---|---|---|---|---|---|
| 1023 | S0234 | S | 0.1 | 20 | 1 | 2 |
| 1024 | S0235 | S | 0.1 | 5 | 1 | 2 |
| 1025 | S0236 | S | 0.1 | 10 | 1 | 2 |
| 1026 | S0237 | S | 0.1 | 10 | 1 | 2 |
| 1027 | S0238 | S | 0.1 | 10 | 1 | 2 |
| 1028 | S0239 | S | 0.1 | 20 | 1 | 2 |
| 1029 | S0240 | S | 0.1 | 10 | 1 | 2 |
| 1030 | S0241 | S | 0.1 | 30 | 1 | 2 |
| 1031 | S0242 | S | 0.1 | 5 | 1 | 4 |
| 1032 | S0243 | S | 0.1 | 5 | 1 | 2 |
| 1033 | S0244 | S | 0.1 | 5 | 1 | 25 |
| 1034 | S0245 | S | 0.1 | 5 | 1 | 2 |
| 1035 | S0246 | S | 0.1 | 5 | 1 | 6 |
| 1036 | S0247 | S | 0.1 | 20 | 1 | 140 |
| 1037 | S0248 | S | 1.8 | 20 | 1 | 75 |
| 1038 | S0249 | S | 1.2 | 5 | 1 | 50 |
| 1039 | S0250 | S | 0.1 | 5 | 1 | 70 |
| 1040 | S0251 | S | 0.1 | 5 | 1 | 2 |
| 1041 | S0252 | S | 0.1 | 20 | 1 | 2 |
| 1042 | S0253 | S | 0.1 | 5 | 1 | 2 |
| 1043 | S0254 | S | 0.2 | 20 | 1 | 2 |
| 1044 | S0255 | S | 0.1 | 5 | 1 | 2 |
| 1045 | S0256 | S | 0.1 | 10 | 1 | 10 |
| 1046 | S0257 | S | 0.1 | 5 | 1 | 2 |
| 1047 | S0258 | S | 0.1 | 5 | 1 | 2 |
| 1048 | S0259 | S | 0.1 | 5 | 1 | 8 |
| 1049 | S0260 | S | 0.1 | 5 | 1 | 2 |
| 1050 | S0261 | S | 0.1 | 60 | 1 | 2 |
| 1051 | S0262 | S | 0.1 | 20 | 1 | 35 |
| 1052 | S0263 | S | 0.1 | 5 | 1 | 25 |
| 1053 | S0264 | S | 0.1 | 10 | 1 | 6 |
| 1054 | S0265 | S | 0.1 | 5 | 1 | 2 |
| 1055 | S0266 | S | 0.1 | 5 | 1 | 40 |
| 1056 | S0267 | S | 0.1 | 5 | 1 | 2 |
| 1057 | S0268 | S | 0.1 | 5 | 1 | 2 |
| 1058 | S0269 | S | 0.1 | 5 | 1 | 2 |
| 1059 | S0270 | S | 0.1 | 540 | 1 | 75 |
| 1060 | S0271 | S | 0.1 | 30 | 1 | 2 |
| 1061 | S0272 | S | 0.1 | 40 | 1 | 30 |
| 1062 | S0273 | S | 0.1 | 20 | 1 | 60 |
| 1063 | S0274 | S | 0.1 | 5 | 1 | 22 |
| 1064 | S0275 | S | 0.1 | 5 | 1 | 55 |
| 1065 | S0276 | S | 0.1 | 10 | 1 | 15 |
| 1066 | S0277 | S | 0.1 | 5 | 1 | 90 |
| 1067 | S0278 | S | 0.1 | 20 | 1 | 45 |
| 1068 | S0279 | S | 0.1 | 10 | 1 | 22 |
| 1069 | S0280 | S | 0.1 | 5 | 1 | 6 |
| 1070 | S0281 | S | 0.1 | 5 | 1 | 20 |
| 1071 | S0282 | S | 0.1 | 5 | 1 | 30 |
| 1072 | S0283 | S | 0.1 | 5 | 1 | 10 |
| 1073 | S0284 | S | 0.1 | 5 | 1 | 12 |
| 1074 | S0285 | S | 0.1 | 10 | 1 | 10 |
| 1075 | S0286 | S | 0.1 | 5 | 2 | 50 |
| 1076 | S0287 | S | 0.1 | 10 | 1 | 75 |
| 1077 | S0288 | S | 0.1 | 20 | 1 | 15 |
| 1078 | S0289 | S | 0.1 | 30 | 1 | 18 |
| 1079 | S0290 | S | 0.1 | 30 | 1 | 30 |
| 1080 | S0291 | S | 0.1 | 5 | 1 | 60 |
| 1081 | S0292 | S | 0.1 | 5 | 1 | 30 |
| 1082 | S0293 | S | 0.1 | 10 | 1 | 12 |
| 1083 | S0294 | S | 0.1 | 20 | 1 | 20 |
| 1084 | S0295 | S | 0.2 | 5 | 1 | 55 |
| 1085 | S0296 | S | 0.1 | 5 | 1 | 2 |

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|---|---|---|---|---|---|---|
| 1123 | S0334 | S | 0.1 | 5 | 1 | 2 |
| 1124 | S0335 | S | 0.2 | 5 | 1 | 2 |
| 1125 | S0336 | S | 0.1 | 10 | 1 | 2 |
| 1126 | S0337 | S | 0.2 | 5 | 1 | 2 |
| 1127 | S0338 | S | 0.1 | 5 | 1 | 2 |
| 1128 | S0339 | S | 0.2 | 10 | 1 | 8 |
| 1129 | S0340 | S | 0.4 | 5 | 1 | 15 |
| 1130 | S0341 | S | 0.1 | 10 | 1 | 25 |
| 1131 | S0342 | S | 0.1 | 5 | 1 | 2 |
| 1132 | S0343 | S | 0.1 | 5 | 1 | 28 |
| 1133 | S0344 | S | 0.1 | 5 | 1 | 2 |
| 1134 | S0345 | S | 0.1 | 5 | 1 | 2 |
| 1135 | S0346 | S | 0.2 | 5 | 1 | 25 |
| 1136 | S0347 | S | 0.1 | 5 | 1 | 2 |
| 1137 | S0348 | S | 0.1 | 5 | 1 | 2 |
| 1138 | S0349 | S | 0.1 | 10 | 1 | 2 |
| 1139 | S0350 | S | 0.1 | 5 | 1 | 2 |
| 1140 | S0351 | S | 0.1 | 5 | 1 | 2 |
| 1141 | S0352 | S | 0.1 | 5 | 1 | 2 |
| 1142 | S0353 | S | 0.1 | 20 | 1 | 2 |
| 1143 | S0354 | S | 0.2 | 20 | 1 | 2 |
| 1144 | S0355 | S | 0.1 | 40 | 1 | 2 |
| 1145 | S0356 | S | 0.1 | 20 | 1 | 6 |
| 1146 | S0357 | S | 0.2 | 220 | 1 | 20 |
| 1147 | S0358 | S | 0.1 | 10 | 1 | 12 |
| 1148 | S0359 | S | 0.1 | 5 | 1 | 22 |
| 1149 | S0360 | S | 0.1 | 5 | 1 | 25 |
| 1150 | S0361 | S | 0.1 | 5 | 1 | 18 |
| 1151 | S0362 | S | 0.1 | 5 | 1 | 25 |
| 1152 | S0363 | S | 0.1 | 5 | 1 | 6 |
| 1153 | S0364 | S | 0.1 | 5 | 1 | 20 |
| 1154 | S0365 | S | 0.1 | 10 | 1 | 15 |
| 1155 | S0366 | S | 0.1 | 5 | 1 | 12 |
| 1156 | S0367 | S | 0.1 | 10 | 1 | 22 |
| 1157 | S0368 | S | 0.1 | 5 | 1 | 4 |
| 1158 | S0369 | S | 0.1 | 20 | 1 | 4 |
| 1159 | S0370 | S | 0.2 | 5 | 1 | 4 |
| 1160 | S0371 | S | 0.2 | 5 | 1 | 6 |
| 1161 | S0372 | S | 0.2 | 5 | 1 | 2 |
| 1162 | S0373 | S | 0.1 | 5 | 1 | 28 |
| 1163 | S0374 | S | 0.1 | 5 | 1 | 6 |
| 1164 | S0375 | S | 0.1 | 10 | 1 | 30 |
| 1165 | S0376 | S | 0.1 | 5 | 1 | 40 |
| 1166 | S0377 | S | 0.1 | 5 | 1 | 25 |
| 1167 | S0378 | S | 0.1 | 5 | 1 | 45 |
| 1168 | S0379 | S | 0.2 | 5 | 1 | 20 |
| 1169 | S0380 | S | 0.1 | 5 | 1 | 15 |
| 1170 | S0381 | S | 0.1 | 5 | 1 | 17 |
| 1171 | S0382 | S | 0.1 | 5 | 1 | 22 |
| 1172 | S0383 | S | 0.1 | 5 | 1 | 60 |
| 1173 | S0384 | S | 0.1 | 5 | 1 | 28 |
| 1174 | S0385 | S | 0.1 | 20 | 1 | 65 |
| 1175 | S0386 | S | 0.2 | 10 | 1 | 2 |
| 1176 | S0387 | S | 0.1 | 20 | 1 | 10 |
| 1177 | S0388 | S | 0.1 | 5 | 1 | 2 |
| 1178 | S0389 | S | 0.1 | 10 | 1 | 4 |
| 1179 | S0390 | S | 0.1 | 20 | 1 | 10 |
| 1180 | S0391 | S | 0.1 | 5 | 1 | 40 |
| 1181 | S0392 | S | 0.2 | 5 | 1 | 2 |
| 1182 | S0393 | S | 0.1 | 5 | 1 | 2 |
| 1183 | S0394 | S | 0.1 | 5 | 1 | 2 |
| 1184 | S0395 | S | 0.1 | 5 | 1 | 4 |

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|---|---|---|---|---|---|---|
| 1221 | S0432 | S | 0.1 | 5 | 1 | 15 |
| 1222 | S0433 | S | 0.1 | 5 | 1 | 12 |
| 1223 | S0434 | S | 0.1 | 5 | 1 | 25 |
| 1224 | S0435 | S | 0.1 | 5 | 1 | 45 |
| 1225 | S0436 | S | 0.1 | 5 | 1 | 15 |
| 1226 | S0437 | S | 0.1 | 10 | 1 | 15 |
| 1227 | S0438 | S | 0.1 | 5 | 1 | 22 |
| 1228 | S0439 | S | 0.1 | 5 | 1 | 20 |
| 1229 | S0440 | S | 0.1 | 5 | 1 | 18 |
| 1230 | S0441 | S | 0.1 | 5 | 2 | 3 |
| 1231 | S0442 | S | 0.1 | 5 | 1 | 2 |
| 1232 | S0443 | S | 0.1 | 5 | 1 | 2 |
| 1233 | S0444 | S | 0.1 | 5 | 1 | 24 |
| 1234 | S0445 | S | 0.1 | 5 | 1 | 40 |
| 1235 | S0446 | S | 0.1 | 5 | 1 | 20 |
| 1236 | S0447 | S | 0.1 | 5 | 1 | 50 |
| 1237 | S0448 | S | 0.1 | 5 | 1 | 36 |
| 1238 | S0449 | S | 0.1 | 5 | 1 | 38 |
| 1239 | S0450 | S | 0.1 | 5 | 1 | 32 |
| 1240 | S0451 | S | 0.1 | 5 | 1 | 26 |
| 1241 | S0452 | S | 0.1 | 5 | 1 | 34 |
| 1242 | S0453 | S | 0.1 | 5 | 1 | 34 |
| 1243 | S0454 | S | 0.1 | 5 | 1 | 48 |
| 1244 | S0455 | S | 0.1 | 5 | 1 | 40 |
| 1245 | S0456 | S | 0.1 | 5 | 1 | 2 |
| 1246 | S0457 | S | 0.1 | 5 | 1 | 46 |
| 1247 | S0458 | S | 0.1 | 5 | 1 | 75 |
| 1248 | S0459 | S | 0.1 | 5 | 1 | 28 |
| 1249 | S0460 | S | 0.1 | 5 | 1 | 160 |
| 1250 | S0461 | S | 0.1 | 5 | 1 | 60 |
| 1251 | S0462 | S | 0.1 | 5 | 1 | 2 |
| 1252 | S0463 | S | 0.1 | 30 | 1 | 180 |
| 1253 | S0464 | S | 0.1 | 5 | 1 | 30 |
| 1254 | S0465 | S | 0.1 | 5 | 1 | 200 |
| 1255 | S0466 | S | 0.1 | 5 | 1 | 75 |
| 1256 | S0467 | S | 0.1 | 5 | 1 | 24 |
| 1257 | S0468 | S | 0.1 | 5 | 1 | 14 |
| 1258 | S0469 | S | 0.1 | 5 | 1 | 52 |
| 1259 | S0470 | S | 0.1 | 10 | 1 | 34 |
| 1260 | S0471 | S | 0.2 | 5 | 1 | 2 |
| 1261 | S0472 | S | 0.1 | 40 | 2 | 32 |
| 1262 | S0473 | S | 0.1 | 5 | 1 | 20 |
| 1263 | S0474 | S | 0.1 | 5 | 1 | 4 |
| 1264 | S0475 | S | 0.1 | 5 | 1 | 6 |
| 1265 | S0476 | S | 0.1 | 5 | 1 | 24 |
| 1266 | S0477 | S | 0.1 | 5 | 1 | 22 |
| 1267 | S0478 | S | 0.1 | 5 | 1 | 60 |
| 1268 | S0479 | S | 0.1 | 5 | 1 | 170 |
| 1269 | S0480 | S | 0.1 | 5 | 1 | 80 |
| 1270 | S0481 | S | 0.1 | 10 | 1 | 2 |
| 1271 | S0482 | S | 0.1 | 5 | 1 | 28 |
| 1272 | S0483 | S | 0.1 | 5 | 2 | 28 |
| 1273 | S0484 | S | 0.1 | 5 | 1 | 10 |
| 1274 | S0485 | S | 0.1 | 5 | 1 | 50 |
| 1275 | S0486 | S | 0.1 | 5 | 1 | 20 |
| 1276 | S0487 | S | 0.1 | 5 | 1 | 26 |
| 1277 | S0488 | S | 0.1 | 5 | 1 | 26 |
| 1278 | S0489 | S | 0.1 | 5 | 2 | 14 |
| 1279 | S0490 | S | 0.1 | 5 | 1 | 22 |
| 1280 | S0491 | S | 0.1 | 5 | 1 | 22 |
| 1281 | S0492 | S | 0.1 | 5 | 1 | 24 |
| 1282 | S0493 | S | 0.1 | 5 | 1 | 50 |
| 1283 | S0494 | S | 0.1 | 5 | 1 | 36 |

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|---|---|---|---|---|---|---|
| 1320 | S0532 | S | 0.2 | 20 | 1 | 60 |
| 1321 | S0533 | S | 0.1 | 5 | 1 | 28 |
| 1322 | S0534 | S | 0.1 | 20 | 1 | 24 |
| 1323 | S0535 | S | 0.1 | 10 | 1 | 16 |
| 1324 | S0536 | S | 0.1 | 10 | 1 | 28 |
| 1325 | S0537 | S | 0.1 | 5 | 1 | 38 |
| 1326 | S0538 | S | 0.1 | 5 | 1 | 34 |
| 1327 | S0539 | S | 0.1 | 5 | 1 | 32 |
| 1328 | S0540 | S | 0.1 | 5 | 1 | 48 |
| 1329 | S0541 | S | 0.1 | 10 | 1 | 24 |
| 1330 | S0542 | S | 0.1 | 10 | 1 | 26 |
| 1331 | S0543 | S | 0.1 | 5 | 1 | 110 |
| 1332 | S0544 | S | 0.1 | 5 | 1 | 48 |
| 1333 | S0545 | S | 0.1 | 5 | 1 | 40 |
| 1334 | S0546 | S | 0.1 | 5 | 1 | 30 |
| 1335 | S0547 | S | 0.1 | 5 | 1 | 30 |
| 1336 | S0548 | S | 0.1 | 5 | 1 | 40 |
| 1337 | S0549 | S | 0.1 | 5 | 1 | 48 |
| 1338 | S0550 | S | 0.1 | 5 | 1 | 2 |
| 1339 | S0551 | S | 0.1 | 5 | 1 | 2 |
| 1340 | S0552 | S | 0.1 | 5 | 1 | 2 |
| 1341 | S0553 | S | 0.1 | 30 | 1 | 2 |
| 1342 | S0554 | S | 0.1 | 100 | 1 | 4 |
| 1343 | S0555 | S | 0.1 | 5 | 1 | 2 |
| 1344 | S0556 | S | 0.1 | 5 | 1 | 2 |
| 1345 | S0557 | S | 0.1 | 20 | 1 | 2 |
| 1346 | S0558 | S | 0.1 | 5 | 1 | 8 |
| 1347 | S0559 | S | 0.1 | 10 | 1 | 2 |
| 1348 | S0560 | S | 0.1 | 20 | 1 | 28 |
| 1349 | S0561 | S | 0.1 | 5 | 1 | 26 |
| 1350 | S0562 | S | 0.1 | 5 | 1 | 28 |
| 1351 | S0563 | S | 0.1 | 5 | 1 | 10 |
| 1352 | S0564 | S | 0.1 | 5 | 1 | 52 |
| 1353 | S0565 | S | 0.1 | 5 | 1 | 24 |
| 1354 | S0566 | S | 0.1 | 5 | 1 | 32 |
| 1355 | S0567 | S | 0.1 | 5 | 1 | 52 |
| 1356 | S0568 | S | 0.1 | 5 | 1 | 80 |
| 1357 | S0569 | S | 0.1 | 5 | 1 | 60 |
| 1358 | S0570 | S | 0.1 | 5 | 1 | 75 |
| 1359 | S0571 | S | 0.1 | 5 | 1 | 100 |
| 1360 | S0572 | S | 0.1 | 5 | 1 | 26 |
| 1361 | S0573 | S | 0.1 | 5 | 1 | 40 |
| 1362 | S0574 | S | 0.1 | 5 | 1 | 28 |
| 1363 | S0575 | S | 0.2 | 5 | 1 | 50 |
| 1364 | S0576 | S | 0.1 | 5 | 1 | 10 |
| 1365 | S0577 | S | 0.1 | 5 | 1 | 48 |
| 1366 | S0578 | S | 0.1 | 5 | 1 | 150 |
| 1367 | S0579 | S | 0.2 | 5 | 2 | 50 |
| 1368 | S0580 | S | 0.2 | 110 | 1 | 60 |
| 1369 | S0581 | S | 0.8 | 5 | 1 | 6 |
| 1370 | S0582 | S | 0.4 | 5 | 1 | 6 |
| 1371 | S0583 | S | 5.4 | 1720 | 1 | 28 |
| 1372 | S0584 | S | 0.2 | 20 | 1 | 32 |
| 1373 | S0585 | S | 0.1 | 5 | 1 | 32 |
| 1374 | S0586 | S | 0.1 | 5 | 1 | 22 |
| 1375 | S0587 | S | 0.1 | 5 | 1 | 75 |
| 1376 | S0588 | S | 0.1 | 5 | 1 | 22 |
| 1377 | S0589 | S | 0.2 | 5 | 1 | 36 |
| 1378 | S0590 | S | 0.2 | 5 | 1 | 24 |
| 1379 | S0591 | S | 0.4 | 5 | 1 | 2 |
| 1380 | S0592 | S | 0.2 | 5 | 1 | 40 |
| 1381 | S0593 | S | 0.4 | 5 | 1 | 26 |
| 1382 | S0594 | S | 0.6 | 5 | 2 | 40 |

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|---|---|---|---|---|---|---|
| 1418 | S0630 | S | 0.1 | 10 | 1 | 10 |
| 1419 | S0631 | S | 0.1 | 5 | 1 | 22 |
| 1420 | S0632 | S | 0.2 | 5 | 2 | 6 |
| 1421 | S0633 | S | 1.4 | 300 | 1 | 2 |
| 1422 | S0634 | S | 0.1 | 40 | 1 | 26 |
| 1423 | S0635 | S | 0.1 | 5 | 1 | 4 |
| 1424 | S0636 | S | 0.1 | 5 | 1 | 2 |
| 1425 | S0637 | S | 0.1 | 5 | 1 | 2 |
| 1426 | S0638 | S | 0.6 | 5 | 1 | 2 |
| 1427 | S0639 | S | 0.1 | 5 | 1 | 10 |
| 1428 | S0640 | S | 0.1 | 5 | 1 | 2 |
| 1429 | S0641 | S | 0.1 | 5 | 1 | 20 |
| 1430 | S0642 | S | 0.1 | 5 | 2 | 32 |
| 1431 | S0643 | S | 0.2 | 70 | 1 | 18 |
| 1432 | S0644 | S | 0.1 | 5 | 1 | 16 |
| 1433 | S0645 | S | 0.1 | 5 | 1 | 16 |
| 1434 | S0646 | S | 0.2 | 5 | 1 | 34 |
| 1435 | S0647 | S | 0.1 | 5 | 1 | 40 |
| 1436 | S0648 | S | 0.2 | 5 | 1 | 30 |
| 1437 | S0649 | S | 0.2 | 5 | 1 | 32 |
| 1438 | S0650 | S | 0.1 | 5 | 1 | 10 |
| 1439 | S0651 | S | 0.2 | 5 | 1 | 6 |
| 1440 | S0652 | S | 0.2 | 140 | 1 | 90 |
| 1441 | S0653 | S | 0.1 | 260 | 1 | 12 |
| 1442 | S0654 | S | 0.1 | 5 | 1 | 6 |
| 1443 | S0655 | S | 0.1 | 5 | 1 | 30 |
| 1444 | S0656 | S | 0.1 | 5 | 1 | 8 |
| 1445 | S0657 | S | 0.1 | 5 | 1 | 12 |
| 1446 | S0658 | S | 0.1 | 5 | 1 | 12 |
| 1447 | S0659 | S | 0.1 | 5 | 1 | 24 |
| 1448 | S0660 | S | 0.1 | 5 | 1 | 70 |
| 1449 | S0661 | S | 0.1 | 30 | 1 | 52 |
| 1450 | S0662 | S | 0.1 | 5 | 1 | 22 |
| 1451 | S0663 | S | 0.1 | 5 | 1 | 2 |
| 1452 | S0664 | S | 0.1 | 5 | 1 | 2 |
| 1453 | S0665 | S | 0.1 | 20 | 1 | 2 |
| 1454 | S0666 | S | 0.1 | 5 | 1 | 6 |
| 1455 | S0667 | S | 0.1 | 20 | 1 | 4 |
| 1456 | S0668 | S | 0.1 | 5 | 1 | 2 |
| 1457 | S0669 | S | 0.1 | 5 | 1 | 2 |
| 1458 | S0670 | S | 0.1 | 5 | 2 | 16 |
| 1459 | S0671 | S | 0.1 | 5 | 1 | 10 |
| 1460 | S0672 | S | 0.1 | 5 | 2 | 12 |
| 1461 | S0673 | S | 0.1 | 5 | 1 | 8 |
| 1462 | S0674 | S | 0.1 | 5 | 1 | 2 |
| 1463 | S0675 | S | 0.1 | 10 | 1 | 2 |
| 1464 | S0676 | S | 0.1 | 5 | 1 | 2 |
| 1465 | S0677 | S | 0.1 | 5 | 1 | 2 |
| 1466 | S0678 | S | 0.1 | 5 | 1 | 2 |
| 1467 | S0679 | S | 0.1 | 5 | 1 | 2 |
| 1468 | S0680 | S | 0.1 | 5 | 1 | 2 |
| 1469 | S0681 | S | 0.1 | 5 | 1 | 2 |
| 1470 | S0682 | S | 0.1 | 5 | 1 | 2 |
| 1471 | S0683 | S | 0.1 | 5 | 1 | 2 |
| 1472 | S0684 | S | 0.2 | 5 | 1 | 2 |
| 1473 | S0685 | S | 0.1 | 5 | 1 | 2 |
| 1474 | S0686 | S | 0.1 | 20 | 1 | 2 |
| 1475 | S0687 | S | 0.1 | 5 | 1 | 2 |
| 1476 | S0688 | S | 0.1 | 5 | 1 | 2 |
| 1477 | S0689 | S | 0.1 | 10 | 1 | 2 |
| 1478 | S0690 | S | 0.1 | 5 | 1 | 2 |
| 1479 | S0691 | S | 0.1 | 5 | 1 | 28 |
| 1480 | S0692 | S | 0.1 | 50 | 1 | 2 |

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|---|---|---|---|---|---|---|
| 1517 | S0740 | S | 0.2 | 320 | 1 | 2 |
| 1518 | S0741 | S | 0.6 | 5 | 29 | 2 |
| 1519 | S0742 | S | 0.2 | 5 | 6 | 2 |
| 1520 | S0743 | S | 0.1 | 10 | 2 | 2 |
| 1521 | S0744 | S | 0.6 | 5 | 6 | 2 |
| 1522 | S0745 | S | 0.8 | 20 | 47 | 2 |
| 1523 | S0746 | S | 0.1 | 5 | 2 | 2 |
| 1524 | S0747 | S | 0.1 | 10 | 1 | 2 |
| 1525 | S0748 | S | 0.1 | 5 | 1 | 2 |
| 1526 | S0749 | S | 0.1 | 5 | 6 | 2 |
| 1527 | S0750 | S | 0.2 | 5 | 19 | 2 |
| 1528 | S0751 | S | 0.1 | 5 | 15 | 2 |
| 1529 | S0752 | S | 0.1 | 10 | 2 | 2 |
| 1530 | S0753 | S | 0.1 | 10 | 5 | 2 |
| 1531 | S0754 | S | 0.1 | 5 | 1 | 2 |
| 1532 | S0755 | S | 0.1 | 5 | 1 | 2 |
| 1533 | S0756 | S | 0.1 | 20 | 1 | 2 |
| 1534 | S0757 | S | 0.1 | 5 | 1 | 2 |
| 1535 | S0758 | S | 0.1 | 5 | 1 | 2 |
| 1536 | S0759 | S | 0.2 | 40 | 1 | 4 |
| 1537 | S0760 | S | 0.2 | 60 | 1 | 2 |
| 1538 | S0761 | S | 0.4 | 5 | 1 | 2 |
| 1539 | S0762 | S | 0.1 | 20 | 1 | 4 |
| 1540 | S0763 | S | 0.1 | 5 | 1 | 2 |
| 1541 | S0764 | S | 0.1 | 5 | 1 | 2 |
| 1542 | S0765 | S | 0.1 | 5 | 1 | 2 |
| 1543 | S0766 | S | 0.4 | 5 | 32 | 2 |
| 1544 | S0767 | S | 0.1 | 20 | 5 | 2 |
| 1545 | S0768 | S | 0.1 | 5 | 2 | 2 |
| 1546 | S0769 | S | 1.0 | 5 | 2 | 2 |
| 1547 | S0770 | S | 0.1 | 5 | 1 | 2 |
| 1548 | S0771 | S | 0.1 | 5 | 7 | 2 |
| 1549 | S0772 | S | 0.1 | 5 | 8 | 2 |
| 1550 | S0773 | S | 0.1 | 5 | 7 | 2 |
| 1551 | S0774 | S | 0.1 | 5 | 2 | 2 |
| 1552 | S0775 | S | 0.1 | 5 | 2 | 2 |
| 1553 | S0776 | S | 0.1 | 5 | 1 | 2 |

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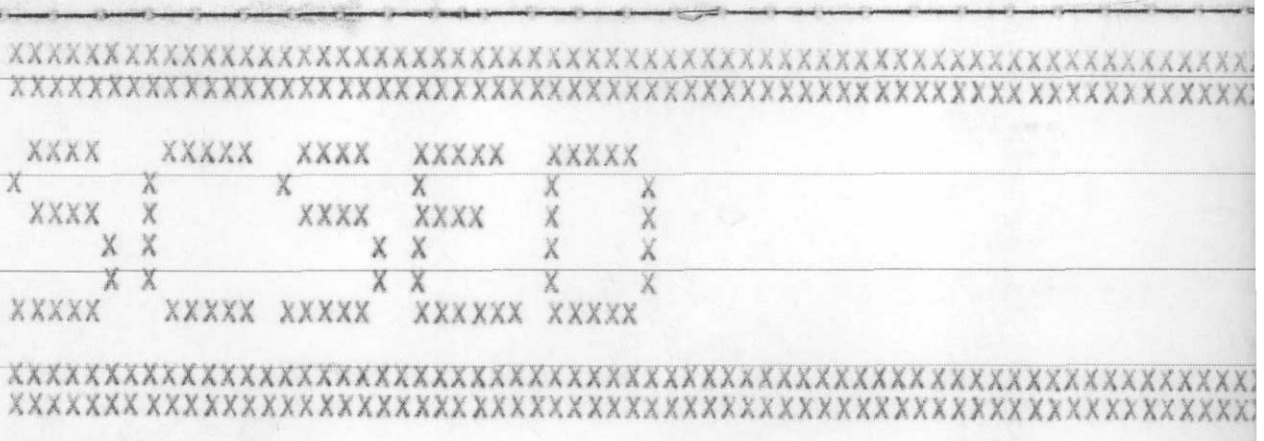
|---|---|---|---|---|---|---|
| 940 | L0084 | G | 0.1 | -10 | 1 | 2456 |
| 950 | L0085 | G | 0.1 | -10 | 2 | 5471 |
| 960 | L0124 | G | 13. | 260 | 0 | 0 |
| 970 | L0126 | G | 37.7 | 36749 | 0 | 0 |
| 980 | L0131 | G | .0 | 0 | 0 | 0 |
| 990 | L0132 | G | 5.2 | 540 | 0 | 0 |
| 1000 | P0013 | G | .0 | -10 | 0 | 1903 |
| 1010 | B0193 | H | .0 | 0 | 0 | 5313 |
| 1020 | B0196 | H | 0.3 | 0 | 0 | 793 |
| 1030 | B0213 | H | .0 | 0 | 0 | 714 |
| 1040 | L0151 | H | 0.2 | -10 | 0 | 476 |
| 1050 | L0152 | H | 0.1 | -10 | 0 | 238 |
| 1060 | L0153 | H | 0.1 | -10 | 0 | 396 |
| 1070 | L0154 | H | 0.2 | 10 | 0 | 396 |
| 1080 | L0155 | H | 0.1 | 10 | 0 | 555 |
| 1090 | L0156 | H | 0.1 | -10 | 0 | 872 |
| 1100 | L0157 | H | 0.1 | -10 | 0 | 872 |
| 1110 | L0158 | H | 0.1 | -10 | 0 | 476 |
| 1120 | L0159 | H | 0.1 | -10 | 0 | 238 |
| 1130 | L0160 | H | 0.1 | -10 | 0 | 1110 |
| 1140 | L0161 | H | 0.1 | -10 | 0 | 1031 |
| 1150 | L0162 | H | 0.1 | -10 | 0 | 396 |
| 1160 | L0163 | H | 0.1 | -10 | 0 | 952 |
| 1170 | L0164 | H | 0.1 | 40 | 0 | 317 |
| 1180 | L0165 | H | 0.1 | -10 | 0 | 1110 |
| 1190 | L0166 | H | 0.1 | -10 | 0 | 952 |
| 1200 | L0167 | H | 0.1 | -10 | 0 | 476 |
| 1210 | L0168 | H | 0.1 | -10 | 0 | 555 |
| 1220 | L0169 | H | 0.1 | -10 | 0 | 1427 |
| 1230 | L0170 | H | 0.2 | -10 | 0 | 1269 |
| 1240 | L0171 | H | 0.1 | -10 | 0 | 0 |
| 1250 | L0172 | H | 0.1 | -10 | 0 | 159 |
| 1260 | L0173 | H | 0.1 | -10 | 0 | 238 |
| 1270 | L0174 | H | 0.1 | -10 | 0 | 634 |
| 1280 | L0175 | H | 0.2 | -10 | 0 | 238 |
| 1290 | L0176 | H | 0.1 | -10 | 0 | 396 |
| 1300 | L0177 | H | 0.2 | 10 | 0 | 317 |
| 1310 | L0178 | H | 0.1 | -10 | 0 | 634 |
| 1320 | L0179 | H | 0.1 | -10 | 0 | 872 |
| 1330 | L0180 | H | 0.1 | -10 | 0 | 714 |
| 1340 | L0181 | H | 0.1 | 10 | 0 | 1427 |
| 1350 | L0182 | H | 0.2 | -10 | 0 | 1269 |
| 1360 | L0183 | H | 0.1 | -10 | 0 | 634 |
| 1370 | L0184 | H | 0.1 | 10 | 0 | 1189 |
| 1380 | L0185 | H | 0.1 | 10 | 0 | 1031 |
| 1390 | L0186 | H | 0.1 | -10 | 0 | 159 |
| 1400 | L0187 | H | 0.1 | -10 | 0 | 238 |
| 1410 | L0188 | H | 0.1 | -10 | 0 | 317 |
| 1420 | L0189 | H | 0.1 | -10 | 0 | 79 |
| 1430 | L0190 | H | 0.1 | -10 | 0 | 79 |
| 1440 | L0191 | H | 0.1 | -10 | 0 | 2300 |
| 1450 | L0192 | H | 0.1 | -10 | 0 | 159 |
| 1460 | L0193 | H | 0.1 | -10 | 0 | 634 |
| 1470 | L0194 | H | 0.1 | -10 | 0 | 555 |
| 23840 | C0143 | V | 1.2 | 22694 | 32 | 2617 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 83 | C0083 | L | 0.1 | 20 | 2 | 11 |
| 84 | C0084 | L | 0.1 | <10 | 2 | 1 |
| 85 | C0085 | L | 0.1 | 10 | 2 | 13 |
| 86 | C0086 | L | 0.1 | 20 | 2 | 2 |
| 87 | C0087 | L | 0.1 | <10 | 2 | 6 |
| 88 | C0088 | L | 0.1 | <10 | 2 | 19 |
| 89 | C0089 | L | 0.1 | 20 | 2 | 1 |
| 90 | C0090 | L | 0.1 | 10 | 2 | 1 |
| 91 | C0091 | L | 0.1 | <10 | 2 | 2 |
| 92 | C0092 | L | 0.1 | <10 | 2 | 5 |
| 93 | C0093 | L | 0.1 | <10 | 2 | 1 |
| 94 | C0094 | L | 0.1 | 40 | 2 | 14 |
| 95 | C0095 | L | 0.1 | <10 | 2 | 1 |
| 96 | C0096 | L | 0.1 | <10 | 2 | 2 |
| 97 | C0097 | L | 0.8 | <10 | 2 | 2 |
| 98 | C0098 | L | 0.1 | 20 | 2 | 1 |
| 99 | C0099 | L | 0.1 | 20 | 1 | 2 |
| 100 | C0100 | L | 0.1 | 10 | 1 | 2 |
| 101 | C0101 | L | 0.1 | <10 | 1 | 2 |
| 102 | C0102 | L | 0.6 | <10 | 1 | 2 |
| 103 | C0103 | L | 0.4 | <10 | 1 | 2 |
| 104 | C0104 | L | 0.1 | <10 | 1 | 2 |
| 105 | C0105 | L | 0.1 | <10 | 1 | 2 |
| 106 | C0106 | L | 0.1 | <10 | 1 | 2 |
| 107 | C0107 | L | 0.1 | <10 | 1 | 2 |
| 108 | C0108 | L | 0.1 | <10 | 1 | 2 |
| 109 | C0109 | L | 0.2 | <10 | 1 | 2 |
| 219 | I0082 | L | 0.1 | <10 | 2 | 2 |
| 224 | I0087 | L | 0.1 | <10 | 1 | 6 |
| 240 | J0014 | L | 0.1 | <10 | 1 | 2 |
| 259 | J0033 | L | 0.4 | 0 | 1 | 2 |
| 260 | J0034 | L | 0.1 | <10 | 1 | 2 |
| 261 | J0035 | L | 0.1 | <10 | 1 | 2 |
| 262 | J0036 | L | 0.1 | <10 | 1 | 2 |
| 263 | J0037 | L | 0.1 | <10 | 1 | 2 |
| 264 | J0038 | L | 0.1 | <10 | 1 | 2 |
| 265 | J0039 | L | 0.1 | <10 | 1 | 2 |
| 266 | J0040 | L | 0.1 | <10 | 1 | 2 |
| 267 | J0041 | L | 0.1 | <10 | 1 | 2 |
| 268 | J0042 | L | 0.1 | <10 | 1 | 2 |
| 269 | J0043 | L | 0.1 | <10 | 1 | 2 |
| 270 | J0044 | L | 0.1 | <10 | 1 | 2 |
| 271 | J0045 | L | 0.1 | <10 | 1 | 2 |
| 272 | J0046 | L | 0.1 | <10 | 1 | 8 |
| 273 | J0047 | L | 0.1 | <10 | 4 | 2 |
| 274 | J0048 | L | 0.1 | <10 | 1 | 2 |
| 275 | J0049 | L | 1.8 | <10 | 2 | 2 |
| 276 | J0050 | L | 0.6 | 10 | 3 | 2 |
| 277 | J0051 | L | 1.2 | <10 | 25 | 2 |
| 278 | J0052 | L | 0.1 | 10 | 8 | 4 |
| 279 | J0053 | L | 0.4 | <10 | 2 | 2 |
| 280 | J0054 | L | 0.8 | 10 | 1 | 2 |
| 281 | J0055 | L | 0.1 | <10 | 1 | 2 |
| 282 | J0056 | L | 0.2 | <10 | 1 | 2 |
| 283 | J0057 | L | 0.1 | <10 | 1 | 2 |
| 284 | J0058 | L | 0.2 | <10 | 1 | 2 |
| 285 | J0059 | L | 0.1 | <10 | 1 | 2 |
| 286 | J0060 | L | 0.1 | <10 | 4 | 2 |
| 287 | J0061 | L | 0.1 | <10 | 1 | 12 |
| 288 | J0062 | L | 0.2 | <10 | 1 | 2 |
| 289 | J0063 | L | 0.1 | <10 | 1 | 2 |
| 290 | J0064 | L | 0.1 | <10 | 1 | 2 |
| 291 | J0065 | L | 0.1 | <10 | 1 | 2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 400 | S0087 | L | 0.1 | 10 | 1 | 2 |
| 401 | S0088 | L | 0.1 | 10 | 1 | 2 |
| 402 | S0089 | L | 0.1 | <10 | 1 | 2 |
| 403 | S0090 | L | 0.1 | 20 | 1 | 2 |
| 404 | S0091 | L | 0.1 | <10 | 6 | 2 |
| 405 | S0092 | L | 0.1 | <10 | 1 | 2 |
| 406 | S0093 | L | 0.1 | <10 | 1 | 2 |
| 407 | S0094 | L | 0.1 | <10 | 1 | 2 |
| 408 | S0095 | L | 0.1 | 10 | 1 | 2 |
| 409 | S0096 | L | 0.1 | 10 | 2 | 2 |
| 410 | S0097 | L | 0.1 | <10 | 1 | 2 |
| 411 | S0098 | L | 0.1 | 20 | 2 | 2 |
| 412 | S0099 | L | 0.1 | <10 | 1 | 2 |
| 413 | S0100 | L | 0.1 | <10 | 1 | 2 |
| 414 | S0101 | L | 0.1 | <10 | 6 | 2 |
| 415 | S0102 | L | 0.1 | <10 | 1 | 2 |
| 416 | S0103 | L | 0.1 | <10 | 1 | 2 |
| 417 | S0104 | L | 0.1 | <10 | 11 | 2 |
| 418 | S0105 | L | 0.1 | <10 | 57 | 2 |
| 419 | S0106 | L | 0.1 | 10 | 6 | 2 |
| 420 | S0107 | L | 0.1 | 10 | 12 | 2 |
| 421 | S0108 | L | 0.1 | <10 | 1 | 2 |
| 422 | S0109 | L | 0.2 | <10 | 5 | 4 |
| 423 | S0110 | L | 0.1 | <10 | 1 | 2 |
| 424 | S0111 | L | 0.1 | <10 | 120 | 6 |
| 425 | S0112 | L | 0.1 | <10 | 5 | 2 |
| 426 | S0113 | L | 0.1 | <10 | 1 | 2 |
| 427 | S0114 | L | 0.1 | <10 | 1 | 2 |
| 428 | S0115 | L | 0.1 | <10 | 1 | 2 |
| 429 | S0116 | L | 0.1 | <10 | 1 | 2 |
| 430 | S0117 | L | 0.2 | <10 | 1 | 2 |
| 431 | S0118 | L | 0.1 | <10 | 1 | 2 |
| 432 | S0119 | L | 0.1 | <10 | 1 | 2 |
| 433 | S0120 | L | 0.1 | <10 | 3 | 2 |
| 434 | S0121 | L | 0.1 | <10 | 1 | 2 |
| 435 | S0122 | L | 0.1 | <10 | 1 | 2 |
| 436 | S0123 | L | 0.1 | <10 | 1 | 2 |
| 437 | S0124 | L | 0.1 | <10 | 2 | 2 |
| 438 | S0125 | L | 0.1 | 30 | 5 | 2 |
| 439 | S0126 | L | 0.1 | <10 | 1 | 2 |
| 440 | S0127 | L | 0.1 | <10 | 1 | 2 |
| 441 | S0128 | L | 0.1 | <10 | 8 | 6 |
| 442 | S0129 | L | 0.1 | <10 | 1 | 2 |
| 443 | S0130 | L | 0.1 | <10 | 1 | 2 |
| 444 | S0131 | L | 0.1 | <10 | 1 | 2 |
| 445 | S0132 | L | 0.1 | <10 | 1 | 2 |
| 446 | S0133 | L | 0.1 | <10 | 1 | 2 |
| 447 | S0134 | L | 0.1 | 20 | 1 | 2 |
| 448 | S0135 | L | 0.1 | <10 | 1 | 2 |
| 449 | S0136 | L | 0.1 | 10 | 1 | 2 |
| 450 | S0137 | L | 0.1 | <10 | 1 | 2 |
| 451 | S0138 | L | 0.1 | <10 | 1 | 2 |
| 452 | S0139 | L | 0.1 | <10 | 1 | 2 |
| 453 | S0140 | L | 0.1 | <10 | 1 | 2 |
| 454 | S0141 | L | 0.1 | 0 | 1 | 2 |
| 455 | S0142 | L | 0.1 | <10 | 1 | 2 |
| 456 | S0143 | L | 0.1 | <10 | 2 | 2 |
| 457 | S0144 | L | 0.1 | <10 | 1 | 2 |
| 458 | S0145 | L | 0.1 | <10 | 1 | 2 |
| 459 | S0146 | L | 0.1 | <10 | 1 | 2 |
| 460 | S0147 | L | 0.1 | <10 | 1 | 2 |
| 461 | S0148 | L | 0.1 | <10 | 2 | 2 |
| 462 | S0149 | L | 0.1 | <10 | 1 | 2 |



```
18:39EST    03/20/79
UN: PA024288
PORT:2115082110300

END OUTPUT
000233  LINES    000000  CARDS    000000  TAPE RECORDS BILLED 0000.
```

| | | | | | | |
|---|---|---|---|---|---|---|
| 450 | C0037 | S | 0.2 | 10 | 2 | 2 |
| 460 | C0038 | S | 0.4 | <10 | 1 | 2 |
| 470 | C0039 | S | 0.1 | <10 | 1 | 2 |
| 480 | C0040 | S | 0.1 | <10 | 1 | 2 |
| 490 | C0041 | S | 0.1 | <10 | 1 | 2 |
| 500 | C0042 | S | 0.1 | <10 | 1 | 2 |
| 510 | C0043 | S | 0.1 | <10 | 1 | 2 |
| 520 | C0044 | S | 0.1 | <10 | 1 | 2 |
| 530 | C0047 | S | 0.1 | <10 | 8 | 2 |
| 540 | C0048 | S | 0.1 | <10 | 15 | 2 |
| 550 | C0049 | S | 0.1 | <10 | 1 | 2 |
| 560 | C0050 | S | 0.1 | <10 | 4 | 2 |
| 570 | C0051 | S | 0.1 | <10 | 30 | 2 |
| 580 | C0054 | S | 0.1 | <10 | 1 | 2 |
| 590 | C0055 | S | 0.1 | 140 | 2 | 2 |
| 600 | C0068 | S | 0.8 | <10 | 2 | 1 |
| 610 | G0001 | S | 0.1 | 130 | 1 | 2 |
| 620 | G0002 | S | 0.1 | 120 | 1 | 2 |
| 630 | G0003 | S | 0.1 | <10 | 1 | 2 |
| 640 | G0004 | S | 0.1 | <10 | 1 | 2 |
| 650 | G0005 | S | 0.1 | <10 | 1 | 2 |
| 660 | G0006 | S | 0.1 | <10 | 1 | 2 |
| 670 | G0007 | S | 0.1 | 10 | 1 | 2 |
| 680 | G0008 | S | 0.1 | <10 | 1 | 2 |
| 690 | G0009 | S | 0.1 | 10 | 1 | 2 |
| 700 | G0010 | S | 0.1 | <10 | 1 | 2 |
| 710 | G0011 | S | 0.1 | <10 | 1 | 2 |
| 720 | G0012 | S | 0.1 | <10 | 1 | 2 |
| 730 | G0013 | S | 0.1 | <10 | 1 | 2 |
| 740 | G0014 | S | 0.1 | <10 | 1 | 2 |
| 750 | G0015 | S | 0.1 | 10 | 2 | 2 |
| 760 | G0016 | S | 0.1 | <10 | 1 | 2 |
| 770 | G0017 | S | 0.4 | <10 | 1 | 2 |
| 780 | G0018 | S | 0.1 | <10 | 1 | 2 |
| 790 | G0019 | S | 0.1 | <10 | 1 | 2 |
| 800 | G0020 | S | 0.1 | <10 | 1 | 2 |
| 810 | G0021 | S | 0.1 | <10 | 1 | 2 |
| 820 | G0022 | S | 0.1 | 10 | 1 | 2 |
| 830 | G0023 | S | 0.1 | 10 | 1 | 2 |
| 840 | I0001 | S | 0.1 | <10 | 1 | 2 |
| 850 | I0002 | S | 0.1 | <10 | 1 | 2 |
| 860 | I0003 | S | 0.1 | 20 | 1 | 2 |
| 870 | I0004 | S | 0.1 | <10 | 1 | 2 |
| 880 | I0005 | S | 0.1 | <10 | 1 | 2 |
| 890 | I0006 | S | 0.1 | <10 | 1 | 2 |
| 900 | I0007 | S | 0.1 | <10 | 1 | 2 |
| 910 | I0008 | S | 0.1 | <10 | 1 | 2 |
| 920 | I0009 | S | 0.1 | 10 | 1 | 2 |
| 930 | I0010 | S | 0.1 | 20 | 1 | 2 |
| 940 | I0011 | S | 0.1 | 20 | 2 | 2 |
| 950 | I0012 | S | 0.1 | <10 | 1 | 2 |
| 960 | I0013 | S | 0.4 | <10 | 1 | 2 |
| 970 | I0014 | S | 0.2 | <10 | 1 | 2 |
| 980 | I0015 | S | 0.1 | 10 | 1 | 2 |
| 990 | I0016 | S | 0.2 | <10 | 1 | 2 |
| 1000 | I0017 | S | 0.1 | 420 | 5 | 2 |
| 1010 | I0018 | S | 0.1 | 10 | 1 | 2 |
| 1020 | I0019 | S | 0.1 | <10 | 1 | 2 |
| 1030 | I0020 | S | 0.1 | 10 | 1 | 2 |
| 1040 | I0021 | S | 0.1 | 10 | 2 | 2 |
| 1050 | I0022 | S | 0.2 | <10 | 1 | 2 |
| 1060 | I0023 | S | 0.2 | <10 | 1 | 2 |
| 1070 | I0024 | S | 0.1 | 10 | 1 | 2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1440 | I0061 | S | 0.1 | <10 | 79 | 2 |
| 1450 | I0062 | S | 0.1 | 10 | 1 | 2 |
| 1460 | I0063 | S | 0.1 | 30 | 2 | 2 |
| 1470 | I0064 | S | 0.4 | 1 | 1 | 2 |
| 1480 | I0065 | S | 0.1 | <10 | 1 | 2 |
| 1490 | I0066 | S | 0.1 | 30 | 1 | 10 |
| 1500 | I0067 | S | 0.1 | <10 | 1 | 2 |
| 1510 | I0068 | S | 0.1 | <10 | 1 | 2 |
| 1520 | I0069 | S | 0.1 | <10 | 1 | 2 |
| 1530 | I0070 | S | 0.1 | <10 | 1 | 2 |
| 1540 | I0071 | S | 0.1 | <10 | 1 | 2 |
| 1550 | I0072 | S | 0.1 | <10 | 1 | 2 |
| 1560 | I0073 | S | 0.2 | <10 | 2 | 2 |
| 1570 | I0074 | S | 0.1 | <10 | 1 | 2 |
| 1580 | I0075 | S | 0.1 | <10 | 1 | 2 |
| 1590 | I0076 | S | 0.1 | <10 | 5 | 2 |
| 1600 | I0077 | S | 0.1 | <10 | 1 | 2 |
| 1610 | I0078 | S | 0.1 | <10 | 1 | 2 |
| 1620 | I0079 | S | 0.1 | <10 | 1 | 2 |
| 1630 | I0080 | S | 0.1 | <10 | 1 | 2 |
| 1640 | I0081 | S | 0.1 | <10 | 1 | 2 |
| 1650 | I0083 | S | 0.1 | <10 | 2 | 6 |
| 1660 | I0084 | S | 0.1 | <10 | 1 | 2 |
| 1670 | I0085 | S | 0.1 | <10 | 1 | 2 |
| 1680 | I0086 | S | 0.1 | <10 | 1 | 2 |
| 1690 | I0086 | S | 0.1 | 20 | 1 | 2 |
| 1700 | I0089 | S | 0.1 | <10 | 1 | 2 |
| 1710 | J0001 | S | 0.1 | <10 | 1 | 2 |
| 1720 | J0002 | S | 0.1 | <10 | 1 | 2 |
| 1730 | J0003 | S | 0.1 | <10 | 1 | 2 |
| 1740 | J0004 | S | 0.1 | <10 | 1 | 2 |
| 1750 | J0005 | S | 0.4 | <10 | 1 | 2 |
| 1760 | J0006 | S | 0.1 | <10 | 1 | 2 |
| 1770 | J0007 | S | 0.1 | <10 | 1 | 2 |
| 1780 | J0008 | S | 0.1 | 20 | 1 | 2 |
| 1790 | J0009 | S | 0.1 | 10 | 1 | 2 |
| 1800 | J0010 | S | 0.1 | <10 | 1 | 2 |
| 1810 | J0011 | S | 0.1 | <10 | 1 | 2 |
| 1820 | J0012 | S | 0.1 | <10 | 1 | 2 |
| 1830 | J0013 | S | 0.1 | <10 | 3 | 2 |
| 1840 | J0015 | S | 0.1 | <10 | 1 | 2 |
| 1850 | J0016 | S | 0.1 | <10 | 1 | 2 |
| 1860 | J0017 | S | 0.1 | <10 | 1 | 2 |
| 1870 | J0018 | S | 0.1 | <10 | 1 | 2 |
| 1880 | J0019 | S | 0.1 | <10 | 1 | 2 |
| 1890 | J0020 | S | 0.1 | <10 | 1 | 2 |
| 1900 | J0021 | S | 0.1 | <10 | 1 | 2 |
| 1910 | J0022 | S | 0.1 | <10 | 1 | 2 |
| 1920 | J0023 | S | 0.1 | <10 | 1 | 2 |
| 1930 | J0024 | S | 0.1 | <10 | 1 | 2 |
| 1940 | J0025 | S | 0.1 | <10 | 1 | 2 |
| 1950 | J0026 | S | 0.1 | <10 | 2 | 2 |
| 1960 | J0027 | S | 0.1 | <10 | 1 | 2 |
| 1970 | J0028 | S | 0.1 | <10 | 1 | 2 |
| 1980 | J0029 | S | 0.1 | <10 | 1 | 2 |
| 1990 | J0030 | S | 0.1 | 10 | 1 | 2 |
| 2000 | J0031 | S | 0.1 | <10 | 1 | 2 |
| 2010 | J0032 | S | 0.1 | <10 | 1 | 2 |
| 2020 | S0001 | S | 0.1 | 10 | 1 | 2 |
| 2030 | S0002 | S | 0.1 | 10 | 1 | 2 |
| 2040 | S0003 | S | 0.1 | <10 | 2 | 2 |
| 2050 | S0004 | S | 0.1 | <10 | 2 | 2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2420 | S0041 | S | 0.1 | <10 | 1 | 2 |
| 2430 | S0042 | S | 0.1 | <10 | 1 | 2 |
| 2440 | S0043 | S | 0.1 | <10 | 1 | 2 |
| 2450 | S0044 | S | 0.1 | <10 | 1 | 2 |
| 2460 | S0045 | S | 0.4 | <10 | 1 | 2 |
| 2470 | S0046 | S | 0.1 | <10 | 1 | 2 |
| 2480 | S0047 | S | 0.1 | <10 | 1 | 2 |
| 2490 | S0048 | S | 0.1 | <10 | 1 | 2 |
| 2500 | S0049 | S | 0.1 | <10 | 1 | 2 |
| 2510 | S0050 | S | 0.1 | <10 | 1 | 2 |
| 2520 | S0051 | S | 0.1 | <10 | 1 | 2 |
| 2530 | S0052 | S | 0.1 | <10 | 1 | 2 |
| 2540 | S0053 | S | 0.1 | <10 | 1 | 2 |
| 2550 | S0054 | S | 0.1 | 200 | 1 | 2 |
| 2560 | S0055 | S | 0.1 | 70 | 6 | 2 |
| 2570 | S0056 | S | 0.1 | 20 | 1 | 4 |
| 2580 | S0057 | S | 0.1 | <10 | 1 | 2 |
| 2590 | S0058 | S | 0.1 | <10 | 1 | 2 |
| 2600 | S0059 | S | 0.1 | <10 | 1 | 22 |
| 2610 | S0060 | S | 0.1 | <10 | 1 | 2 |
| 2620 | S0061 | S | 0.1 | <10 | 1 | 2 |
| 2630 | S0062 | S | 0.1 | <10 | 1 | 2 |
| 2640 | S0063 | S | 0.1 | <10 | 1 | 2 |
| 2650 | S0064 | S | 0.1 | <10 | 1 | 2 |
| 2660 | S0065 | S | 0.1 | <10 | 1 | 2 |
| 2670 | S0066 | S | 0.1 | <10 | 1 | 2 |
| 2680 | S0067 | S | 0.1 | <10 | 1 | 2 |
| 2690 | S0068 | S | 0.1 | <10 | 1 | 2 |
| 2700 | S0069 | S | 0.1 | <10 | 1 | 2 |
| 2710 | S0070 | S | 0.1 | <10 | 1 | 2 |
| ~~2720~~ | ~~S0071~~ | ~~S~~ | ~~0.1~~ | ~~<10~~ | ~~1~~ | ~~2~~ |
| 2730 | S0072 | S | 0.1 | <10 | 1 | 2 |
| 2740 | S0074 | S | 0.1 | <10 | 1 | 28 |

# APPENDIX III

## McElhanney Survey Sites - UTM Coordinates and Elevations

All coordinates are in metric units.

| | Iden. | Easting | Northing | Elevation | Residuals | | |
|---|---|---|---|---|---|---|---|
| -222 | 9 | 0.0 | 0.0 | 0.0 | | | |
| -222 | | | | | | | |
| 1 | 29949 | 458217.27 | 7100342.85 | 768.09 | 0.01 | 0.14 | -0.11 |
| 1 | 29959 | 458331.10 | 7099954.20 | 764.75 | 0.14 | -0.27 | -0.28 |
| 2 | 29719 | 458406.09 | 7101166.77 | 778.62 | -0.12 | -0.22 | 0.37 |
| 2 | 29729 | 458922.16 | 7100482.87 | 845.46 | -0.03 | -0.44 | 0.25 |
| 2 | 29879 | 459069.06 | 7100559.22 | 859.25 | 0.10 | -0.24 | 0.36 |
| 2 | 29889 | 459184.06 | 7100707.56 | 826.30 | 1.72 | 0.71 | 0.77 |
| 2 | 29869 | 459388.56 | 7100642.70 | 869.93 | -0.20 | 0.41 | -0.01 |
| 2 | 29899 | 459293.16 | 7100924.79 | 840.70 | -0.88 | 0.27 | 0.22 |
| 3 | 29859 | 459541.39 | 7100843.17 | 867.29 | -0.01 | -0.27 | -0.30 |
| 3 | 29699 | 459258.95 | 7101705.16 | 1072.07 | -0.46 | 0.18 | -0.86 |
| 3 | 29909 | 459712.75 | 7101080.69 | 878.58 | -0.25 | -0.03 | -0.31 |
| 3 | 29849 | 459741.17 | 7100895.42 | 880.61 | -0.15 | 0.12 | -0.85 |
| 3 | 29769 | 460355.32 | 7100927.49 | 1035.93 | 0.54 | -0.59 | -0.00 |
| 4 | 29919 | 460335.13 | 7101325.49 | 952.54 | 0.15 | 0.10 | 0.29 |
| 4 | 29929 | 460745.65 | 7101325.90 | 1011.04 | 0.14 | -0.10 | 0.33 |
| 1 | 29939 | 461208.10 | 7101398.60 | 1051.37 | 0.07 | -0.03 | 0.30 |
| 2 | 29759 | 462283.20 | 7102468.99 | 1288.16 | 0.19 | 0.05 | 0.14 |
| 4 | 29519 | 464202.54 | 7102011.84 | 1536.53 | 0.09 | -0.25 | -0.21 |
| Unknown 1 | 1526 | 458279.82 | 7100150.08 | 772.79 | 0.10 | 0.07 | 0.12 |
| H-3 1 | 1036 | 458329.83 | 7099741.31 | 771.03 | -0.01 | -0.01 | -0.13 |
| H-4 1 | 1046 | 458269.68 | 7099416.11 | 767.09 | -0.02 | 0.07 | -0.26 |
| Z-36 1 | 20366 | 458532.16 | 7099618.34 | 779.68 | -0.01 | 0.13 | 0.17 |
| H-1 1 | 1016 | 458216.96 | 7100956.23 | 781.63 | -0.14 | -0.09 | -0.08 |
| H-2 1 | 1026 | 458234.95 | 7100793.05 | 779.91 | -0.14 | 0.07 | 0.12 |
| Unknown 1 | 1516 | 458249.55 | 7100560.43 | 772.19 | -0.04 | 0.04 | 0.11 |
| Unknown 2 | 1536 | 458478.82 | 7101294.27 | 778.52 | -0.04 | -0.06 | -0.04 |
| 3 | 457 | 463215.79 | 7101689.79 | 1340.37 | 0.19 | 0.17 | 0.01 |
| 4 | 467 | 463444.19 | 7103031.17 | 1148.35 | -0.37 | -0.24 | -0.38 |
| 4 | 477 | 464297.36 | 7103339.48 | 1256.85 | 0.09 | 0.19 | 0.33 |
| 4 | 29739 | 460853.58 | 7102050.46 | 1227.62 | -8.61 | 0.24 | |
| 1 | 25269 | 462133.37 | 7101189.39 | 1272.17 | -349.15 | 91.79 | -70.55 |
| 1 | 391 | 457579.13 | 7101550.54 | 851.59 | | | |
| 1 | 392 | 457603.95 | 7100907.05 | 994.56 | | | |
| 1 | 393 | 457795.95 | 7100410.33 | 867.31 | | | |
| Z-51 2 | 20516 | 458735.67 | 7101954.65 | 860.36 | | | |
| 2 | 401 | 458480.54 | 7101817.35 | 785.94 | | | |
| Z-52 2 | 20526 | 458948.64 | 7101305.29 | 924.98 | | | |
| Z-37 2 | 20376 | 458619.75 | 7100924.44 | 805.52 | | | |
| Z-50 2 | 20506 | 458781.84 | 7101156.82 | 858.76 | | | |
| CDH -10 2 | 34816 | 458773.89 | 7100793.73 | 806.21 | | | |

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|---|---|---|---|---|---|
| CDH-3 | 2 | 34836 | 458773.82 | 7100681.88 | 814.00 |
| CDH-4 | 2 | 34846 | 458772.99 | 7100601.86 | 819.96 |
| CDH-5 | 2 | 34856 | 458772.20 | 7100559.61 | 823.82 |
| Unknown | 2 | 1506 | 458874.10 | 7100686.20 | 820.79 |
| D-16 | 2 | 40166 | 459003.03 | 7100858.26 | 829.70 |
| D-15 | 2 | 40156 | 459123.24 | 7100855.50 | 829.55 |
| D-14 | 2 | 40146 | 458774.52 | 7100239.85 | 837.37 |
| | 2 | 34866 | 458781.86 | 7100382.15 | 830.63 |
| D-13 | 2 | 40136 | 459240.34 | 7100550.45 | 865.42 |
| | 2 | 405 | 459079.84 | 7099895.12 | 897.22 |
| Z-55 | 2 | 20556 | 459100.92 | 7101669.10 | 1018.74 |
| Z-53 | 2 | 20536 | 459205.45 | 7101498.69 | 1017.45 |
| Z-41 | 2 | 20416 | 459520.53 | 7099819.92 | 998.85 |
| Z-30 | 3 | 20306 | 459419.72 | 7101996.63 | 1038.67 |
| Z-31 | 3 | 20316 | 459458.82 | 7101984.51 | 1040.34 |
| Z-38 | 3 | 20386 | 459518.68 | 7101830.43 | 1022.70 |
| Z-58 | 3 | 20586 | 459353.47 | 7101813.03 | 1077.78 |
| Z-56 | 3 | 20566 | 459352.35 | 7101590.38 | 1015.93 |
| D-57 | 3 | 40576 | 459476.31 | 7101419.30 | 945.38 |
| Z-54 | 3 | 20546 | 459280.05 | 7101173.50 | 908.21 |
| Z-34 | 3 | 20346 | 459610.85 | 7101232.06 | 901.44 |
| Z-32 | 3 | 20326 | 459727.90 | 7101349.75 | 933.25 |
| D-11 | 3 | 40116 | 459391.16 | 7100804.07 | 834.51 |
| D-12 | 3 | 40126 | 459466.39 | 7100737.48 | 868.48 |
| D-10 | 3 | 40106 | 459508.82 | 7100967.22 | 856.44 |
| D-9 | 3 | 40096 | 459769.55 | 7101040.81 | 880.02 |
| Z-43 | 3 | 20436 | 460003.88 | 7100718.23 | 922.65 |
| Z-42 | 3 | 20426 | 459954.40 | 7100561.67 | 969.43 |
| | 3 | 415 | 459774.23 | 7100335.28 | 973.90 |
| Z-60 | 3 | 20606 | 459763.42 | 7102207.71 | 1057.90 |
| Z-59 | 3 | 20596 | 459535.21 | 7102059.40 | 1041.22 |
| Z-39 | 3 | 20396 | 459575.42 | 7101943.80 | 1017.58 |
| Z-44 | 3 | 20446 | 460032.34 | 7100931.34 | 945.70 |
| Z-40 | 3 | 20406 | 460239.89 | 7100446.46 | 973.12 |
| Z-61 | 3 | 20616 | 459883.00 | 7102142.51 | 1049.48 |
| Z-62 | 3 | 20626 | 459874.02 | 7101778.87 | 1006.62 |
| Z-63 | 3 | 20636 | 460052.80 | 7101675.03 | 1046.11 |
| Z-65 | 3 | 20656 | 460197.35 | 7101465.73 | 989.24 |
| D-8 | 3 | 40086 | 460055.83 | 7101300.13 | 923.38 |
| Z-45 | 3 | 20456 | 460360.77 | 7100783.78 | 1036.57 |
| Z-46 | 3 | 20466 | 460596.10 | 7100579.35 | 1089.36 |
| Z-64 | 4 | 20646 | 460265.71 | 7101891.88 | 1135.03 |
| Z-33 | 4 | 20336 | 460406.55 | 7101624.03 | 1107.79 |
| D-7 | 4 | 40076 | 460378.05 | 7101347.36 | 949.71 |

| | | | | | |
|---|---|---|---|---|---|
| D-6 | 4 | 40066 | 460484.32 | 7101315.85 | 971.21 |
| D-5 | 4 | 40056 | 460608.79 | 7101467.34 | 980.72 |
| D-4 | 4 | 40046 | 460683.03 | 7101461.39 | 995.80 |
| | 4 | 424 | 460673.56 | 7100979.20 | 1024.56 |
| | 4 | 425 | 460801.58 | 7100629.76 | 1103.11 |
| Z-66 | 4 | 20666 | 460637.02 | 7102019.91 | 1201.21 |
| D-17 | 4 | 40176 | 460871.48 | 7101393.31 | 1025.59 |
| Z-48 | 4 | 20486 | 460981.18 | 7100983.43 | 1076.19 |
| Z-49 | 4 | 20496 | 461206.22 | 7101046.71 | 1148.58 |
| Z-47 | 4 | 20476 | 461415.82 | 7100915.05 | 1208.75 |
| | 1 | 431 | 461168.83 | 7102106.61 | 1244.59 |
| | 1 | 432 | 461267.99 | 7101588.97 | 1233.86 |
| D-2 | 1 | 40026 | 461372.19 | 7101617.36 | 1072.73 |
| D-1 | 1 | 40016 | 461437.97 | 7101541.02 | 1087.38 |
| D-3 | 1 | 40036 | 461269.13 | 7101482.14 | 1055.54 |
| Z-71 | 1 | 20716 | 461352.23 | 7101455.32 | 1067.29 |
| Z-72 | 1 | 20726 | 461505.83 | 7101427.02 | 1110.42 |
| Z-75 | 1 | 20756 | 461638.10 | 7101396.33 | 1158.76 |
| | 1 | 435 | 461551.95 | 7101074.63 | 1122.54 |
| Z-74 | 1 | 20746 | 461770.34 | 7101829.57 | 1125.03 |
| Z-73 | 1 | 20736 | 461626.58 | 7101672.60 | 1116.02 |
| Z-76 | 1 | 20766 | 461802.95 | 7101457.55 | 1186.88 |
| Z-77 | 1 | 20776 | 461941.77 | 7101337.98 | 1227.40 |
| Z-78 | 1 | 20786 | 462012.07 | 7101211.11 | 1255.21 |
| Z-79 | 1 | 20796 | 462226.16 | 7101161.07 | 1283.85 |
| | 2 | 441 | 461868.25 | 7102681.24 | 1209.90 |
| | 2 | 442 | 462089.01 | 7102403.47 | 1259.72 |
| | 2 | 443 | 462235.54 | 7101995.03 | 1228.73 |
| | 2 | 444 | 462238.05 | 7101538.48 | 1233.02 |
| | 2 | 445 | 462422.08 | 7101312.79 | 1293.18 |
| Z-70 | 2 | 20706 | 462374.69 | 7102027.55 | 1255.58 |
| | 3 | 451 | 462703.46 | 7102970.43 | 1250.50 |
| Z-67 | 3 | 20676 | 462704.74 | 7102583.32 | 1307.87 |
| | 3 | 452 | 462844.21 | 7102616.96 | 1313.99 |
| | 3 | 453 | 462879.00 | 7102375.52 | 1313.00 |
| Z-68 | 3 | 20686 | 463050.56 | 7102103.17 | 1334.25 |
| | 3 | 454 | 463145.43 | 7101826.45 | 1332.89 |
| | 4 | 461 | 463381.21 | 7103335.35 | 1077.83 |
| | 4 | 463 | 463627.01 | 7102551.00 | 1389.34 |
| Z-69 | 4 | 20696 | 463851.87 | 7102326.53 | 1426.54 |
| | 4 | 464 | 463788.21 | 7102145.04 | 1431.69 |
| | 4 | 465 | 463873.78 | 7101936.65 | 1424.99 |
| | 4 | 472 | 464153.34 | 7103158.45 | 1265.53 |
| | 4 | 473 | 464218.05 | 7102755.79 | 1352.20 |

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|---|---|---|---|---|---|---|---|---|
| | 3 | 322 | 457632.71 | 7097933.24 | 790.17 | | | |
| | 3 | 323 | 458084.66 | 7098191.03 | 785.78 | | | |
| H-7 | 3 | 5076 | 458455.68 | 7098172.35 | 742.70 | | | |
| H-6 | 3 | 5066 | 458257.57 | 7098537.94 | 758.15 | | | |
| | 3 | 325 | 459020.91 | 7098236.51 | 878.59 | | | |
| H-5 | 3 | 1056 | 458463.81 | 7098771.64 | 755.80 | | | |
| | 4 | 311 | 457219.51 | 7099032.80 | 1077.44 | | | |
| | 4 | 312 | 457672.30 | 7099122.30 | 973.09 | | | |
| Z-35 | 4 | 20356 | 458474.20 | 7099032.37 | 767.93 | | | |
| | 4 | 315 | 458937.55 | 7099352.62 | 840.15 | | | |
| | 5 | 301 | 457069.11 | 7099865.39 | 907.65 | | | |
| | 5 | 302 | 457557.62 | 7099960.32 | 848.51 | | | |
| | 5 | 303 | 457933.59 | 7100160.02 | 809.88 | | | |
| | 5 | 305 | 458815.30 | 7100317.49 | 837.80 | | | |
| | 5 | 292 | 457480.61 | 7101142.29 | 1045.95 | | | |
| | 5 | 293 | 457848.59 | 7101061.55 | 913.96 | | | |
| | 5 | 295 | 458766.51 | 7101187.38 | 859.36 | | | |
| | 1 | 9 | 458322.22 | 7096122.18 | 2579.05 | | | |
| | 1 | 1 | 458216.82 | 7097196.39 | 2579.67 | | | |
| | 2 | 1 | 458126.75 | 7098162.56 | 2577.96 | | | |
| | 3 | 1 | 458040.58 | 7099149.85 | 2574.83 | | | |
| | 4 | 1 | 457953.90 | 7100148.65 | 2577.72 | | | |
| | 5 | 1 | 457869.38 | 7101145.51 | 2572.75 | | | |
| -222 | | | | | | | | |
| | 2 | 25059 | 449809.22 | 7106603.78 | 1089.28 | -0.47 | 0.78 | -0.06 Li |
| | 2 | 25049 | 450606.65 | 7101745.77 | 1417.14 | -0.30 | -0.09 | -0.05 |
| | 4 | 25709 | 455081.45 | 7106173.62 | 1159.23 | -0.32 | 0.38 | -0.23 |
| | 5 | 25069 | 458387.90 | 7102652.38 | 798.30 | 0.87 | -0.16 | 1.53 |
| | 5 | 29719 | 458406.09 | 7101166.77 | 778.62 | 0.21 | 0.09 | 0.75 |
| | 6 | 29629 | 460801.44 | 7106768.84 | 1497.85 | -1.47 | -1.66 | 0.08 |
| | 6 | 29939 | 461208.10 | 7101398.60 | 1051.37 | 0.07 | -0.06 | -0.27 |
| | 7 | 29519 | 464203.54 | 7102011.84 | 1536.53 | 0.39 | -0.52 | -0.32 |
| | 8 | 29539 | 467530.37 | 7105837.18 | 1532.42 | -0.30 | 0.70 | -0.10 |
| | 9 | 29529 | 468713.16 | 7102494.71 | 1161.27 | -0.01 | -0.94 | 0.45 |
| | 1 | 107 | 447462.06 | 7101401.68 | 1405.96 | 0.36 | -0.40 | 0.63 |
| | 3 | 87 | 452681.38 | 7101504.94 | 986.88 | -0.05 | 0.70 | -1.23 |
| | 4 | 77 | 455598.81 | 7101108.26 | 986.28 | -0.06 | 0.07 | -0.26 |
| | 8 | 37 | 466375.17 | 7101992.63 | 1352.73 | 0.37 | 0.33 | 0.31 |
| | 9 | 17 | 470842.57 | 7102460.79 | 907.00 | -0.13 | 0.06 | -0.39 |
| | 7 | 457 | 463215.79 | 7101680.79 | 1340.37 | -0.10 | -0.07 | -0.01 |
| | 7 | 467 | 463444.19 | 7103031.17 | 1148.35 | 0.37 | 0.24 | 0.38 |
| | 7 | 477 | 464097.36 | 7103339.48 | 1256.85 | -0.09 | -0.19 | -0.33 |
| | 5 | 29829 | 457389.84 | 7103913.51 | 786.18 | | | ~~54.95~~ p |

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|---|---|---|---|---|---|
| | 4 | 252 | 454334.47 | 7100343.98 | 1338.32 |
| | 4 | 253 | 454251.27 | 7098927.40 | 1189.68 |
| | 4 | 254 | 454404.62 | 7097654.52 | 1062.17 |
| | 5 | 241 | 457080.59 | 7101552.42 | 867.01 |
| | 5 | 243 | 457074.03 | 7099905.29 | 900.97 |
| | 6 | 231 | 459787.24 | 7101846.28 | 1003.19 |
| | 6 | 232 | 459772.94 | 7100340.10 | 975.32 |
| Z-87 | 6 | 20876 | 460564.97 | 7099110.74 | 1340.49 |
| | 6 | 233 | 459635.42 | 7098965.01 | 984.94 |
| | 6 | 234 | 459982.39 | 7097577.52 | 911.85 |
| | 6 | 235 | 460063.32 | 7096333.40 | 723.27 |
| Z-106 | 6 | 21066 | 461752.84 | 7099996.28 | 1342.07 |
| Z-107 | 6 | 21076 | 460990.81 | 7099434.79 | 1385.71 |
| Z-86 | 7 | 20866 | 463109.37 | 7101024.91 | 1361.27 |
| Z-98 | 7 | 20986 | 463159.92 | 7101083.89 | 1358.69 |
| Z-110 | 7 | 21106 | 462527.28 | 7100925.36 | 1334.50 |
| Z-109 | 7 | 21096 | 462661.09 | 7100695.08 | 1359.99 |
| Z-89 | 7 | 20896 | 462124.05 | 7100285.92 | 1317.13 |
| Z-88 | 7 | 20886 | 462260.00 | 7100386.68 | 1311.69 |
| Z-108 | 7 | 21086 | 462585.92 | 7100409.70 | 1359.35 |
| Z-92 | 7 | 20926 | 463005.67 | 7099650.96 | 1383.46 |
| | 7 | 223 | 462550.88 | 7098975.62 | 969.58 |
| | 7 | 224 | 462668.70 | 7097517.94 | 754.18 |
| | 7 | 225 | 462753.44 | 7096254.88 | 974.31 |
| Z-99 | 7 | 20996 | 463548.03 | 7101356.71 | 1361.46 |
| Z-85 | 7 | 20856 | 463774.66 | 7101544.80 | 1390.24 |
| Z-102 | 7 | 21026 | 464028.48 | 7101719.43 | 1433.07 |
| Z-101 | 7 | 21016 | 464329.79 | 7101687.28 | 1426.74 |
| Z-100 | 7 | 21006 | 463933.50 | 7100824.64 | 1391.35 |
| Z-104 | 7 | 21046 | 463535.02 | 7100431.69 | 1430.86 |
| Z-103 | 7 | 21036 | 463793.86 | 7100495.64 | 1393.26 |
| Z-105 | 7 | 21056 | 463905.44 | 7100143.15 | 1298.40 |
| Z-91 | 8 | 20916 | 464642.85 | 7101268.56 | 1389.04 |
| Z-90 | 8 | 20906 | 464866.24 | 7100998.88 | 1371.96 |
| Z-80 | 8 | 20806 | 465078.38 | 7100546.37 | 1269.75 |
| Z-81 | 8 | 20816 | 465011.99 | 7100320.18 | 1218.48 |
| Z-83 | 8 | 20836 | 464945.79 | 7100102.12 | 1116.42 |
| Z-82 | 8 | 20826 | 465035.47 | 7100065.79 | 1089.61 |
| Z-84 | 8 | 20846 | 465036.95 | 7099740.68 | 972.83 |
| Z-111 | 8 | 21116 | 464541.11 | 7099555.68 | 944.38 |
| Z-112 | 8 | 21126 | 464724.31 | 7099371.87 | 897.24 |
| Z-113 | 8 | 21136 | 465031.46 | 7099016.73 | 811.41 |
| | 8 | 214 | 465129.00 | 7097558.48 | 945.89 |
| | 8 | 215 | 465342.73 | 7096655.33 | 1111.72 |

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|---|---|---|---|---|
| | 1 101 | 447480.86 | 7106935.23 | 764.95 |
| | 1 102 | 447332.32 | 7105371.13 | 974.39 |
| | 1 103 | 447439.12 | 7104053.70 | 1101.56 |
| | 1 104 | 447321.38 | 7102573.79 | 1257.87 |
| | 2 92 | 450279.91 | 7105359.11 | 1110.69 |
| | 2 93 | 450076.12 | 7104172.41 | 1255.86 |
| | 2 94 | 450298.91 | 7102736.53 | 1154.15 |
| | 3 81 | 452902.13 | 7106766.10 | 889.21 |
| | 3 82 | 452860.77 | 7105522.16 | 990.99 |
| | 3 83 | 452832.16 | 7104299.43 | 1038.97 |
| | 3 84 | 452857.65 | 7102939.62 | 1277.79 |
| | 4 72 | 455744.42 | 7105474.52 | 1011.01 |
| | 4 73 | 455751.41 | 7104003.22 | 1017.21 |
| | 4 74 | 455718.87 | 7102620.44 | 1227.83 |
| | 5 61 | 458396.99 | 7106711.39 | 1257.03 |
| | 5 62 | 458365.07 | 7105369.60 | 1058.52 |
| | 5 63 | 458287.81 | 7104174.97 | 1048.93 |
| | 6 52 | 460954.19 | 7105709.24 | 1212.91 |
| | 6 53 | 460928.42 | 7103981.12 | 928.30 |
| | 6 54 | 461174.01 | 7102926.41 | 1035.32 |
| | 7 41 | 463673.71 | 7106721.19 | 1166.37 |
| | 7 42 | 463741.83 | 7105557.66 | 972.86 |
| | 7 43 | 463783.01 | 7104160.51 | 1060.02 |
| Z-94 | 7 20946 | 464927.37 | 7102381.95 | 1461.06 |
| Z-95 | 7 20956 | 465677.26 | 7102956.54 | 1395.30 |
| | 8 31 | 466658.67 | 7106858.93 | 1332.88 |
| | 8 32 | 466504.62 | 7105481.26 | 1441.34 |
| | 8 33 | 466587.08 | 7104420.45 | 1298.33 |
| Z-97 | 8 20976 | 467116.11 | 7104119.39 | 1315.00 |
| Z-96 | 8 20966 | 466007.10 | 7103259.50 | 1375.60 |
| Z-93 | 8 20936 | 467355.36 | 7104326.43 | 1322.85 |
| | 9 21 | 469351.50 | 7106879.69 | 1159.45 |
| | 9 22 | 469209.15 | 7105559.50 | 1361.81 |
| | 9 23 | 469180.07 | 7104294.66 | 1140.66 |
| | 9 25 | 469348.80 | 7101492.41 | 848.00 |
| | 9 11 | 472021.90 | 7106800.25 | 1053.17 |
| | 9 12 | 471926.95 | 7105466.40 | 1007.71 |
| | 9 13 | 472045.87 | 7104165.73 | 935.27 |
| | 9 14 | 471962.25 | 7102880.79 | 1224.89 |
| | 9 15 | 472083.46 | 7101554.52 | 1175.92 |
| | 1 9 | 447392.88 | 7103942.74 | 6056.75 |
| | 1 1 | 450119.41 | 7104005.04 | 6056.57 |
| | 2 1 | 452839.72 | 7104073.07 | 6052.83 |
| | 3 1 | 455571.31 | 7104065.79 | 6065.72 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | 1 | 458273.90 | 7104075.02 | 6054.81 | | | |
| 5 | 1 | 460969.43 | 7104129.39 | 6052.27 | | | |
| 6 | 1 | 463665.73 | 7104179.50 | 6061.16 | | | |
| 7 | 1 | 466393.87 | 7104215.42 | 6066.56 | | | |
| 8 | 1 | 469141.27 | 7104154.33 | 6065.98 | | | |
| 9 | 1 | 471906.18 | 7104100.34 | 6074.25 | | | |
| -222 | | | | | | | |
| 2 | 29609 | 449256.74 | 7100344.97 | 1455.86 | -0.65 | -0.14 | 0.42 |
| 2 | 25049 | 45[illegible]6.65 | 71[illegible]1745.77 | 1417.14 | -[illegible].1[illegible] | [illegible].7[illegible] | -[illegible].98 |
| 2 | 29599 | 450580.18 | 7096968.18 | 1068.87 | 0.09 | -0.26 | 0.14 |
| 5 | 29719 | 458406.09 | 7101166.77 | 778.62 | 0.30 | -0.42 | 0.58 |
| 5 | 29669 | 457549.44 | 7098457.75 | 984.58 | 1.17 | -0.65 | -0.16 |
| 5 | 29649 | 457999.88 | 7096499.20 | 723.93 | -0.81 | 0.24 | -0.19 |
| 6 | 29659 | 458833.76 | 7097202.26 | 810.67 | -0.81 | 1.05 | 0.65 |
| 6 | 29939 | 4612[illegible]8.1[illegible] | 71[illegible]1398.60 | 1051.37 | -0.40 | -0.33 | -1.10 |
| 7 | 29519 | 464203.54 | 7102011.84 | 1536.53 | -0.79 | 0.68 | -1.42 |
| 8 | 25019 | 466111.39 | 7097337.19 | 1317.79 | 0.42 | -0.68 | 0.28 |
| 9 | 29529 | 468713.16 | 7102494.71 | 1161.27 | 0.32 | 0.65 | 0.29 |
| 1 | 107 | 447462.[illegible]6 | 71[illegible]1401.68 | 14[illegible]5.56 | -[illegible].36 | [illegible].40 | -[illegible].63 |
| 3 | 87 | 452681.38 | 7101504.94 | 986.88 | 0.05 | -0.70 | 1.23 |
| 4 | 77 | 455598.81 | 7101108.26 | 986.28 | 0.06 | -0.07 | 0.26 |
| 8 | 37 | 466375.17 | 7101992.63 | 1352.73 | -[illegible].37 | -0.33 | -0.31 |
| 9 | 17 | 470842.57 | 7102460.79 | 907.00 | 0.13 | -0.06 | 0.39 |
| 2 | 277 | 448663.25 | 7096937.83 | 1112.99 | 0.13 | -[illegible].21 | [illegible].18 |
| 3 | 267 | 451481.73 | 7[illegible]96296.18 | 735.87 | 0.41 | 0.32 | -0.46 |
| 4 | 257 | 453951.56 | 7096542.93 | 942.72 | 0.25 | 0.28 | 0.47 |
| 5 | 247 | 457014.48 | 7096066.69 | 8[illegible]1.77 | -[illegible].27 | -[illegible].07 | -[illegible].55 |
| 7 | 227 | 461873.17 | 7096230.64 | 883.08 | 0.04 | -0.20 | 0.00 |
| 8 | 217 | 464443.19 | 7096525.67 | 850.97 | 0.19 | 0.21 | 0.02 |
| 5 | 297 | 457157.45 | 71[illegible]1[illegible]25.65 | 1[illegible]92.61 | 0.38 | [illegible].[illegible]1 | [illegible].14 |
| 1 | 281 | 446012.45 | 7101471.39 | 1115.52 | | | |
| 1 | 282 | 446151.01 | 71[illegible]0352.43 | 1[illegible]11.84 | | | |
| 1 | 283 | 446210.16 | 7098821.80 | 1254.84 | | | |
| 1 | 284 | 446313.77 | 7097459.15 | 1451.06 | | | |
| 1 | 285 | 446212.12 | 7[illegible]096146.24 | 1147.48 | | | |
| 2 | 271 | 448692.58 | 7101188.95 | 1379.46 | | | |
| 2 | 273 | 448774.6[illegible] | 7[illegible]098856.[illegible]3 | 957.[illegible]6 | | | |
| 2 | 275 | 448848.23 | 7096045.45 | 823.76 | | | |
| 3 | 261 | 451404.79 | 7101556.50 | 1204.16 | | | |
| 3 | 262 | 451452.68 | 71[illegible]0218.79 | 11[illegible]3.22 | | | |
| 3 | 263 | 451652.62 | 7098889.52 | 907.11 | | | |
| 3 | 264 | 451538.45 | 7097549.09 | 764.54 | | | |
| 4 | 251 | 4542[illegible]8.64 | 7101422.29 | 1288.09 | | | |

McElhanney

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Z-114 | 8 | 21146 | 466088.52 | 7102488.61 | 1377.87 | | | |
| Z-115 | 8 | 21156 | 466711.12 | 7102017.33 | 1332.06 | | | |
| Z-117 | 9 | 21176 | 468220.79 | 7102519.07 | 1201.36 | | | |
| Z-116 | 9 | 21166 | 467366.37 | 7101617.07 | 1251.82 | | | |
| | 9 | 202 | 468562.69 | 7100513.74 | 832.65 | | | |
| | 9 | 203 | 467931.23 | 7099345.43 | 831.27 | | | |
| | 9 | 204 | 467820.60 | 7097960.06 | 1108.58 | | | |
| | 9 | 205 | 467841.40 | 7096643.78 | 1161.60 | | | |
| | 9 | 192 | 471071.84 | 7100641.87 | 1124.23 | | | |
| | 9 | 193 | 470696.17 | 7099264.29 | 954.12 | | | |
| | 9 | 194 | 470828.85 | 7097735.14 | 1153.43 | | | |
| | 9 | 195 | 470754.87 | 7096803.62 | 1175.50 | | | |
| | 1 | 9 | 446030.60 | 7098842.25 | 6070.75 | | | |
| | 1 | 1 | 448734.60 | 7098852.06 | 6064.57 | | | |
| | 2 | 1 | 451448.36 | 7098897.16 | 6063.01 | | | |
| | 3 | 1 | 454219.96 | 7098944.51 | 6051.70 | | | |
| | 4 | 1 | 457008.91 | 7098979.12 | 6070.36 | | | |
| | 5 | 1 | 459738.48 | 7099030.95 | 6082.94 | | | |
| | 6 | 1 | 462459.08 | 7099067.30 | 6091.90 | | | |
| | 7 | 1 | 465204.26 | 7099121.12 | 6091.66 | | | |
| | 8 | 1 | 467956.49 | 7099161.66 | 6091.69 | | | |
| | 9 | 1 | 470703.80 | 7099139.28 | 6103.42 | | | |
| -222 | | | | | | | | |
| | 1 | 25039 | 449415.43 | 7093590.98 | 1129.57 | 0.81 | 0.41 | 0.82 L |
| | 2 | 29838 | 449688.18 | 7091087.02 | 660.70 | | | -1.01 |
| | 2 | 29599 | 450580.18 | 7096968.18 | 1068.87 | -0.17 | 0.47 | -0.75 |
| | 2 | 29779 | 452058.38 | 7093031.40 | 663.70 | 0.64 | -0.04 | 1.23 |
| | 3 | 29579 | 454286.59 | 7095451.34 | 1124.06 | -0.15 | 0.33 | -1.57 |
| | 5 | 29649 | 457999.88 | 7096499.20 | 723.93 | -0.23 | -0.51 | -0.07 |
| | 6 | 29559 | 462259.60 | 7094930.46 | 1292.65 | -0.06 | 0.46 | 0.19 |
| | 6 | 29569 | 462473.48 | 7093021.52 | 1159.19 | 0.64 | -0.46 | -0.21 |
| | 1 | 277 | 448663.25 | 7096937.83 | 1112.99 | -0.13 | 0.21 | -0.18 |
| | 2 | 267 | 451491.73 | 7096296.18 | 735.87 | -0.41 | -0.32 | 0.46 |
| | 3 | 257 | 453951.56 | 7096542.93 | 942.72 | -0.25 | -0.28 | -0.47 |
| | 4 | 247 | 457014.48 | 7096066.69 | 801.77 | 0.27 | 0.07 | 0.55 |
| | 6 | 227 | 461873.17 | 7096230.64 | 883.08 | -0.04 | 0.20 | -0.00 |
| | 6 | 217 | 464443.19 | 7096525.67 | 850.97 | -0.19 | -0.21 | -0.02 |
| | 4 | 25029 | 457515.97 | 7092012.93 | 1243.07 | 1314.24 | -892.50 | -398.10 |
| | 1 | 112 | 448168.99 | 7095260.08 | 778.77 | | | |
| | 1 | 113 | 448288.74 | 7093922.51 | 996.06 | | | |
| | 1 | 114 | 448161.39 | 7092621.88 | 1002.65 | | | |
| | 1 | 115 | 448369.52 | 7090964.16 | 820.33 | | | |
| | 2 | 122 | 450801.15 | 7095458.50 | 713.14 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 4 | 474 | 464368.90 | 7102448.12 | 1409.88 | | | |
| | 4 | 475 | 464582.73 | 7102148.04 | 1481.61 | | | |
| | 1 | 9 | 457903.20 | 7100511.97 | 2580.93 | | | |
| | 1 | 1 | 458743.24 | 7100787.72 | 2582.82 | | | |
| | 2 | 1 | 459642.97 | 7101086.37 | 2593.57 | | | |
| | 3 | 1 | 460496.33 | 7101393.75 | 2596.56 | | | |
| | 4 | 1 | 461346.45 | 7101711.51 | 2600.12 | | | |
| | 1 | 1 | 462179.04 | 7102003.76 | 2598.66 | | | |
| | 2 | 1 | 463002.56 | 7102287.75 | 2592.03 | | | |
| | 3 | 1 | 463678.20 | 7102508.14 | 2593.58 | | | |
| | 4 | 1 | 464251.82 | 7102697.79 | 2598.79 | | | |
| | -222 | | | | | | | |
| | 1 | 29639 | 457813.59 | 7095905.21 | 722.50 | -0.04 | -0.33 | -0.03 |
| | 1 | 29649 | 457999.88 | 7096499.20 | 723.93 | -0.31 | -0.28 | 0.04 |
| | 2 | 29659 | 458933.76 | 7097202.26 | 810.67 | -0.28 | 0.42 | 0.14 |
| | 3 | 29989 | 458468.90 | 7098033.33 | 745.40 | -0.05 | 0.97 | -0.24 |
| | 3 | 29979 | 458357.98 | 7098446.58 | 743.51 | 0.50 | 0.44 | -0.11 |
| | 3 | 29669 | 457549.44 | 7098457.75 | 984.58 | -0.31 | -0.31 | -0.24 |
| | 4 | 29969 | 458339.70 | 7099028.10 | 750.15 | 0.65 | 0.58 | 0.20 |
| | 4 | 25079 | 457782.15 | 7099593.12 | 926.29 | -0.17 | -0.47 | 0.40 |
| | 5 | 29959 | 458331.1 | 7099954.20 | 764.75 | 0.00 | -0.21 | 0.05 |
| | 5 | 29949 | 458217.27 | 7100342.85 | 768.09 | -0.07 | 0.12 | 0.10 |
| | 5 | 29729 | 458522.16 | 7100482.87 | 845.46 | 0.36 | -0.15 | -0.49 |
| | 5 | 29719 | 458406.09 | 7101166.77 | 778.62 | -0.16 | -0.30 | 0.48 |
| | 5 | 297 | 457157.45 | 7101025.65 | 1092.61 | -0.38 | -0.01 | -0.14 |
| H-4 | 4 | 1046 | 458269.68 | 7099416.11 | 767.09 | 0.02 | -0.07 | 0.26 |
| H-3 | 4 | 1036 | 458329.83 | 7099741.31 | 771.03 | 0.01 | 0.01 | 0.13 |
| Z-36 | 4 | 20366 | 458532.16 | 7099618.34 | 779.68 | 0.01 | -0.13 | -0.17 |
| Unknown | 5 | 1526 | 458279.82 | 7100150.08 | 772.79 | -0.10 | -0.07 | -0.12 |
| Unknown | 5 | 1516 | 458249.55 | 7100560.43 | 772.10 | 0.04 | -0.04 | -0.11 |
| H-2 | 5 | 1026 | 458234.85 | 7100793.05 | 779.91 | 0.14 | -0.07 | -0.12 |
| H-1 | 5 | 1016 | 458216.56 | 7100956.23 | 781.63 | 0.14 | 0.09 | 0.08 |
| Unknown | 5 | 1536 | 458478.82 | 7101294.27 | 778.52 | 0.04 | 0.06 | 0.04 |
| | 2 | 30009 | 458480.80 | 7097287.00 | 736.40 | -64.77 | -272.68 | -2.96 |
| | 1 | 341 | 457324.44 | 7096741.85 | 746.72 | | | |
| | 1 | 343 | 458302.00 | 7096187.62 | 733.11 | | | |
| | 1 | 344 | 458829.46 | 7096240.64 | 722.23 | | | |
| | 1 | 345 | 459270.08 | 7096312.75 | 724.25 | | | |
| | 2 | 331 | 457342.23 | 7097151.26 | 883.78 | | | |
| | 2 | 332 | 457817.29 | 7097136.66 | 764.09 | | | |
| | 2 | 335 | 459143.08 | 7097284.14 | 842.00 | | | |
| H-8 | 2 | 5086 | 458480.56 | 7097288.52 | 736.49 | | | |
| | 3 | 321 | 457153.76 | 7097536.96 | 832.49 | | | |

| | | | | |
|---|---|---|---|---|
| 2 | 123 | 450763.65 | 7094138.25 | 742.11 |
| 2 | 124 | 450909.60 | 7092773.50 | 791.94 |
| 2 | 125 | 450976.58 | 7091190.91 | 738.38 |
| 3 | 131 | 453509.60 | 7096640.55 | 964.04 |
| 3 | 132 | 453629.43 | 7095365.76 | 1133.14 |
| 3 | 133 | 453682.37 | 7094084.51 | 764.94 |
| 3 | 134 | 453686.65 | 7092578.35 | 875.12 |
| 3 | 135 | 453605.64 | 7091166.90 | 844.85 |
| 4 | 141 | 455974.67 | 7096667.35 | 1150.34 |
| 4 | 142 | 455939.69 | 7095244.94 | 831.73 |
| 4 | 143 | 456252.85 | 7093962.36 | 722.68 |
| 4 | 144 | 456104.58 | 7092453.16 | 903.04 |
| 4 | 145 | 456283.88 | 7091261.53 | 1181.12 |
| 5 | 152 | 458933.72 | 7095550.54 | 763.61 |
| 5 | 153 | 459035.05 | 7093881.07 | 856.82 |
| 5 | 154 | 459064.41 | 7092516.06 | 1180.56 |
| 5 | 155 | 458830.24 | 7091120.43 | 844.23 |
| 6 | 163 | 461644.17 | 7093658.56 | 1092.42 |
| 6 | 164 | 461898.67 | 7090992.63 | 1025.87 |
| 6 | 172 | 464198.45 | 7095209.77 | 1157.31 |
| 6 | 173 | 464427.43 | 7093563.37 | 919.20 |
| 6 | 174 | 464256.73 | 7092043.41 | 938.39 |
| 6 | 175 | 464447.60 | 7090780.39 | 817.19 |
| 1 | 9 | 448181.62 | 7093918.49 | 6068.68 |
| 1 | 1 | 450885.72 | 7093981.29 | 6069.66 |
| 2 | 1 | 453582.12 | 7093978.01 | 6074.24 |
| 3 | 1 | 456268.33 | 7093964.21 | 6072.99 |
| 4 | 1 | 458954.35 | 7093896.45 | 6078.56 |
| 5 | 1 | 461646.71 | 7093775.80 | 6081.11 |
| 6 | 1 | 464322.17 | 7093739.37 | 6083.84 |

# APPENDIX IV

## Notarized Statement of Costs and Statement of Qualifications

Statement of Costs: Mar 1-24, Jeff 1-112, Alec 1-60, Dave 1-24, R.D. 1-16, Smoky 1-82, D.G. 2-38, 40-41, 43, 45-53, 55, Bob 1-73

Personnel (field work) Summer 1978

| | | |
|---|---|---|
| L.J. D'Aigle - overall supervison of Total Program<br>Salary of $2000/month split between Tungsten mine area and Dublin Gulch for July, August and Sept. 1-15 | | $2500 |
| B. Lennan - Project Supervisor - | June 19-24 - camp set up 6 days at $65/day | $ 390 |
| | June 25 - July 2 - set out aerial 8 days at $65/day survey sites | $ 520 |
| | July 3-6 - Recon geologic mapping 4 days at $65/day | $ 260 |
| | July 7-8 - Set out survey sites 2 days at $65/day | $ 130 |
| | July 9-12 - Recon geologic mapping 4 days at $65/day | $ 260 |
| | July 13-18 - Assist McElhanney Surveyors 6 days at $65/day | $ 390 |
| | July 19-31 - Ray Gulch Grid - geologic mapping 13 days at $65/day<br>L39+550E, L39+700E, L39+850E, L40+000E, L40+150E, L40+300E | $ 845 |
| | Aug. 1-13 - Dublin Gulch Grid - geologic mapping 13 days at $65/day | $ 845 |
| | Total | $6140 |
| D. Lyman - Project Geologist - | June 15-25 - camp set up and supervision 11 days at $66/day | $ 726 |
| | June 26-30 - property familiarization and set out survey sites 5 days at $66/day | $ 330 |
| | July 1 - Recon mapping 1 day at $66/day | $ 66 |
| | July 3-9 - Cut and set out survey sites 7 days at $66/day | $ 462 |
| | July 10-18 - Recon geologic mapping 9 days at $66/day<br>Set up survey grids - Ray Gulch and baseline | $ 594 |
| | July 21 - Orienting McElhanney surveyors 1 day at $66/day | $ 66 |
| | July 22-25 - Geologic mapping - Line cutting 4 days at $66/day<br>Supervision - Ray Gulch L39+550E, L39+400E | $ 264 |
| | July 28-31 - Geologic mapping of Baseline 4 days at $66/day<br>Line cutting supervision | $ 264 |
| | Aug. 1 - 6 - Geologic mapping - Ray Gulch Grid - L39+550E, L39+400E, Baseline L39+700E 6 days at $66/day | $ 396 |
| | Aug. 8-11 - Geologic mapping, Line cutting supervision L39+250E, L38+800E, Cliff areas on west side of Ray Gulch - 4 days at $66/day | $ 264 |

D. Lyman - cont'd.

| | | | |
|---|---|---|---|
| Aug. 12-16 | - Geologic mapping - North Ridge area, Ray Gulch cliffs Supervision of completion of Line cutting 5 days at $66/day | | $ 330 |
| Aug. 22-25 | - Geologic and Geochemical Data Map plotting 4 days at $66/day | | $ 264 |
| Aug. 27 | - Mapping "North Ridge" area | 1 day at $66/day | $ 66 |
| Aug. 28-31 | - Geologic mapping "North Ridge" Supervise chaining of Baseline 12+100N and 2 crosslines | 4 days at $66/day | $ 264 |
| Sept. 1 | - Plot new lines on base map #5 | 1 day at $66/day | $ 66 |
| Sept. 3-4 | - Geologic mapping on Jeff claims N.E. of Potato Hills | 2 days at $66/day | $ 132 |
| Sept. 6-8 | - Crew supervision of data plotting on McElhanney | 3 days at $66/day | $ 198 |
| | Maps. Accumulated geochemical data | | |
| Sept. 9-12 | - Geologic mapping - Dublin Gulch grid L36+700E, L36+800E, | 4 days at $66/day | $ 264 |
| | Eagle Pup area Geologic mapping in Dublin Creek - placer pit areas. Also North Ridge area | | |
| Sept. 13-14 | - Plot Dublin Creek placer pit area Geology and Tin Dome geology | 2 days at $66/day | $ 132 |
| Sept. 15-17 | - Channel Sample Garnet Skarn Zone, 39+400 Skarn Zone 39+800 Skarn Zone, 40+150 Skarn Zone Quartz vein stockworks in Quartz Monzonite Plug | 3 days at $66/day | $ 198 |
| | | Total | $5346 |

Halim Arik - Geologist

| | | | | |
|---|---|---|---|---|
| June 15-28 | - Camp set up and property familiarization traverses | 14 days at | $72/day | $1008 |
| June 29 - July 2 | - Set out aerial triangulation survey sites | 4 days | " | $ 288 |
| July 3-4 | - Compass and flag northeaster end of Baseline 10+00N | 2 days | " | $ 144 |
| July 5-7 | - Recon. geologic mapping, Olive Gulch, East Potato Hill drainage of Ray Gulch, Bawn Boy Gulch | 3 days | " | $ 216 |
| July 8-13 | - Recon. geologic mapping, Lynx Dome, Haggart Dome drainages. Headwaters of Haggart Creek north of Potato Hills (Jeff, Bob, D.G. claims) | 6 days | " | $ 432 |
| July 15-16 | - Tin Dome drainages (Ann Gulch and north side drainages) recon. geologic mapping | 2 days | " | $ 144 |
| July 8 | - Recon. geologic mapping along westerly trending drainage from Haggart Dome | 1 day | " | $ 72 |
| July 19-22 | - Detailed geologic mapping "Ray Gulch" grid Line 40+45OE Prorated as parts of Lines on Mar 25-30 group | 2 days | " | $ 144 |
| July 23-26 | - Detailed geologic mapping Tin Dome area | 4 days | " | $ 288 |
| July 27 | - Recon. geologic mapping Gill Gulch | 1 day | " | $ 72 |
| July 28 - Aug. 3 | - Detailed geologic mapping Tin Dome area and geology plotting | 7 days | " | $ 504 |
| Aug. 4-6 | - Ray Gulch Grid - Detailed geologic mapping L38+20OE, L38+35OE, L38+50OE | 3 days | " | $ 216 |
| Aug. 7 | - Recon. geology at heatwaters of Haggart Creek N.E. of Potato Hills | 1 day | " | $ 72 |
| Aug. 8-12 | - Complete detailed geologic mapping on L38+20OE, L38+35OE and L38+50OE | 5 days | " | $ 360 |
| Aug. 13 | - Plot geologic data | 1 day | " | $ 72 |
| Aug. 14-16 | - Detailed geology along "Ray Gulch" cliffs Lines 38+950, L39+100, L39+250 | 3 days | " | $ 216 |
| Aug. 22-23 | - Detailed geologic mapping L38+05OE | 2 days | " | $ 144 |
| Aug. 25-31 | - Plot geologic data. Map Lines 38+05OE and 37+90OE on Dublin Gulch grid | 7 days | " | $ 504 |
| Sept. 1-4 | - Detailed geologic mapping "Dublin Gulch" grid L 37+60OE, L37+75OE | 4 days | " | $ 288 |
| Sept. 5-6 | - Detailed geologic mapping "Dublin Gulch grid L37+30OE, L37+45OE | 2 days | " | $ 144 |
| Sept. 7-9 | - Detailed geologic mapping "Dublin Gulch" grid L37+00OE, L36+80OE | 3 days | " | $ 216 |
| Sept. 10-16 | - Detailed geologic mapping "Dublin Gulch" grid - checking old workings - plotting accumulated geologic data | 7 days | " | $ 504 |
| | | | Total | $6048 |

D. Coffin - Senior Assistant and Prospector

| | | | | |
|---|---|---|---|---|
| June 15-25 | - Camp set up and property orientation | 11 days at | $65/day | $ 715 |
| June 26-30 | - Set out aerial triangulation survey grids | 5 days | " | $ 325 |
| July 3-6 | - Recon. geochem. sampling and establishing baseline and "Ray Gulch" grid line turn off points | 4 days | " | $ 260 |
| July 7-8 | - Geochem grid sampling L39+550E, L39+700E, L39+850E and L40+000E | 2 days | " | $ 130 |
| July 9-12 | - Recon. geochem. sampling Haggart Dome and Lynx Dome drainages | 4 days | " | $ 260 |
| July 15-17 | - Geochem. grid sampling L40+150E, L40+300E Sampling Olive - Dublin Gulch Quartz Monzonite plug | 3 days | " | $ 195 |
| July 26-28 | - Set up survey sites, recon geochem. sampling Lynx Dome - Lime Creek area | 3 days | " | $ 195 |
| Aug. 17 | - Plot geochemical data on base maps | 1 day | " | $ 65 |
| | | | Total | $2145 |

Rob Crow - Junior Assistant

| | | | |
|---|---|---|---|
| June 26-30 | - Camp set up | 5 days at $48/day | $ 240 |
| July 1-4 | - Assist in setting out aerial triangulation Survey sites | 4 days " | $ 192 |
| July 5-12 | - Recon. geochem. sampling, Stuttle Pup, Platinum Pup, Iron Rust Creek, Lynx Dome and Haggart Creek tributaries | 8 days " | $ 384 |
| July 14-18 | - Assist D. Lyman compassing and flagging new grid lines, "Ray Gulch" grid | 5 days " | $ 240 |
| July 20-31 | - Soil geochem. sampling :40+300E, L40+450E, L39+850E. Assisting B. Lennan in detailed geologic mapping on "Ray Gulch" grid L39+550E, L39+700E, L39+850E, L40+000E, L40+150E | 12 days " | $ 576 |
| | | Total | $1632 |

Chris Stevens - Senior Assistant

| | | | |
|---|---|---|---|
| July 31 - Aug. 13 | - Compass check on cut lines and geochem. soil sampling on L38+650E, L38+200E, Baseline E of L40+000E, L38+350E, L37+750E, L37+600E, L37+450E Plot correct lines | 14 days at $60/day | $ 840 |
| Aug. 14 | - Magnetometer survey L38+950E, L39+700E | 1 day " | $ 60 |
| Aug. 15-17 | - Chain and picket "North Ridge" 12+100N Baseline. Compass check and geochem. soil sampling on L12+100N | 3 days " | $ 180 |
| Aug. 22 | - Sample and compass check on two lines extending Az. 324° from Baseline 12+100W | 1 day " | $ 60 |
| Aug. 30-31 | - Compass and flag in "Ray Gulch" grid tie lines 8+900N and 8+000N | 2 days " | $ 120 |
| Sept. 1-6 | - Plot accumulated geochemical data on base maps. Chain and picket tie lines 8+900N and 8+000N Plot tie lines on base map and correct grid | 6 days " | $ 360 |
| | | Total | $1620 |

Gary Sopher - Junior Assistant

| | | | |
|---|---|---|---|
| July 31 | - Magnetometer test and survey line test | 1 day at $48/day | $ 48 |
| Aug. 1-2 | - Soil geochemistry L38+650E | 2 days " | $ 96 |
| Aug. 3 | - Magnetometer survey L38+950E, L39+700E | 1 day " | $ 48 |
| Aug. 4-13 | - Soil geochemistry on L38+950E, L38+800E, L38+650E, L38+500E, L38+350E, L38+200E, L37+600E, L37+300E, L36+700E | 10 days " | $ 480 |
| Aug. 14 | - Magnetometer survey, L38+950E, L39+700E | 1 day " | $ 48 |
| Aug. 15 | - Assist C. Stevens - chaining and picketing N. Baseline 12+100N | 1 day " | $ 48 |
| Aug. 16 | - Magnetometer survey L36+700E, L36+800E, L38+050E, L38+200E | 1 day " | $ 48 |
| Aug. 17 | - Plot and check magnetometer survey data | 1 day " | $ 48 |
| Aug. 26-27 | - Magnetometer test down L40+600E. Re-test on L39+700E, L38+950E | 2 days " | $ 96 |
| Aug. 30 - Sept. 1 | - Assist C. Stevens, compassing, chaining and picketing tie lines in "Ray Gulch" L8+900N and 8+000N | 3 days " | $ 144 |
| Sept. 2-4 | - Plot geochem. and magnetometer. Prepare soil samples for shipping to Lab. | 3 days " | $ 144 |
| | | Total | $1248 |

Joe Wyckoff - Junior Assistant

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|---|---|---|---|
| Sept. 1 | - Geochem soil sampling. N. Baseline 12+100 and two cross lines | 1 day at $48/day | $ 48 |
| Sept. 2 | - Assist C. Stevens, surveying in "Ray Gulch" grid tie lines 8+900N and 8+000N | 1 day " | $ 48 |
| Sept. 8 | - Plot geochem. data onto base maps | 1 day " | $ 48 |
| Sept. 10-15 | - Recon. geochem. sampling and soil geochem. sampling Gill Gulch, Bawn Boy Gulch, North Ridge area. Plot data. Sample streams S. of Haggart Creek near Lynx Creek junction | 6 days " | $ 288 |
| | | Total | $ 432 |

Don Storie - Junior Assistant - Sampler

| | | | | |
|---|---|---|---|---|
| June 21-30 | - Set up camp and set out aerial triangulation survey sites | 10 days at | $55/day | $ 550 |
| July 3-4 | - Set out aerial triangulation survey sites | 2 days | " | $ 110 |
| July 5-7 | - Recon. geochem. sampling, compass and flag in "Ray Gulch" grid lines | 3 days | " | $ 165 |
| July 8-9 | - Assist land surveyor on Baseline and "Ray Gulch" grid | 2 days | " | $ 110 |
| July 10-13 | - Recon. geochem. sampling, Lynx Dome drainage, headwaters Haggart Creek N. of Potato Hills, Fischer Gulch | 4 days | " | $ 220 |
| July 14 | - Mark out grid lines on Ray Gulch cliff area | 1 day | " | $ 55 |
| July 15-16 | - Recon. geochem. sampling Tin Dome, Dublin Gulch drainages | 2 days | " | $ 110 |
| July 17-18 | - Recon. geochem. sampling - drainage W. of Haggart Dome. Soil grid sampling L+40150E | 2 days | " | $ 110 |
| July 19-21 | - Soil geochem. sampling L40+150E, L40+300E | 3 days | " | $ 165 |
| July 23 - Aug. 2 | - Soil geochem. sampling L40+300E, L39+850E, L39+700E, L39+550E, L40+000E, L38+950E, L38+800E Baseline, L38+500E, L38+200E | 10 days | " | $ 550 |
| Aug. 3 | - Magnetometer survey on L38+950E and L39+700E | 1 day | " | $ 55 |
| Aug. 4-15 | - Soil geochem. sampling L38+950E, L38+800E, L39+100E L39+250E, L38+050E, L39+400E, L37+900E, L37+000E, L36+800E, Baseline 10+000N | 12 days | " | $ 660 |
| Aug. 16-17 | - Magnetometer survey L36+700E, L36+800E, L38+050E, L38+200E Plot sample locations on base map | 2 days | " | $ 110 |
| Aug. 22 | - Plot sample locations on base map | 1 day | " | $ 55 |
| Sept. 1-15 | - Soil geochem. sampling L37+600E, L37+450E. Recon. geochem. sampling - south side Lynx Creek. Plot data. Samples "North Ridge" and Olive Gulch areas. Soil geochem. sampling on two Tin Dome grid lines | 15 days | " | $ 825 |
| Oct. 1-10 | - Chip sampling of Skarn Zones, Quartz Monzonite quartz vein stockworks. Camp clean up. | 10 days | " | $ 550 |
| | | | Total | $4400 |

Robert Plummer - Geologist

| | | | |
|---|---|---|---|
| Aug. 22-25 | - Detailed geologic mapping L38+050E, L36+700E | 4 days at $64/day | $ 256 |
| Aug. 26-27 | - Detailed mapping of "North Ridge" to base of Potato Hills | 2 days " | $ 128 |
| Aug. 30 - Sept. 1 | - Complete mapping of "North Ridge" quartzites and plot data on base map | 3 days " | $ 192 |
| Sept. 6-10 | - Detailed mapping in Potato Hills to Cascaller Gulch area and on North facing slopes of "North Ridge" | 5 days " | $ 320 |
| | | Total | $ 896 |
| | | Total Field Wages | $29,907 |

OFFICE PERSONNEL SALARIES - REPORT PREPARATION

Dave Lyman - Project Geologist - Salary $2,000/month

| | | | |
|---|---|---|---|
| Sept. 25 - Sept. 30 | - | Data organization and initial report planning - 2000 ÷ 4 = | $ 500 |
| Oct. 1 - Oct. 31 | - | Initial geochemical data compilation. Plot 130 points on new air photos taken in July. Consulting with Canadian General Electric to set up a compatible computer program for geochemical data | 2,000 |
| Nov. 1 - Nov. 30 | - | Compiled geochemical data into form acceptable to computer program. All data key punched. Transferred detailed geochemical data on rough field base maps onto first draft mylar film | 2,000 |
| Dec. 1 - Dec. 22 | - | Ran geochemical program. Problems slowed process down considerably. Statitical analysis difficulties. Sample data merged with analysis results and reached successful listing of all samples taken according to sampler and sample type | 1,500 |
| | | Total | $6,000 |

Halim Arik - Geologist - Salary $2,000/month

| | | | |
|---|---|---|---|
| Sept. 25 - Sept. 30 | - | Sort field maps and collect all notebook information. Compile all grid geologic information from geologists' field maps and notes. Start rough mylar draft of Map 5 grid Geology | 1 week | $ 500 |
| Oct. 1 - Oct. 15 | - | Complete rough geology map draft. Begin 1:1000 Map 7 Tin Dome Geology map - rough mylar draft | 2 weeks | $1,000 |
| Oct. 15 - Oct. 31 | - | Complete Tin Dome Geology rough draft and plot reconnaissance geochemistry data (transfer from 1:50000 maps to 1:10000 scale mylar maps) | 2 weeks | $1,000 |
| | | | Total | $2,500 |

Brian Lennan - Supervising Geologist - Salry $2,000/month
- Salary divided between Dublin Gulch Project and other projects

| | | | |
|---|---|---|---|
| Sept. 18 - Sept. 30 | - | Supervision and direction of work carried out by D. Lyman, H. Arik. Discuss processing of aerial photography flown in summer with McElahnney Surveying | 2 weeks | $1,000 |
| Oct. 9 - Oct. 31 | - | Assist D. Lyman in selecting 130 survey control points on air photos. Used by McElhanney to start computer analysis of all aerial triangulation sites. Assist in plotting of geologic material on rough mylar draft with H. Arik. Contact Canadian General Electric and discuss computer applications geochemical data | 3 weeks | $1,500 |

B. Lennan (Cont'd)

| | | | |
|---|---|---|---|
| Nov. 13 - Nov. 30 | - | Finalize discussion with McElhanney with regards to production of ortho-photo from new aerial photography and surveying. Instruct McElhanney to produce 1:5000 scale orthophoto with contour overprint, 10 meter contour interval. Submit all 130 plotted points so production of aerial triangulation and orthophoto can begin. D. Lyman starts processing of geochemical data. | 3 weeks | $1,500 |
| Dec. 1 - Dec. 21 | - | Assist with rough draft of geologic data at scales of 1:50000 and 1:10000. Assist with rough draft of geochemical maps (reconnaissance and grid). Set up contract with Altair drating to do final drafts of all maps. | 3 weeks | $1,500 |
| Jan. 15 - Feb. 15 | - | Start Altair on map drafting. Take 13 1:5000 original topo maps produced during summer of 1978 back to McElhanney for correlation of government aerial triangulation and 1978 aerial triangulation. Corrections to be compiled on orthophoto. Locate problems in computer program as applied to statistical analysis of geochemical data. Try and adjust. Assemble presentation photography out of many taken. Assemble historical data and cross check with information obtained from summer work. | 5 weeks | $2,500 |
| Mar. 15 - May 8 | - | Start receiving completed maps from Altair drafting. Evaluate data. Set format of report, obtain petrographic report on Dublin Gulch rock specimens. Start writing rough draft of report | 8 weeks | $4,000 |
| | | | Total | $12,000 |

Brian Lennan (Cont'd)

| | | | |
|---|---|---|---|
| Mar. 15 - May 8 | Check, correct and make additions to report. Colour all copies of maps that accompany report. Compile and bind report. | | |

Joyce Irvine - Secretary - $1,100/month

| | | | |
|---|---|---|---|
| April 16 - May 8 | - Type rough draft, correct errors, omissions. Type final draft of 100+ pages | 3.5 weeks | $ 962.50 |
| | | Total Office Wages | $21,462.50 |

Invoiced Expenditures Incurred for Assessment of Dublin Gulch Property - 1978
Mar 1-24, R.D. 1-16, Dave 1-24, Alec 1-60, Smoky 1-82, Bob 1-73, D.G. 1-56, Jeff 1-112

| | | | |
|---|---|---|---|
| McElhanney Surveying and Engineering<br>Vancouver, B.C. | - | Production of 13 map sheets - aerial photography and surveying<br>Total $44,074.87 = $3,390.37 1 map sheet<br>10 9/10 map sheets | = $36,955.03 |
| | | (2 Secret Creek, 1/10 Mar 25-30 claim group) | |
| McElhanney Surveying and Engineering<br>Vancouver, B.C. | - | Orthophoto production - High level<br>Dublin Gulch Mineral Claims - Low Level<br>Dublin Gulch Placer Claims<br>Total $27,183 ÷ 2 | = $13,591.50 |
| Chemex Laboratories<br>North Vancouver, B.C. | - | Analysis for Au, Ag, $WO_3$, Sn $11.35 per sample | |
| | | Soil samples Total 1553 - 52 for Mar 25-30 claims = 1501 x $11.35 | = $17,036.35 |
| | | Silt samples Total 466 x $11.35 | = $ 5,289.10 |
| | | Rock chip sample Total 242 x $11.35 | = $ 2,735.35 |
| | | Rock chip and channel samples<br>Assays Au, $WO_3$, Ag Total 132 x $17.00 | = $ 2,244.00 |
| Expediting Services<br>Tintina Expediting<br>Mayo, Yukon | | For crews during June, July, Aug., Sept., Oct. 1978 | = $ 3,936.38 |

Cont'd

| | | | | |
|---|---|---|---|---|
| Dublin Gulch Mining Ltd.<br>R. Holway<br>Whitehorse, Y.T. | - D-9 cat - road repairs and clean out of established trenches<br>54 hrs. at $100/hr. | | = | $ 5,400 |
| Dublin Gulch Mining Ltd.<br>R. Holway<br>Whitehorse, Y.T. | - Board - $15 manday | | | |
| | June - 53 mandays x $15 | | = | $ 795 |
| | July - 145 mandays x $15 | | = | $ 2,175 |
| | Aug. - 146 mandays x $15 | | = | $ 2,190 |
| | Sept. - 119 mandays x $15 | | = | $ 1,785 |
| | Oct. - 3 mandays x $15 | | = | $ 45 |
| | | Sub Total | | $ 6,990 |
| | Subtract $240 for Mar 25-30 | | | 240 |
| | | Total | | $ 6,750 |

Truck Rentals

| | | |
|---|---|---|
| Tilden | - Unit 102 - Drivers - D. Coffin, D. Lyman/others to a lesser extent<br>June 15 - Sept. 25<br>$955/month + mileage = $1,000/month | $ 3,250 |
| | Unit 90 - Drivers - B. Lennan, D. Storie, H. Arik/others to a lesser extent<br>June 19 - Sept. 25<br>$955/month + mileage = $1,000/month | $3,209.50 |
| Bow Mac | - Drivers - D. Coffin, others to a lesser extent 551.84 - 256 = $ 295.84<br>$256 applied towards Mar 25-20 | |

Cont'd

Helicopter Time

| | |
|---|---|
| Invoices - TNTA - Mayo | $15,281.30 |
| Invoices - Cascade Rotors | 6,266.00 |

Total of 70 hrs. over June, July, Aug., Sept.
utilization approx. 40 hrs. - establishing survey sites and moving surveyors over 100 square miles to do aerial triangulation to tie in new photography with government established control points.
Approx. 30 hrs. for reconnaissance geologic mapping and geochemical surveys. Drop outs and pick ups in inaccessible areas. Supporting up to 8 men.

Map Production

| | |
|---|---|
| Dominion Reprographics, Vancouver, B.C.<br>Blow-up government 1:50000 106D - 4 map to 1:10000 for plotting reconnaissance geochem. samples. | 347.65 |
| Food supplies - Graham's Store - Mayo, Y.T. | 1,217.16 |
| Danny's Dept. Store - Mayo, Y.T. | 3,537.63 |
| Fuel — Camp - stove oil and propane | 292.89 |
| Vehicle - Two rental vehicles - some diesel for cat | 2,190.79 |
| White Pass Petroleum Helicopter - Surveyors and geochem. and geology<br>Mayo, Y.T. | 3,288.18 |
| Survey Supplies - Marker cloth for aerial photography sites | 351.65 |
| - Laths (pickets) for grid lines | 825.51 |
| Camp Supplies - 7 tents, stoves, tools, kitchen materials, etc.<br>Deakin Equipment<br>Powell Street<br>Vancouver, B.C. | 7,078.02 |

Cont'd

| | | | |
|---|---|---|---|
| Survey Equipment | - Plane table unit, all drafting supplies, office tent supplies - needed to carry out<br>B.C. Industries<br>960 Richards St.<br>Vancouver, B.C. | | $ 2,930.02 |
| Wood Supplies for tent frames etc. | - Klippert's - Mayo | Lumber | 627.10 |
| | Genier Enterprises - Mayo | Lumber, plywood, nails plastic | 1,499.83 |
| Line Cutting | - grid line cutting, compassing, chaining, slope correcting 85.1 Km. at $244/line Km<br>Jesmex Ltd.<br>John Graham<br>Box 5197<br>Whitehorse, Y.T. | | 20,764.40 |
| Report Preparation | - Drafting of all maps - 267 hrs. at $15/hr.<br>Altair Drafting<br>821 W. Pender St.<br>Vancouver, B.C. | | 4,000.00 |
| Data Processing | - Canadian General Electric<br>W. Hastings St.<br>Vancouver, B.C. | | 1,000.00 |
| | | Total Invoiced Expenditures | $172,191.13 |

# A F F I D A V I T

I, WILLIAM BRIAN LENNAN, Exploration Geologist, of 1208 - 2008 Fullerton Avenue, North Vancouver, British Columbia, MAKE OATH AND SAY AS FOLLOWS:

THAT costs in the total sum of $223,560.63 have been incurred by Canada Tungsten Mining Corporation Limited for carrying out assessment work on the Mar 1-24, Dave 1-24, Alec 1-60, R.D. 1-16, Smoky 1-82, D.G. 2-38, 40, 41, 43, 45-53, 56, Bob 1-73, Jeff 1-112 claims.

SWORN BEFORE ME at the City of Vancouver, in the Province of British Columbia this 11th day of May, 1979.

A Notary Public in and for the Province of British Columbia

William Brian Lennan

WILLIAM BRIAN LENNAN

STATEMENT OF QUALIFICATIONS:

I, WILLIAM BRIAN LENNAN, as a representative of Canada Tungsten Mining Corporation Limited and project supervisor, specify that an aerial photography survey, aerial triangulation survey, 1:5000 and 1:10000 scale map production, geological, geophysical and geochemical evaluations be performed for assessement purposes on the Mar 1-24, Dave 1-24, Alec 1-60, Smoky 1-82, Bob 1-73, Jeff 1-112 and D.G. 2-38, 40-41, 43, 45-53 and 55 claims and certify:

1.) THAT I am a 1973 graduate of the University of British Columbia with a Bachelor of Science degree in Geology.

2.) THAT I have practised my profession in Geology for 6 years (4 years in British Columbia, 2 years in Yukon Territory).

3.) THAT I am registered as an Engineering Pupil of the Association of Professional Engineers of British Columbia.

4.) THAT I have submitted applications for Fellow Membership status with the Geological Association of Canada and The Canadian Institute of Mining and Metallurgy.

William Brian Lennan

William Brian Lennan

MAP AREA (13 1:5000 maps produced and located as below

① Outline of sheet with sheet no.

LINE 1

LINE 2

LINE 3

LINE 4

LINE 5

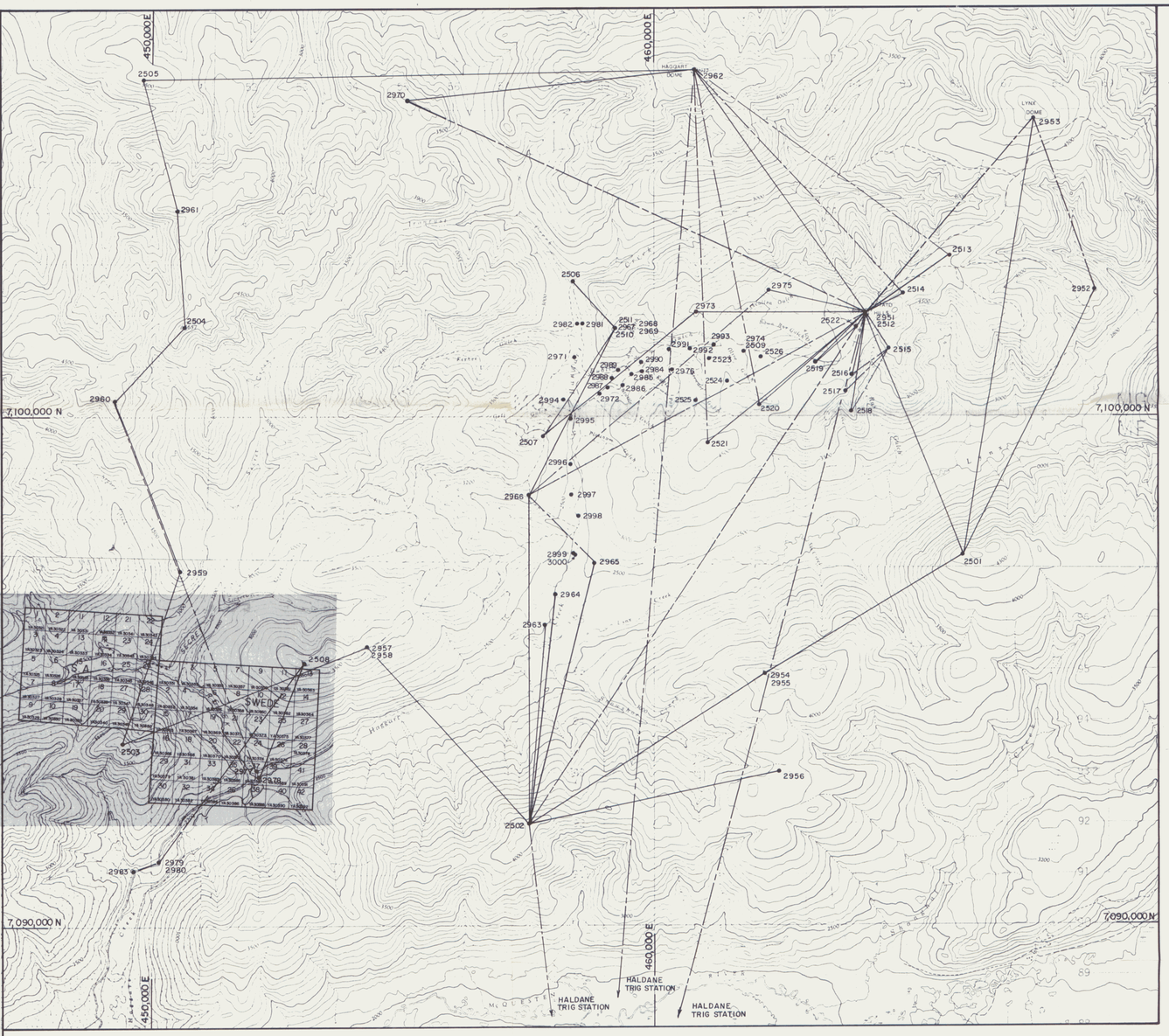
Photo numbers

FLIGHT LINES

INDEX OF AERIAL PHOTOGRAPHY
OF
HAGGART CREEK – DUBLIN GULCH
FOR
CANADA TUNGSTEN MINING CORP LTD.
MAP No. 1

DATE OF PHOTO : 29 JULY 1978
C.F.L. : 152.66
: 1" = ± 1,000 FT.
: 1" = ± 2640 FT.

McELHANNEY SURVEYING & ENGINEERING LTD.
REF. NO. 06497-1




## TABLE OF CO-ORDINATES

| STATION | NORTH | EAST | ELEV. | DESCRIPTION | STATION | NORTH | EAST | ELEV. | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|
| 2501 HV | 7,097,337.19 | 466,111.39 | 1,317.79 | 1P with tag and cairn | 2970 HV | 7,10[illegible]173.62 | 455,081.45 | 1,159.23 | 1P with tag |
| 2502 HV | 7,092,012.93 | 457,515.97 | 1,243.07 | 1P with tag and cairn | 2971 HV | 7,101,166.77 | 458,406.09 | 778.62 | 1P with tag |
| 2503 HV | 7,093,590.98 | 449,415.43 | 1,129.57 | 1P with tag | 2972 HV | 7,100,482.87 | 458,922.16 | 845.46 | 1P with tag |
| 2504 HV | 7,101,745.77 | 450,606.65 | 1,417.14 | 1P with tag near trig. cairn | 2973 HV | 7,102,050.62 | 460,844.74 | 1,227.83 | 1P with tag |
| 2505 HV | 7,106,603.78 | 449,809.22 | 1,089.28 | 1P with tag | 2973 ECC | 7,102,050.46 | 460,853.58 | ---- | |
| 2506 HV | 7,102,652.38 | 458,387.90 | 798.30 | 1P with tag | 2974 HV | 7,101,281.27 | 461,783.14 | 1,201.65 | 1P with tag |
| 2507 HV | 7,099,593.12 | 457,782.15 | 926.29 | 1P with tag in clearing | 2975 HV | 7,102,468.99 | 462,283.20 | 1,288.16 | 1P with tag |
| 2508 | 7,095,150.16 | 453,034.95 | 1,118.19 | 1P with tag on top of ridge | 2976 HV | 7,100,927.49 | 460,355.32 | 1,035.93 | 1P with tag |
| 2509 | 7,101,280.38 | 461,777.45 | 1,201.35 | 1P with tag | 2977 HV | 7,093,031.40 | 452,058.38 | 663.70 | 1P with tag |
| 2510 | 7,101,686.49 | 459,217.81 | 1,071.78 | 1P with tag | 2978 | 7,092,920.08 | 452,123.96 | 664.08 | 1P with tag |
| 2511 | 7,101,675.99 | 459,276.86 | 1,068.38 | 1P with tag | 2979 | ---- | ---- | 691.71 | 1P with tag |
| 2512 | 7,101,967.63 | 464,248.01 | 1,534.05 | Nub with tag | 2980 | ---- | ---- | 692.17 | 1P with tag |
| 2513 | 7,103,147.87 | 465,871.57 | 1,379.78 | 1P with tag and target | 2981 | 7,101,822.04 | 458,535.11 | 786.54 | 1P with tag |
| 2514 | 7,102,415.82 | 464,931.62 | 1,455.76 | 1P with tag and target | 2982 | 7,101,825.46 | 458,469.86 | 786.18 | Nub on gravel bar |
| 2515 | 7,101,330.86 | 464,663.15 | 1,396.70 | 1P with tag and target | 2983 V | ---- | ---- | 660.70 | 1P with tag |
| 2516 | 7,100,828.08 | 463,932.90 | 1,392.39 | 1P with tag and target | 2984 | 7,100,895.43 | 459,741.17 | 880.61 | Spike with tag and target |
| 2517 | 7,100,504.33 | 463,799.83 | 1,398.68 | 1P with tag and target | 2985 | 7,100,843.17 | 459,541.39 | 867.29 | Spike with tag and target |
| 2518 | 7,100,101.64 | 463,927.21 | 1,292.94 | 1P with tag and target | 2986 | 7,100,642.70 | 459,388.56 | 869.93 | Spike with tag and target |
| 2519 | 7,101,085.51 | 463,190.03 | 1,359.50 | 1P with tag and target | 2987 | 7,100,559.22 | 459,069.06 | 859.25 | Spike with tag and target |
| 2520 | 7,100,245.52 | 462,073.40 | 1,325.68 | 1P with tag and target | 2988 | 7,100,707.96 | 459,184.06 | 826.3 | Spike with tag and target |
| 2521 | 7,099,492.63 | 461,077.86 | 1,382.66 | 1P with tag and target | 2989 | 7,100,924.19 | 459,293.16 | 840.7 | Spike with tag and target |
| 2522 | 7,101,719.30 | 464,029.13 | 1,433.60 | 1P with tag and target | 2990 | 7,101,080.69 | 459,712.75 | 878.58 | Spike with tag and target |
| 2523 | 7,101,134.91 | 461,096.38 | 1,120.04 | 1P with tag and target | 2991 | 7,101,325.49 | 460,335.13 | 952.54 | Spike with tag and target |
| 2524 | 7,100,731.99 | 461,448.15 | 1,233.36 | 1P with tag and target | 2992 | 7,101,325.90 | 460,745.65 | 1,011.04 | Spike with tag and target |
| 2525 | 7,100,306.23 | 460,839.14 | 1,204.90 | 1P with tag and target | 2993 | 7,101,398.6 | 461,208.1 | 1,051.37 | Spike with tag and target |
| 2526 | 7,101,189.39 | 462,133.07 | 1,272.10 | 1P with tag and target | 2994 | 7,100,342.85 | 458,217.27 | 768.09 | Spike with tag and target |
| 2951 HV | 7,102,011.84 | 464,203.54 | 1,536.53 | 1P with tag near Potato Cairn | 2995 | 7,099,954.2 | 458,331.1 | 764.75 | Spike with tag and target |
| 2952 HV | 7,102,494.71 | 468,713.16 | 1,161.27 | 1P with tag | 2996 | 7,099,028.1 | 458,339.7 | 750.15 | Spike with tag and target |
| 2953 HV | 7,105,837.18 | 467,530.07 | 1,532.42 | 1P with tag | 2997 | 7,098,446.58 | 458,357.98 | 743.51 | Spike with tag and target |
| 2954 | 7,094,926.43 | 462,229.70 | 1,292.71 | 1P with tag | 2998 | 7,098,033.33 | 458,465.90 | 745.40 | Spike with tag and target |
| 2955 HV | 7,094,930.46 | 462,259.60 | 1,292.65 | 1P with tag | 2999 | 7,097,330.44 | 458,383.26 | 739.12 | 1P with tag |
| 2956 HV | 7,095,021.52 | 462,473.68 | 1,159.19 | 1P with tag | 3000 | 7,097,287.0 | 458,480.8 | 736.4 | Spike with tag and target |
| 2957 HV | 7,095,451.34 | 454,286.59 | 1,124.06 | 1P with tag | DH #1 | 7,100,793.2 | 458,774.6 | 806.0 | Drill hole |
| 2958 | 7,095,452.65 | 454,285.55 | 1,123.88 | 1P with tag | DH #3 | 7,100,682.5 | 458,774.6 | 814.0 | Drill hole |
| 2959 HV | 7,096,968.18 | 450,580.18 | 1,068.87 | 1P with tag | DH #4 | 7,100,601.1 | 458,773.7 | 819.8 | Drill hole |
| 2960 HV | 7,100,344.97 | 449,256.74 | 1,455.86 | 1P with tag | DH #5 | 7,100,558.9 | 458,773.4 | 823.9 | Drill hole |
| 2961 | 7,104,053.68 | 450,456.76 | 1,301.96 | 1P with tag | DH #6 | 7,100,500.5 | 458,783.7 | 827.3 | Drill hole |
| 2962 | 7,106,768.84 | 460,801.44 | 1,497.85 | 1P with tag on Haggarts Dome | DH #7 | 7,100,447.5 | 458,780.8 | 828.5 | Drill hole |
| 2963 HV | 7,095,905.21 | 457,813.59 | 722.50 | 1P with tag | DH #8 | 7,100,375.2 | 458,777.7 | 830.1 | Drill hole |
| 2964 HV | 7,096,499.20 | 457,999.88 | 723.93 | 1P with tag | DH #9 | 7,100,315.7 | 458,783.2 | 833.6 | Drill hole |
| 2965 HV | 7,097,202.26 | 458,833.76 | 810.67 | 1P with tag | | | | | |
| 2966 HV | 7,098,457.75 | 457,549.44 | 984.58 | 1P with tag on Tin Dome | HAGGART CAIRN HV | 7,106,765.7 | 460,799.3 | 1,497.97 | Government Trig. Sta. |
| 2967 | 7,101,703.25 | 459,238.78 | 1,074.86 | 1P with tag on Tin Dome | POTATO CAIRN | 7,102,018.4 | 464,206.4 | 1,537.23 | Government Trig. Sta. |
| 2968 | 7,101,709.15 | 459,223.72 | 1,073.93 | Lath with tag on Tin Dome | HALDANE | 7,081,565.4 | 458,681.0 | ---- | Government Trig. Sta. |
| 2969 HV | 7,101,705.16 | 459,258.95 | 1,072.07 | 1P with tag on Tin Dome | | | | | |




DETAIL OF SURVEY
IN DUBLIN GULCH
AND HAGGART CREEK.

SCALE 1:20,000




BEARING DEVIATION AT THE MERIDIAN THROUGH TRIG STATION POTATO.

Additional 130+ points located on orthophoto and listed in appendix no 3

## LEGEND

BEARINGS ARE UTM AND ARE DERIVED FROM TRIG POINTS POTATO AND HALDANE.

ELEVATIONS ARE GEODETIC AND ARE DERIVED FROM TRIG POINT POTATO.

DISTANCES ARE REDUCED TO SEA LEVEL DATUM.

CO-ORDINATES ARE UTM ZONE 8, CENTRAL MERIDIAN −135° AND ARE DERIVED FROM TRIG STATION POTATO.

| | |
|---|---|
| 2951 • | DENOTES SURVEY STATION |
| ——— | DENOTES HORIZONTAL AND VERTICAL ANGLES AND DISTANCE OBSERVED. |
| — — — | DENOTES VERTICAL ANGLE AND DISTANCE OBSERVED. |
| ——·—— | DENOTES HORIZONTAL ANGLE ONLY OBSERVED. |
| HV | DENOTES POINT TARGETTED AND USED AS A HORIZONTAL AND VERTICAL PHOTO CONTROL POINT. |
| V | DENOTES POINT TARGETTED AND USED AS A VERTICAL PHOTO CONTROL POINT. |

| REV NO | DATE | REVISION | DR. | CH. | APP. |
|---|---|---|---|---|---|

# CANADA TUNGSTEN LTD.

## PLAN OF PHOTO CONTROL HAGGART CREEK, Y.T.

**McELHANNEY SURVEYING & ENGINEERING LTD.**
Vancouver, B.C.

| | |
|---|---|
| DESIGNED R.H. | SCALES HOR: 1:50,000 VERT: |
| DRAWN K.M.S. | |
| CHECKED J.W.K.S | DATE AUGUST 16, 1978 |
| APPROVED R.S. | JOB NO. 07465-0 |
| CLIENT DWG. NO. MAP No. 2 | MSEL DWG. NO. "A" |
| | REV. |

SECRET CREEK

SECRET CREEK

SWEDE CREEK

SWEDE CREEK

SWEDE CREEK

HAGGART CREEK

S.A. 1-30

SWEDE 1-42

N

TUNSTEN GEOCHEMISTRY

3ppm's

6ppm's

>6ppm's

▲ J-49
2
2
∠10
10

Typical sample location with alphabetically coded sample number and analysis results.

▲ J-50
84, 166, 5600, 480
Pb(lead), Zn(zinc), Ti(titanium), Zr(zirconium)
ppm ppm ppm ppm

SAMPLE LOCATION SYMBOLS

▲ stream sediments

● soil

■ rock

SAMPLE NUMBERS

letter identifies sampler.
each sampler has a complete number series.

SAMPLE VALUES

The number sequence indicates element geochemical analysis in ppm as shown below

W (ppm)
Sn (ppm)
Au (ppb)
Ag (ppm)

Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

S.A. & SWEDE - claim names
34 - claim number
YA30384 - grant number

OTHER SYMBOLS

< less than

> more than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS

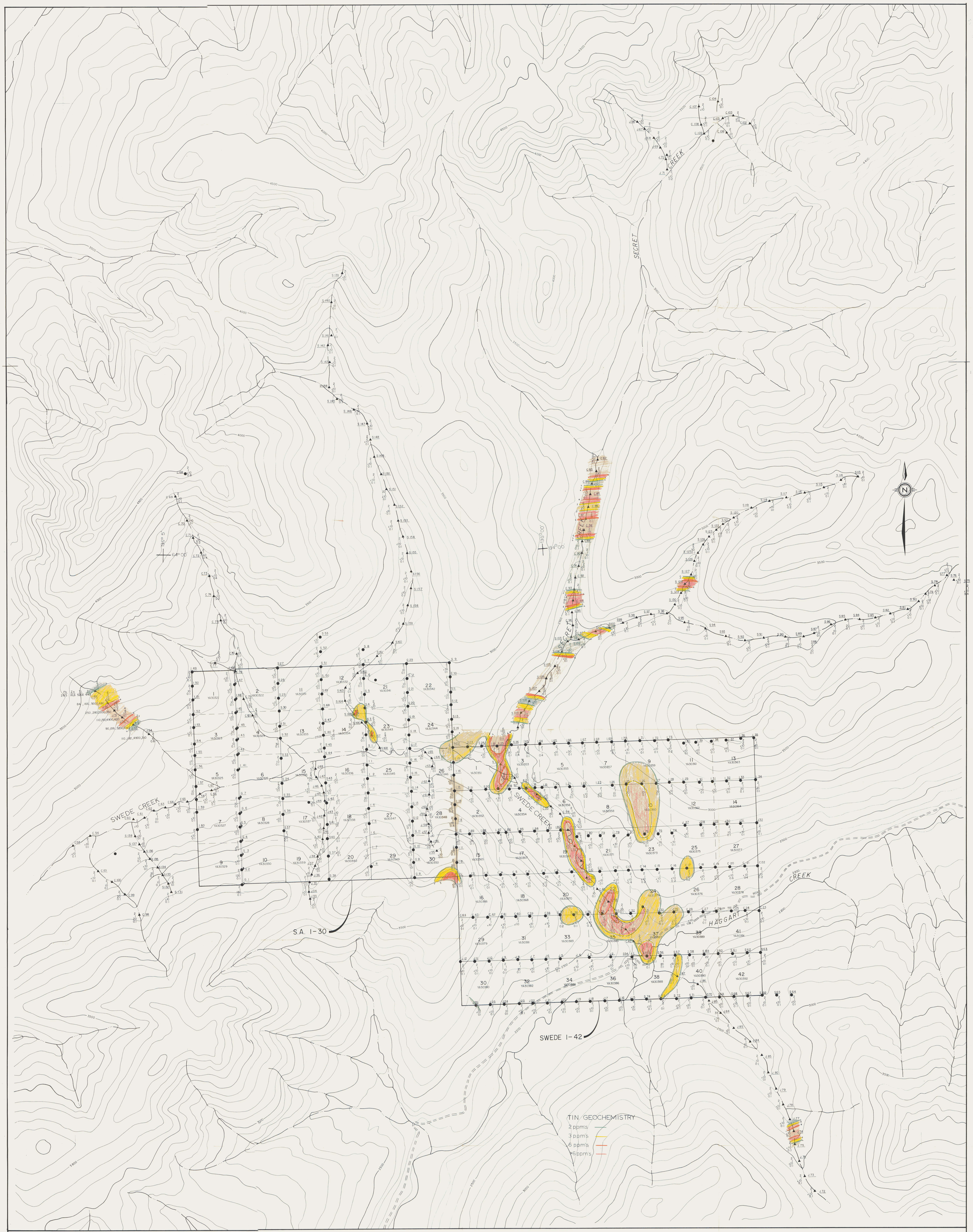
W 4 ppm, values below detection limit reported as 2 ppm
Sn 2 ppm, values below detection limit reported as 1 ppm
Au 10 ppb, values below detection limit reported as < 10 ppb
Ag 0.2 ppm, values below detected limit reported as 0.1 ppm

CANADA TUNGSTEN MINING CORP. LTD.

# 1978 SECRET CREEK CLAIM AREA
## MAYO MINING DISTRICT, YUKON TERRITORY
## SWEDE CLAIMS & S.A. CLAIMS
## GEOCHEMICAL SURVEY
## SOIL and STREAM SEDIMENTS

METRES 100 0 100 200 300 400 FEET 833 0 833 1666

| | |
|---|---|
| SCALE: IN METERS 1:10,000 | NTS No. 105 M/13, 15 P/16 |
| DATE: JUNE 1978 | MAP No. 3 |
| DRAWN BY: | To accompany report: SECRET CREEK |
| REVISED BY: | PROJECT REPORT |




▲ J-49 — Typical sample location with alphabetically coded sample number and analysis results.
2
2
410
10

▲ J-50
84, 166, 5600, 480 — Pb(lead), Zn(zinc), Ti(titanium), Zr(zirconium) ppm ppm ppm ppm

SAMPLE LOCATION SYMBOLS
- ▲ stream sediments
- ● soil
- ■ rock

SAMPLE NUMBERS
letter identifies sampler.
each sampler has a complete number series.

SAMPLE VALUES
The number sequence indicates element geochemical analysis in ppm as shown below
W (ppm)
Sn (ppm)
Au (ppb)
Ag (ppm)
Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

S.A. & SWEDE - claim names
34 - claim number
YA 30384 - grant number

OTHER SYMBOLS
- < less than
- > more than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS
W 4 ppm, values below detection limit reported as 2 ppm
Sn 2 ppm, values below detection limit reported as 1 ppm
Au 10 ppb, values below detection limit reported as < 10 ppb
Ag 0.2 ppm, values below detected limit reported as 0.1 ppm

CANADA TUNGSTEN MINING CORP. LTD.

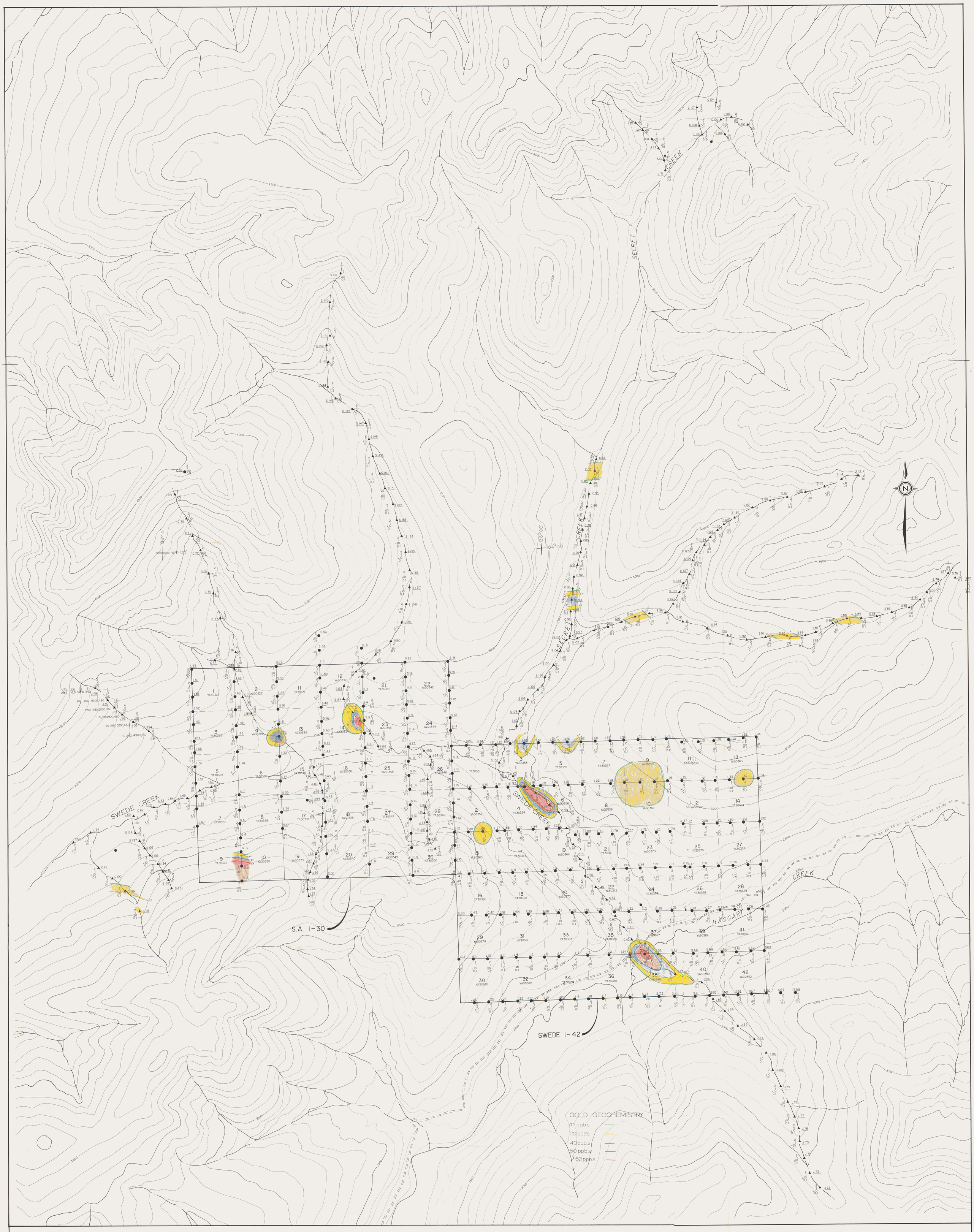
# 1978 SECRET CREEK CLAIM AREA
# MAYO MINING DISTRICT, YUKON TERRITORY

## SWEDE CLAIMS & S.A. CLAIMS

## GEOCHEMICAL SURVEY
## SOIL and STREAM SEDIMENTS

METRES 100 0 100 200 300 400 — FEET 833 0 833 1666

| | |
|---|---|
| SCALE: IN METERS 1 : 10,000 | NTS No. 105 M/13, 115 P/16 |
| DATE JUNE 1978 | MAP No. 4 |
| DRAWN BY | To accompany report: SECRET CREEK |
| REVISED BY | PROJECT REPORT |




▲ J-49
2
2
∠10
10

Typical sample location with alphabetically coded sample number and analysis results.

▲ J-50
84, 166, 5600, 480
Pb (lead), Zn (zinc), Ti (titanium), Zr (zirconium)
ppm ppm ppm ppm

SAMPLE LOCATION SYMBOLS

▲ stream sediments
● soil
■ rock

SAMPLE NUMBERS
letter identifies sampler.
each sampler has a complete number series.

SAMPLE VALUES
The number sequence indicates element geochemical analysis in ppm as shown below

W (ppm)
Sn (ppm)
Au (ppb)
Ag (ppm)

Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

S.A. & SWEDE - claim names
34 - claim number
YA30384 - grant number

OTHER SYMBOLS
< less than
> more than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS
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Ag 0.2 ppm, values below detected ted limit reported as 0.1 ppm

CANADA TUNGSTEN MINING CORP. LTD.

# 1978 SECRET CREEK CLAIM AREA
## MAYO MINING DISTRICT, YUKON TERRITORY
## SWEDE CLAIMS & S.A. CLAIMS
## GEOCHEMICAL SURVEY
## SOIL and STREAM SEDIMENTS

METRES 100 0 100 200 300 400 — FEET 833 0 833 1666

| | |
|---|---|
| SCALE IN METERS 1:10,000 | NTS No. 105 M/13, 15 P/16 |
| DATE JUNE 1978 | MAP No. 5 |
| DRAWN BY | To accompany report SECRET CREEK |
| REVISED BY | PROJECT REPORT |

SECRET CREEK

SWEDE CREEK

SECRET CREEK

SWEDE CREEK

HAGGART CREEK

S.A. 1-30

SWEDE 1-42

64° 00'

135° 15'

64° 00'

135° 00'

N

SILVER GEOCHEMISTRY

.15 ppm's

20 ppm's

40 ppm's

> 40 ppm's

▲ J-49
2
2
410
10

Typical sample location with alphabetically coded sample number and analysis results. Its

▲ J-50
84, 166, 5600, 480
Pb (lead), Zn (zinc), Ti (titanium), Zr (zirconium)
ppm ppm ppm ppm

SAMPLE LOCATION SYMBOLS

▲ stream sediments

● soil

■ rock

SAMPLE NUMBERS

letter identifies sampler.

each sampler has a complete number series.

SAMPLE VALUES

The number sequence indicates element geochemical analysis in ppm as shown below

W (ppm)
Sn (ppm)
Au (ppb)
Ag (ppm)

Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

S.A. & SWEDE - claim names
34 - claim number
YA30384 - grant number

OTHER SYMBOLS

< less than

> more than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS

W 4 ppm, values below detection limit reported as 2 ppm

Sn 2 ppm, values below detection limit reported as 1 ppm

Au 10 ppb, values below detection limit reported as < 10 ppb

Ag 0.2 ppm, values below detected limit reported as 0.1 ppm

CANADA TUNGSTEN MINING CORP. LTD.

# 1978 SECRET CREEK CLAIM AREA
## MAYO MINING DISTRICT, YUKON TERRITORY

SWEDE CLAIMS & S.A. CLAIMS

GEOCHEMICAL SURVEY
SOIL and STREAM SEDIMENTS

METRES 100 0 100 200 300 400 — FEET 833 0 833 1666

| | |
|---|---|
| SCALE: IN METERS 1:10,000 | NTS No.: 105 M/13, 105 P/16 |
| DATE: JUNE 1978 | MAP No. 6 |
| DRAWN BY: | To accompany report: SECRET CREEK |
| REVISED BY: | PROJECT REPORT |

MAP AREA (13 1:5000 maps produced and located as below

① Outline of sheet with sheet no.

LINE 1

LINE 2

LINE 3

LINE 4

LINE 5

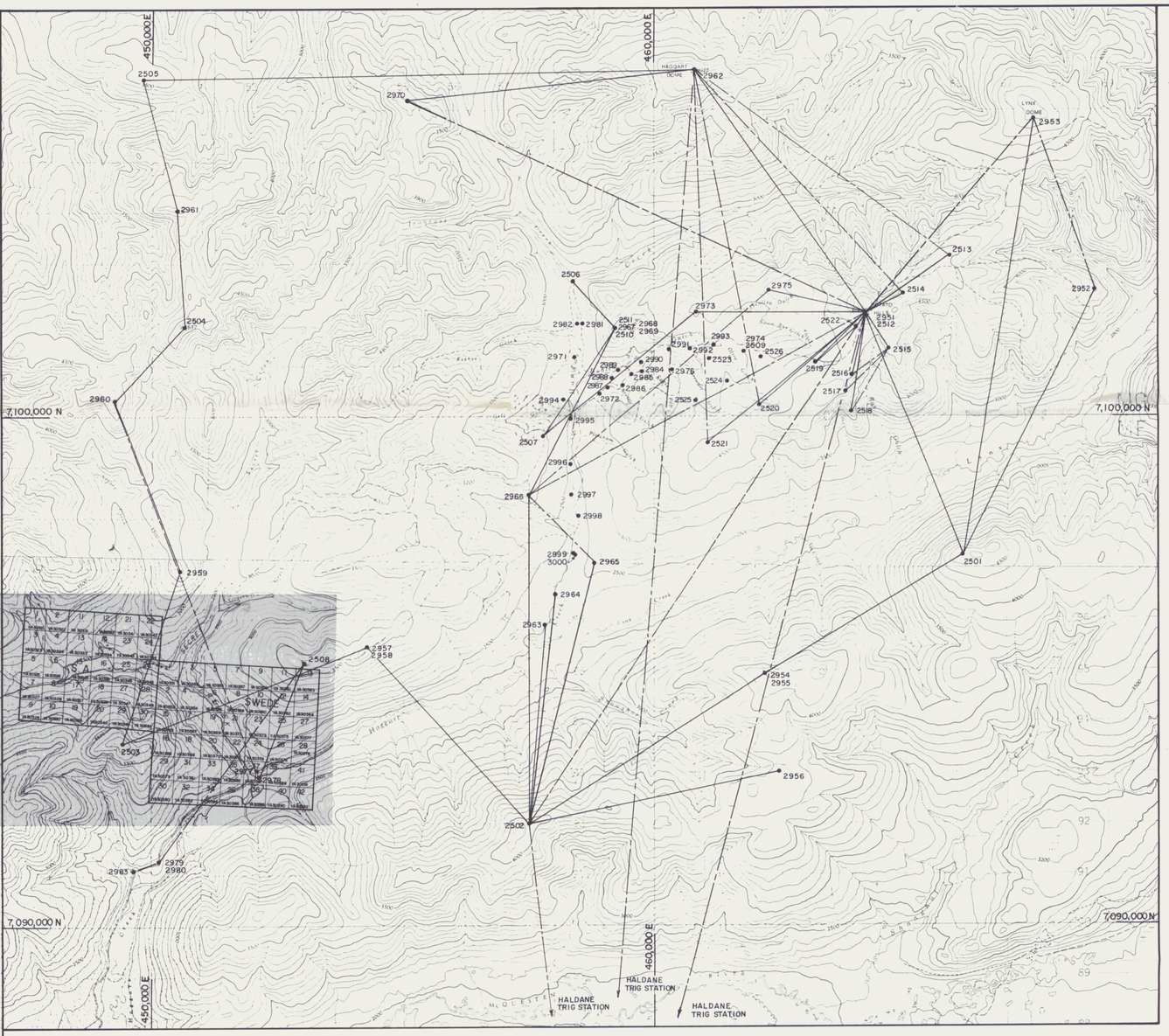
Photo numbers

FLIGHT LINES

INDEX OF AERIAL PHOTOGRAPHY
OF
HAGGART CREEK – DUBLIN GULCH
FOR
CANADA TUNGSTEN MINING CORP LTD.
MAP No. 1

DATE OF PHOTO : 29 JULY 1978
C.F.L. : 152.66
: 1" = ± 1,000 FT.
: 1" = ± 2640 FT.

McELHANNEY SURVEYING & ENGINEERING LTD.
REF. NO. 06497-1




## TABLE OF CO-ORDINATES

| STATION | NORTH | EAST | ELEV. | DESCRIPTION | STATION | NORTH | EAST | ELEV. | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|
| 2501 HV | 7,097,337.19 | 466,111.39 | 1,317.79 | 1P with tag and cairn | 2970 HV | 7,10[illegible]173.62 | 455,081.45 | 1,159.23 | 1P with tag |
| 2502 HV | 7,092,012.93 | 457,515.97 | 1,243.07 | 1P with tag and cairn | 2971 HV | 7,101,166.77 | 458,406.09 | 778.62 | 1P with tag |
| 2503 HV | 7,093,590.98 | 449,415.43 | 1,129.57 | 1P with tag | 2972 HV | 7,100,482.87 | 458,922.16 | 845.46 | 1P with tag |
| 2504 HV | 7,101,745.77 | 450,606.65 | 1,417.14 | 1P with tag near trig. cairn | 2973 HV | 7,102,050.62 | 460,844.74 | 1,227.83 | 1P with tag |
| 2505 HV | 7,106,603.78 | 449,809.22 | 1,089.28 | 1P with tag | 2973 ECC | 7,102,050.46 | 460,853.58 | ---- | |
| 2506 HV | 7,102,652.38 | 458,387.90 | 798.30 | 1P with tag | 2974 HV | 7,101,281.27 | 461,783.14 | 1,201.65 | 1P with tag |
| 2507 HV | 7,099,593.12 | 457,782.15 | 926.29 | 1P with tag in clearing | 2975 HV | 7,102,468.99 | 462,283.20 | 1,288.16 | 1P with tag |
| 2508 | 7,095,150.16 | 453,034.95 | 1,118.19 | 1P with tag on top of ridge | 2976 HV | 7,100,927.49 | 460,355.32 | 1,035.93 | 1P with tag |
| 2509 | 7,101,280.38 | 461,777.45 | 1,201.35 | 1P with tag | 2977 HV | 7,093,031.40 | 452,058.38 | 663.70 | 1P with tag |
| 2510 | 7,101,686.49 | 459,217.81 | 1,071.78 | 1P with tag | 2978 | 7,092,920.08 | 452,123.96 | 664.08 | 1P with tag |
| 2511 | 7,101,675.99 | 459,276.86 | 1,068.38 | 1P with tag | 2979 | ---- | ---- | 691.71 | 1P with tag |
| 2512 | 7,101,967.63 | 464,248.01 | 1,534.05 | Nub with tag | 2980 | ---- | ---- | 692.17 | 1P with tag |
| 2513 | 7,103,147.87 | 465,871.57 | 1,379.78 | 1P with tag and target | 2981 | 7,101,822.04 | 458,535.11 | 786.54 | 1P with tag |
| 2514 | 7,102,415.82 | 464,931.62 | 1,455.76 | 1P with tag and target | 2982 | 7,101,825.46 | 458,469.86 | 786.18 | Nub on gravel bar |
| 2515 | 7,101,330.86 | 464,663.15 | 1,396.70 | 1P with tag and target | 2983 V | ---- | ---- | 660.70 | 1P with tag |
| 2516 | 7,100,828.08 | 463,932.90 | 1,392.39 | 1P with tag and target | 2984 | 7,100,895.43 | 459,741.17 | 880.61 | Spike with tag and target |
| 2517 | 7,100,504.33 | 463,799.83 | 1,398.68 | 1P with tag and target | 2985 | 7,100,843.17 | 459,541.39 | 867.29 | Spike with tag and target |
| 2518 | 7,100,101.64 | 463,927.21 | 1,292.94 | 1P with tag and target | 2986 | 7,100,642.70 | 459,388.56 | 869.93 | Spike with tag and target |
| 2519 | 7,101,085.51 | 463,190.03 | 1,359.50 | 1P with tag and target | 2987 | 7,100,559.22 | 459,069.06 | 859.25 | Spike with tag and target |
| 2520 | 7,100,245.52 | 462,073.40 | 1,325.68 | 1P with tag and target | 2988 | 7,100,707.96 | 459,184.06 | 826.3 | Spike with tag and target |
| 2521 | 7,099,492.63 | 461,077.86 | 1,382.66 | 1P with tag and target | 2989 | 7,100,924.19 | 459,293.16 | 840.7 | Spike with tag and target |
| 2522 | 7,101,719.30 | 464,029.13 | 1,433.60 | 1P with tag and target | 2990 | 7,101,080.69 | 459,712.75 | 878.58 | Spike with tag and target |
| 2523 | 7,101,134.91 | 461,096.38 | 1,120.04 | 1P with tag and target | 2991 | 7,101,325.49 | 460,335.13 | 952.54 | Spike with tag and target |
| 2524 | 7,100,731.99 | 461,448.15 | 1,233.36 | 1P with tag and target | 2992 | 7,101,325.90 | 460,745.65 | 1,011.04 | Spike with tag and target |
| 2525 | 7,100,306.23 | 460,839.14 | 1,204.90 | 1P with tag and target | 2993 | 7,101,398.6 | 461,208.1 | 1,051.37 | Spike with tag and target |
| 2526 | 7,101,189.39 | 462,133.07 | 1,272.10 | 1P with tag and target | 2994 | 7,100,342.85 | 458,217.27 | 768.09 | Spike with tag and target |
| 2951 HV | 7,102,011.84 | 464,203.54 | 1,536.53 | 1P with tag near Potato Cairn | 2995 | 7,099,954.2 | 458,331.1 | 764.75 | Spike with tag and target |
| 2952 HV | 7,102,494.71 | 468,713.16 | 1,161.27 | 1P with tag | 2996 | 7,099,028.1 | 458,339.7 | 750.15 | Spike with tag and target |
| 2953 HV | 7,105,837.18 | 467,530.07 | 1,532.42 | 1P with tag | 2997 | 7,098,446.58 | 458,357.98 | 743.51 | Spike with tag and target |
| 2954 | 7,094,926.43 | 462,229.70 | 1,292.71 | 1P with tag | 2998 | 7,098,033.33 | 458,465.90 | 745.40 | Spike with tag and target |
| 2955 HV | 7,094,930.46 | 462,259.60 | 1,292.65 | 1P with tag | 2999 | 7,097,330.44 | 458,383.26 | 739.12 | 1P with tag |
| 2956 HV | 7,095,021.52 | 462,473.68 | 1,159.19 | 1P with tag | 3000 | 7,097,287.0 | 458,480.8 | 736.4 | Spike with tag and target |
| 2957 HV | 7,095,451.34 | 454,286.59 | 1,124.06 | 1P with tag | DH #1 | 7,100,793.2 | 458,774.6 | 806.0 | Drill hole |
| 2958 | 7,095,452.65 | 454,285.55 | 1,123.88 | 1P with tag | DH #3 | 7,100,682.5 | 458,774.6 | 814.0 | Drill hole |
| 2959 HV | 7,096,968.18 | 450,580.18 | 1,068.87 | 1P with tag | DH #4 | 7,100,601.1 | 458,773.7 | 819.8 | Drill hole |
| 2960 HV | 7,100,344.97 | 449,256.74 | 1,455.86 | 1P with tag | DH #5 | 7,100,558.9 | 458,773.4 | 823.9 | Drill hole |
| 2961 | 7,104,053.68 | 450,456.76 | 1,301.96 | 1P with tag | DH #6 | 7,100,500.5 | 458,783.7 | 827.3 | Drill hole |
| 2962 | 7,106,768.84 | 460,801.44 | 1,497.85 | 1P with tag on Haggarts Dome | DH #7 | 7,100,447.5 | 458,780.8 | 828.5 | Drill hole |
| 2963 HV | 7,095,905.21 | 457,813.59 | 722.50 | 1P with tag | DH #8 | 7,100,375.2 | 458,777.7 | 830.1 | Drill hole |
| 2964 HV | 7,096,499.20 | 457,999.88 | 723.93 | 1P with tag | DH #9 | 7,100,315.7 | 458,783.2 | 833.6 | Drill hole |
| 2965 HV | 7,097,202.26 | 458,833.76 | 810.67 | 1P with tag | | | | | |
| 2966 HV | 7,098,457.75 | 457,549.44 | 984.58 | 1P with tag on Tin Dome | HAGGART CAIRN HV | 7,106,765.7 | 460,799.3 | 1,497.97 | Government Trig. Sta. |
| 2967 | 7,101,703.25 | 459,238.78 | 1,074.86 | 1P with tag on Tin Dome | POTATO CAIRN | 7,102,018.4 | 464,206.4 | 1,537.23 | Government Trig. Sta. |
| 2968 | 7,101,709.15 | 459,223.72 | 1,073.93 | Lath with tag on Tin Dome | HALDANE | 7,081,565.4 | 458,681.0 | ---- | Government Trig. Sta. |
| 2969 HV | 7,101,705.16 | 459,258.95 | 1,072.07 | 1P with tag on Tin Dome | | | | | |




DETAIL OF SURVEY
IN DUBLIN GULCH
AND HAGGART CREEK.

SCALE 1:20,000




BEARING DEVIATION AT THE MERIDIAN THROUGH TRIG STATION POTATO.

Additional 130+ points located on orthophoto and listed in appendix no 3

## LEGEND

BEARINGS ARE UTM AND ARE DERIVED FROM TRIG POINTS POTATO AND HALDANE.

ELEVATIONS ARE GEODETIC AND ARE DERIVED FROM TRIG POINT POTATO.

DISTANCES ARE REDUCED TO SEA LEVEL DATUM.

CO-ORDINATES ARE UTM ZONE 8, CENTRAL MERIDIAN −135° AND ARE DERIVED FROM TRIG STATION POTATO.

| | |
|---|---|
| 2951 • | DENOTES SURVEY STATION |
| ——— | DENOTES HORIZONTAL AND VERTICAL ANGLES AND DISTANCE OBSERVED. |
| — — — | DENOTES VERTICAL ANGLE AND DISTANCE OBSERVED. |
| ——·—— | DENOTES HORIZONTAL ANGLE ONLY OBSERVED. |
| HV | DENOTES POINT TARGETTED AND USED AS A HORIZONTAL AND VERTICAL PHOTO CONTROL POINT. |
| V | DENOTES POINT TARGETTED AND USED AS A VERTICAL PHOTO CONTROL POINT. |

| REV NO | DATE | REVISION | DR. | CH. | APP. |
|---|---|---|---|---|---|

# CANADA TUNGSTEN LTD.

## PLAN OF PHOTO CONTROL HAGGART CREEK, Y.T.

**McELHANNEY SURVEYING & ENGINEERING LTD.**
Vancouver, B.C.

| | |
|---|---|
| DESIGNED R.H. | SCALES HOR: 1:50,000 VERT: |
| DRAWN K.M.S. | |
| CHECKED J.W.K.S | DATE AUGUST 16, 1978 |
| APPROVED R.S. | JOB NO. 07465-0 |
| CLIENT DWG. NO. MAP No. 2 | MSEL DWG. NO. "A" |
| | REV. |

LYNX DOME

BASELINE 10+000N

JEFF 1-112

DAVE 1-24

RD 1-16

MAR 1-24

MAR 25-30

ALEC 1-60

MG ME

POTATO HILLS

Cabin Gulch

Bonanza Gulch

Lynx Creek

Skate Creek

Skarn Zone

OVERBURDEN

possible Plunging Anticline

Claims as located on recon geochemistry maps 8 & 9

45'

40'

## ROCK TYPES & ABBREVIATIONS

CRETACEOUS

- 11 Mafic Dykes - Dioritic to Gabbroic
- 10 Quartz Monzonite
- 9 Aplite Dykes
- 8 Granodiorite to Granite Grc, GRN, gd
- 7 Biotite Granodiorite

YUKON GROUP PRECAMBRIAN and/or PALAEOZOIC

- Garnet Diopside Skarn
- 5 Biotite-Quartzites (Schistose) Bio. & Musc Qtzite-Qtzt
- 4 Muscovite-Quartzites (Schistose)
- Laminated Diopside Skarn
- 2 Marble
- Black Phyllitic Schists

## STRUCTURE & SYMBOLS

- FAULTS - definite, indefinite
- CONTACTS - definite, indefinite
- OUTCROP - Float
- BOULDER FIELD
- BEDDING - dip (25), strike
- JOINTING, FRACTURING WITH ATTITUDE
- STREAMS
- CAT ROADS
- OLD WORKINGS - shafts
- OLD WORKINGS - adits
- AIRPHOTO TRIANGULATION SURVEY SITES

CANADA TUNGSTEN MINING CORP. LTD.

1978 DUBLIN GULCH PROJECT
MAYO MINING DISTRICT, YUKON TERRITORY

# RECONNAISSANCE & DETAILED GEOLOGY

(FOR MORE DETAIL SEE 1:5000 MAP NO. 5
MAP NO. 3 (EASTERN HALF)

METRES 100 0 100 200 300 400 FEET 833 0 833 1666

| | |
|---|---|
| SCALE IN 1:10,000 | NTS No. 106 D/4 (East Half) |
| DATE JANUARY 1979 | MAP No. 3 |
| DRAWN BY B. LENNAN | To accompany report 1978 Dublin Gulch |
| REVISED BY | Project Report |

HAGGART DOME 4917

JEFF 1-112

DAVE 1-24

NORTH RIDGE R.D. 1-16

B-13

Fisher Creek

Gulch

Platinum Gulch

Dublin Gulch

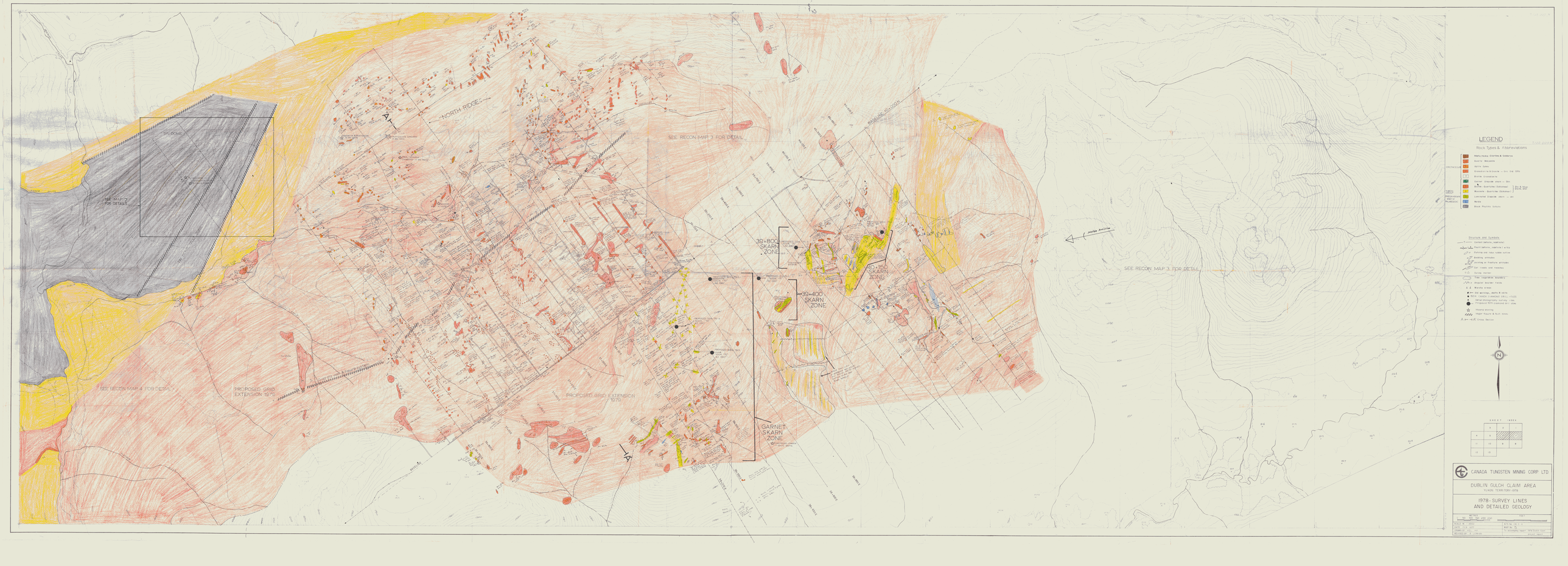
Creek D-56

Creek

Gulch

Gulch

Gulch



"NORTH RIDGE"
SEE RECON MAP 3 FOR DETAIL
SEE MAP 7 FOR DETAILS
SEE RECON MAP 4 FOR DETAIL
PROPOSED GRID EXTENSION 1979
39+800 SKARN ZONE
39+400 SKARN ZONE
40+150 SKARN ZONE
GARNET SKARN ZONE
SEE RECON MAP 3 FOR DETAIL
LEGEND
Rock Types & Abbreviations
Structure and Symbols
SHEET INDEX
CANADA TUNGSTEN MINING CORP LTD
DUBLIN GULCH CLAIM AREA
YUKON TERRITORY-1978
1978-SURVEY LINES AND DETAILED GEOLOGY

A

324°

SECTION - DUBLIN GULCH ( See map 5 ) VIEW LOOKING N. 54° E.

A'

144°

Very limited exposure of actual outcrop interpretation from float rock mapping.

Scheelite bearing skarns 0% to 2.20% $WO_3$ in float samples and outcrop. No cassiterite.

ELEVATION A.S.L.

1400 m.
1300 m.
1200 m.
1100 m.
1000 m.
900 m.
800 m.

NORTH RIDGE

Massive units of interbedded biotite quartzite, muscovite quartzite schist and very minor amounts of skarn.

Interbedded biotite quartzite schists muscovite quartzite schists and minor diopside skarn.

OLIVE GULCH AREA

DUBLIN CREEK

CANEX DDH

Cassiterite and scheelite bearing stockworks quartz veins trend northeastly and emanate from small stock.

Quartz Monzonite to Granodiorite

FAULT

GOLD - QTZ - ARSENOPYRITE FISSURE SYSTEM

Granodiorite

Northeasterly trending pegmatitic veins throughout intrusive stock.
2 mm to 10 cm thick
2 to 8 veins per 30 cm common scheelite specks in most veins. No cassiterite in this vein system.

Granodiorite

ELEVATION A.S.L.

1400 m.
1300 m.
1200 m.
1100 m.
1000 m.
900 m.
800 m.

*LEGEND*

- Quartz Monzonite
- Granodiorite
- Skarn
- Biotite and muscovite quartzite schist
- Faults and Fissures
- Diamond Drill Hole

CANADA TUNGSTEN MINING CORP. LTD.

DUBLIN GULCH

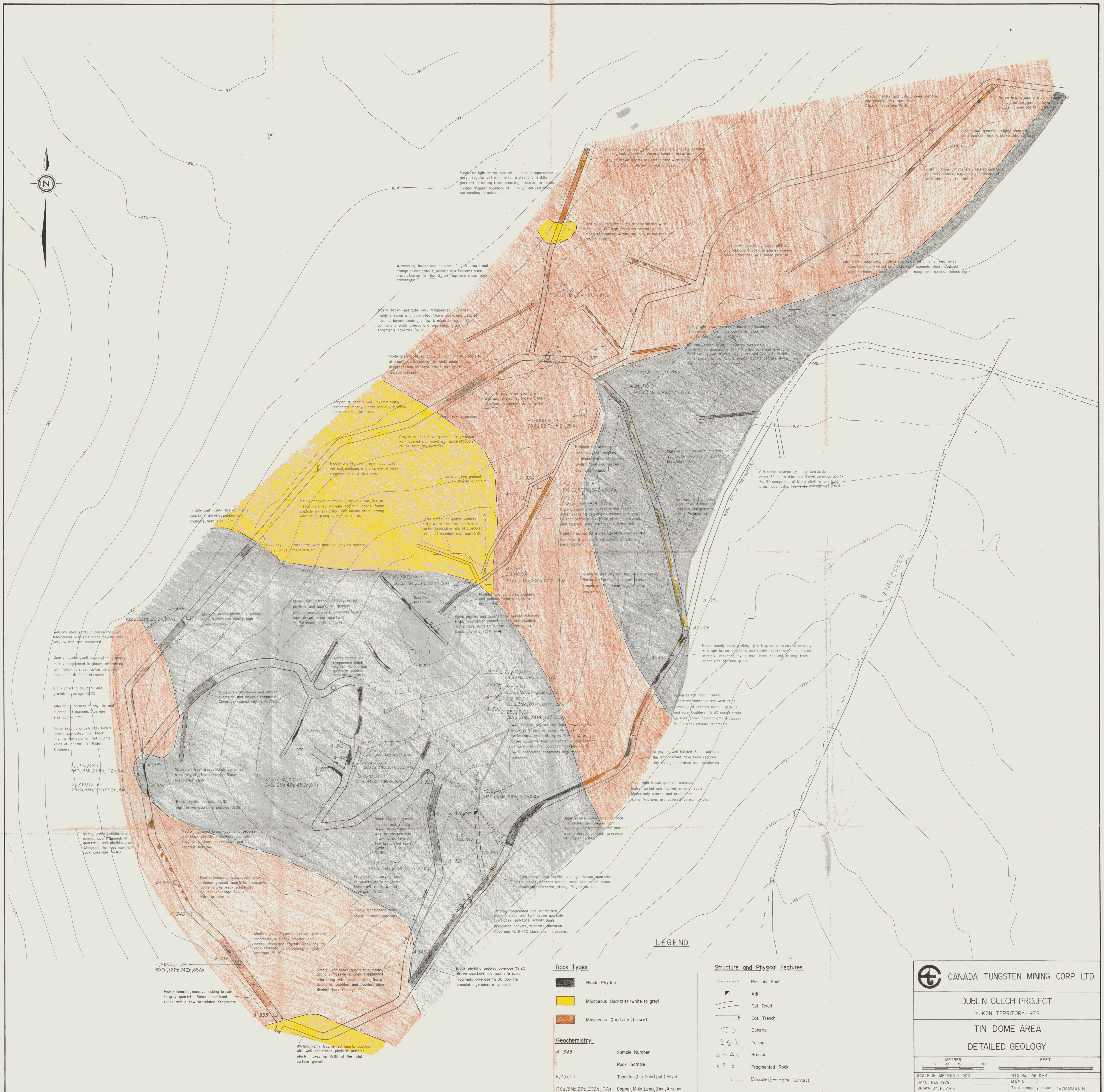
YUKON TERRITORY, MAYO MINING DISTRICT

# GEOLOGIC SECTION A-A'

VIEW LOOKING N. 54° E.
SKETCH MAP FROM OVERBURDEN MAPPING - NO DRILL INFORMATION

m 0 50 100 200 300 m

| | | | |
|---|---|---|---|
| SCALE IN | 1 : 5000 | NTS No. | 106 D - 4 |
| DATE | MARCH 1979 | MAP No. | 6 |
| DRAWN BY | B. LENNAN | To accompany report | 1978 DUBLIN GULCH PROJECT REPORT |
| REVISED BY | | | |


990
980
990
996 X
990
1000
980
950
960
970
Black and light brown quartzitic horizons represented in very irregular pattern highly twisted and friddle portions resulting from shearing process. In places contain angular boulders of 1' to 2' derived from surrounding formations.
Black to brown quartzitic and phyllitic gravels pebbles, blocks, highly altered zones, some brecciation.
Grey to brown quartzite, intercalated with black to silvery phyllitic rock, in places strongly folded.
Light colour to grey quartzite alternating with black phyllite, high grade alteration, some limonitized bands within the clayish horizons of varying colour.
Alternating bands and pockets of black, brown and orange colour gravels, pebbles and boulders some brecciation on the floor. Some fragments shows weak schistosity.
A-316
-,1,<10,0.1
12 Cu,1 Mo,8 Pb,10 Zn,10 As
1047 X
Mostly brown quartzite, very fragmented in places highly sheared and contorted. Some blocks and pebbles have carbonate coating a few brecciated spots. Some portions strongly altered and weathered black fragments coverage % 10.
Moderately layered black to light brown quartzite alternating, overlain by the soils made up the disintegration of these rocks through the residual process.
A-319
A-317
-,<10,0.1
12 Cu,2 Mo,12 Pb,10 Zn,8 As
2,1,<10,0.1
14 Cu,3 Mo,12 Pb,10 Zn,8 As
Partially weathered quartzite and quartzite schist, brown to black in colour. Fragments up to % 40.
Greyish quartzite, well layered highly contorted, mostly blocky, partially massive some oxidized intervals
Blocky, friable phyllite
A-337
-,>1000,-,1
78 Cu,22 Pb,18 Zn,28 As
Greyish to light brown quartzite fragmented, well layered significent iron oxide products on the fractured surfaces
Blocky phyllite and greyish quartzite vertical plunging is distinctive strongly fragmented and shattered.
Massive, fine grained light coloured quartzite
Residual soil horizons of varying colour resulting of disintegration of black phyllitic and light brown quartzite schist.
A-336
-,1,<1000,2,8
104 Cu,50 Pb,24 Zn,70 As
A-315
2,1,10,0.1
32 Cu,1 Mo,38 Pb,50 Zn
Mainly massive quartzite, grey in colour, fine to medium grained, includes phyllitic lenses. Some sulphide mineralization and limonitization strong weathering, plunging vertical or close to
Friable and highly altered greyish quartzite gravels, pebbles and boulders, max. size 1' to 2'
Some irregular quartz veinlets milky white, non-mineralization partial brecciation phyllitic pebble, cob and boulders coverage % 30
Light brown to grey quartzite and quartzite schist exposing as pebbles, cobbles and gravels. Boulder coverage % 30 in places massive and well layered, shiny cleavage surfaces striking
Highly fragmented phyllitic pebbles, cobbles and boulders. Significant indications of strong metamorphism.
Blocky phyllite, intercalated with massive greyish quartzite some sulphide mineralization.
A-318
2,1,<10,0.4
20 Cu,2 Mo,20 Pb,20 Zn,3 As
2,1,<10,0.2
36 Cu,1 Mo,20 Pb,90 Zn,3 As
A-314
Quartzite and phyllitic horizons alternating. Black and orange in colour. Gradual fragmentation ultimately ending up to clayish soil.
Phyllitic and quartzitic boulders and pebbles alternating. Some brecciated rocks
Sporadic brecciation
Mostly light brown gravels, pebbles and boulders of quartzitic origin. Coverage % 30 black phyllitic pebbles up to % 5-10
Ancient Trench, covered by heavy overburden (3' to 4' in thickness) % 30 - 40 gravel coverage averaging 2, 3 cm in size, mostly light brown and quartzitic origin. Some brecciation containing angular quartz pebbles of less than 1 cm in size or little over.
Massive light coloured quartzite high grade silicification sporadic brecciated rocks.
Horizontally alternating black phyllitic rocks and light coloured quartzite, highly fragmented.
Predominantly quartzitic gravels pebbles and blocks, max. size 5 cm. Approx. coverage % 30
Brown to gray quartzite very fragmented highly oxidized, partially layered and in places includes phyllitic intervals.
1062 X
Light brown quartzite, highly sheared, some boulders having slickensided surfaces.
1060
Light to brown, moderately layered quartzite partially massive exposures, intercalated with black phyllitic rocks.
Light brown quartzite, highly altered, silicified and blocky in places layered zones alternates with black phyllite.
1050
Light brown quartzite, moderately layered, highly weathered in places strongly twisted and distorted fragments shows oxidized cleavage surfaces (products of iron and manganese oxides dominating.)
1040
1030
1020
Old trench covered by heavy overburden of about 3'-4' in thickness. Gravel coverage approx % 30 composed of black phyllitic and light brown quartzitic fragments average size 2 to 4 cm
1010
ROAD CUT IN OVERBURDEN
1000
ANN CREEK
990
980
970
960
950
A-351
A-349
A-350
Predominantly black phyllite, highly fragmented layers alternating with light brown quartzite and rarely quartz schist. In places strongly undulating layers have been reduced to clay from either kind of rock group.
Alongside the road-trench, significant alteration and weathering. Coverage of pebbles, cobbles, gravels and rare boulders % 30 mainly made up light brown colour quartzite. Approx. % 20 black phyllite fragments.
Black phyllite, well foliated. Some portions of the embankment have been reduced to clay through alteration and weathering
Small light brown quartzite outcrops, highly twisted and faulted in minor scale. Moderately altered and brecciated. Some fractures are covered by iron oxides.
-,70,-,0.4
182 Cu,8 Pb,20 Zn,30 As
A-338
Black to silvery phyllitic in places very friable and blocky high grade folding.
Moderately altered and fragmented phyllitic and quartzitic gravels, pebbles and boulders. Coverage % 40 light brown colour quartzitic % 30 black phyllitic rocks.
Black phyllite and light fairly layered quartzite. Highly fragmented pebbles, cobble and boulders. Some have wrinkled surfaces. Coverage of black phyllitic rock % 40
1085
TIN HILLS
1080
Well laminated quartz, in places massive, intercalated with soft black phyllite, both very twisted and contorted
Quartzite, schist, well layered, fine grained, mostly fragmented, in places alternating with black to silver colour phyllitic rock of 1' to 2' in thickness.
Black phyllitic boulders and gravels coverage % 20.
Alternating pockets of phyllitic and quartzitic fragments. Average size 2,3,4 cms.
Some brecciation, strongly folded brown quartzite, minor black phyllitic horizons or few quartz veins of approx. 10-15 cms thickness.
Highly folded and fragmented black phyllite % 10 brown quartzite pebbles moderately altered.
Moderately weathered and altered quartzitic and phyllitic fragments. Coverage respectively % 40, % 30
A-313
2,1,<10,0.1
10 Cu,1 Mo,10 Pb,10 Zn,3 As
A-308
6,-,-,0.1
16 Cu,2 Mo,18 Pb,20 Zn,5 As
A-312
2,2,40,0.1
10 Cu,3 Mo,20 Pb,20 Zn,10 As
A-322
25,1,10,0.1
30 Cu,3 Mo,34 Pb,20 Zn,10 As
Well foliated phyllite and light brown quartzite. Black to silvery in colour. Vertically and horizontally oriented layers frequently are mixed up. Some tourmalinization is represented by very tiny and corroded crystals. Up to % 5 brecciated fragments, high grade alteration.
Survey Control Point
1079 X
A-311
A-310
A-309
A-307
2,2,<10,0.2
28 Cu,1 Mo,14 Pb,45 Zn,10 As
-8,24,<10,0.4
200 Cu,2 Mo,30 Pb,55 Zn,4 As
2,10,<10,0.1
32 Cu,3 Mo,20 Pb,40 Zn,36 As
375,10,<10,0.2
24 Cu,2 Mo,4 Pb,45 Zn,8 As
2,1,<10,0.2
38 Cu,3 Mo,22 Pb,110 Zn,4 As
A-320
2,1,<10,0.2
24 Cu,3 Mo,12 Pb,45 Zn,3 As
A-324
Moderately weathered, strongly contorted black phyllite, fair alteration. Some brecciated spots.
A-323
2,2,40,0.1
10 Cu,3 Mo,20 Pb,20 Zn,10 As
Black phyllite boulders % 30 light brown quartzite pebbles % 20
OLD ADIT
OLD TAILINGS
Black phyllitic gravels, pebbles and boulders. Some shows alterance with brown quartzite in zoning pattern. A few brecciated spots. Coverage of fragment % 30
Black, silvery colour phyllitic rock intercalated with lesser light brown quartzite, alternating and weathering, as a result presence of clayish zones.
A-348
A-321
2,2,<10,0.4
36 Cu,3 Mo,20 Pb,25 Zn,82 As
Mostly gravel, pebbles and cobbles size fragments of quartzitic and phyllitic origin. Alongside the road maximum rock coverage % 40
Medium grained, brown quartzitic pebbles and black phyllitic fragments, quartzitic fragments shows slickensided and sheared features.
Fragments of varying size of quartzitic origin, some brecciated rocks. Approx. coverage % 20.
Alternating black phyllite and light brown quartzite (in places quartzite schist), some brecciated rocks moderate alteration, strong fragmentation.
A-341
Poorly lineated, massive, light brown, medium grained quartzitic fragments. Some shows weak schistosity. Boulder coverage % 20. Rare brecciation.
A-340
Highly fragmented black phyllitic small outcrops.
Strongly fragmented and interrelated black phyllitic and light brown quartzite (in places quartzite schist). Some brecciated pockets, moderate alteration. Coverage % 15-20 black phyllitic pebbles.
Medium grained poorly layered quartzite fragments, in places massive and having elongated crystals. Black phyllite rock coverage % 30. Quartzitic rock coverage % 40.
A-339
-,>1000,-,0.4
130 Cu,32 Pb,74 Zn,68 As
A-343
Small light brown quartzite outcrops, partially massive, strongly fragmented, alternating with black phyllite. Some quartzitic pebbles and boulders show distinct kink foldings.
Black phyllitic pebbles coverage % 20. Brown quartzite and quartzite schist fragments coverage % 30. Sporadic brecciation, moderate alteration.
Poorly lineated, massive looking brown to grey quartzite. Some limonitized rocks and a few brecciated fragments.
A-335
Whitish, highly fragmented quartz pockets with well schistosed phyllitic pebbles which makes up % 60 of the total surface gravels.
LEGEND
Rock Types
Black Phyllite
Micaceous Quartzite (white to grey)
Micaceous Quartzite (brown)
Geochemistry
A-343 Sample Number
Rock Sample
6,2,5,0.1 Tungsten, Tin, Gold (ppb), Silver
10 Cu, 3 Mo, 2 Pb, 20 Zn, 10 As Copper, Moly, Lead, Zinc, Arsenic
Structure and Physical Features
?~~~? Possible Fault
Adit
Cat. Road
Cat. Trench
Outcrop
Tailings
Breccia
Fragmented Rock
—?— Possible Geological Contact
CANADA TUNGSTEN MINING CORP. LTD.
DUBLIN GULCH PROJECT
YUKON TERRITORY-1978
TIN DOME AREA
DETAILED GEOLOGY
METRES
0 10 20 30 40 50
FEET
SCALE IN METRES 1:1000
NTS No. 106 D-4
DATE FEB., 1979
MAP No. 7
DRAWN BY H. ARIK
To accompany report: 1978 DUBLIN

LYNX DOME

JEFF

MARY ANN

ALEC

MG ME

BASELINE 10+000N

Lynx Creek

Skate

Butler Gulch

Slate Creek

POTATO HILLS

4000m.

135° 45′

40′

△ A-136 2,1,<10,0.1 — Typical sample location with alphabetically coded sample number and analysis results.

SAMPLE LOCATION SYMBOLS

- △ stream sediments
- ○ soil
- □ rock

SAMPLE NUMBERS

letter identifies sampler

each sampler has a complete number series

SAMPLE VALUES

The number sequence indicates element geochemical analysis in ppm as shown below

W(ppm), Sn(ppm), Au(ppm), Ag(ppm)

Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

Assay results are shown as % or Troy oz./short ton (oz./ton)

Tungsten assay are reported in $WO_3$%

OTHER SYMBOLS

| | |
|---|---|
| NS | not sufficient sample for analysis |
| NA | no analysis for sample |
| — | no analysis for element |
| < | less than |
| > | greater than |

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS

W 4ppm, values below detection limit reported as 2 ppm

Sn 2ppm, values below detection limit reported as 1 ppm

Au 10ppb, values below detection limit reported as < 10ppb

Ag 0.2ppm, values below detection limit reported as 0.1ppm

CANADA TUNGSTEN MINING CORP. LTD.

# 1978 DUBLIN GULCH PROJECT
## MAYO MINING DISTRICT, YUKON TERRITORY
## REGIONAL STREAM GEOCHEMISTRY
## TUNGSTEN, TIN, GOLD, SILVER
## MAP 8 (EASTERN HALF)

METRES 100 0 100 200 300 400 — FEET 833 0 833 1666

| | |
|---|---|
| SCALE IN: 1 : 10,000 | NTS No. 106 D/4 |
| DATE: JANUARY 1979 | MAP No. 8 (EASTERN HALF) |
| DRAWN BY: B. LENNAN & D. LYMAN | To accompany report: |
| REVISED BY: | 1978 DUBLIN GULCH PROJECT |

HAGGART DOME
4917
Ironrust
Creek
Dublin Gulch
Haggart
Fisher Gulch
Platinum
Gulch
Stewart
Gulch
Pine Gulch
Gas
Gulch
BASELINE 10+000N
135° 55'
50'

△ A-136 2,1,<10,0.1 — Typical sample location with alphabetically coded sample number and analysis results.

SAMPLE LOCATION SYMBOLS
- △ stream sediments
- ○ soil
- □ rock

SAMPLE NUMBERS
letter identifies sampler
each sampler has a complete number series

SAMPLE VALUES
The number sequence indicates element geochemical analysis in ppm as shown below

W(ppm), Sn(ppm), Au(ppm), Ag(ppm)

Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

Assay results are shown as % or Troy oz./short ton (oz./ton)

Tungsten assay are reported in $WO_3$%

OTHER SYMBOLS
- NS not sufficient sample for analysis
- NA no analysis for sample
- — no analysis for element
- < less than
- > greater than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS
- W 4ppm, values below detection limit reported as 2 ppm
- Sn 2ppm, values below detection limit reported as 1 ppm
- Au 10ppm, values below detection limit reported as < 10ppm
- Ag 0.2ppm, values below detection limit reported as 0.1ppm

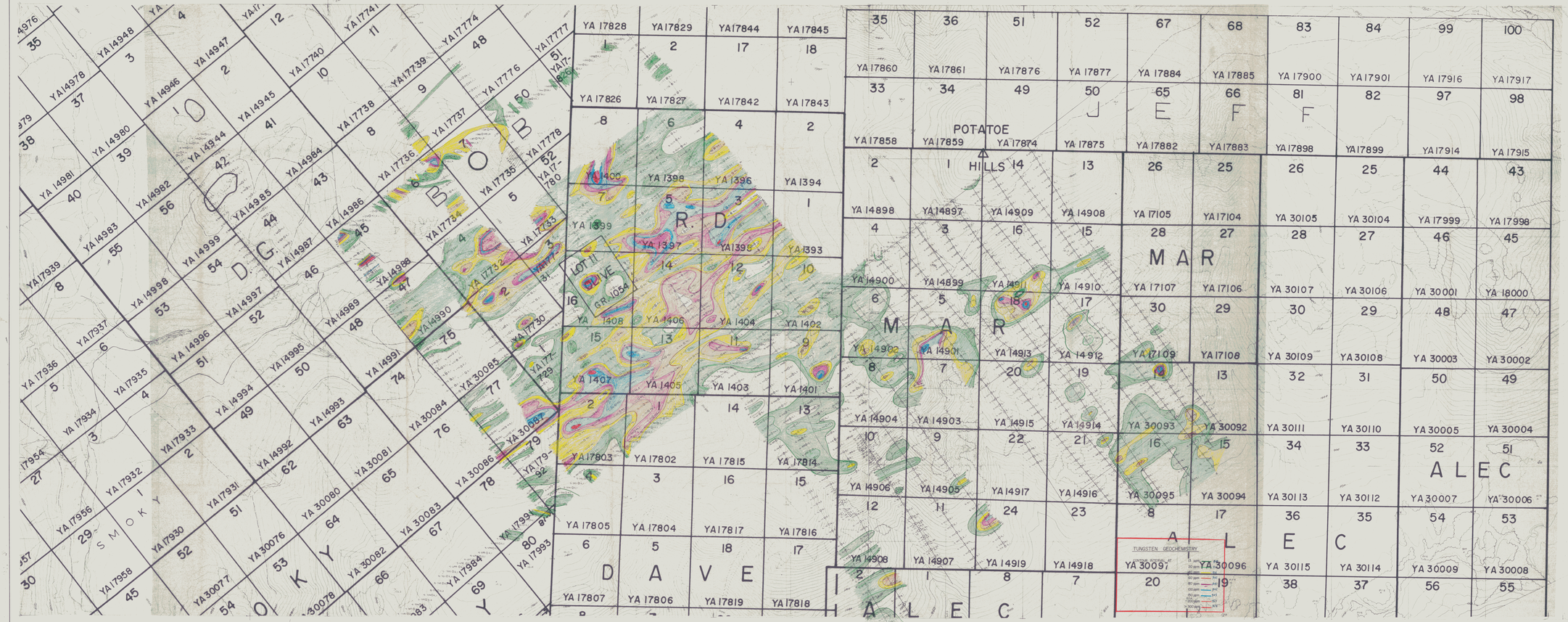
CANADA TUNGSTEN MINING CORP. LTD.

# 1978 DUBLIN GULCH PROJECT
## MAYO MINING DISTRICT, YUKON TERRITORY

## REGIONAL STREAM GEOCHEMISTRY
## TUNGSTEN, TIN, GOLD, SILVER
## MAP 9 (WESTERN HALF)

METRES 100 0 100 200 300 400 — FEET 833 0 833 1666

| | |
|---|---|
| SCALE: IN: 1: 10,000 | NTS No. 106 D/4 |
| DATE: JANUARY 1979 | MAP No. 9 (WESTERN HALF) |
| DRAWN BY: B. LENNAN & D. LYMAN | To accompany report: |
| REVISED BY: | 1978 DUBLIN GULCH |




## LEGEND

GEOCHEMICAL SAMPLING

S-113 ○ SAMPLE LOCATION WITH SAMPLE NUMBER

SAMPLE LOCATIONS

△ STREAM SAMPLE
○ SOIL SAMPLE
□ ROCK SAMPLE

SAMPLE NUMBERS

SAMPLES ARE DESIGNATED BY A LETTER FOLLOWED BY A SEQUENTIAL NUMBER THE LETTER INDICATES AN INDIVIDUAL SAMPLER

SAMPLE ANALYSIS RESULTS

A SUITE OF 3 ELEMENTS - TUNGSTEN, TIN & MOLYBDENUM ARE DISPLAYED IN SERIES AS SHOWN

S-113 ○ 2,1,1 Sample Number ○ Tungsten, Tin, Moly

DETECTION LIMITS

TUNGSTEN 4 PPM VALUES BELOW LIMIT SHOWN AS 2 PPM
TIN 2 PPM VALUES BELOW LIMIT SHOWN AS 1 PPM

SYMBOLS

TREE VEGETATION LIMITS
CUT ROADS AND TRENCHES
CONTOUR INTERVAL = 10 Metres

NOTE: See Map No. 4 4 4 For Stream & Rock Geochemistry

SHEET INDEX

CANADA TUNGSTEN MINING CORP. LTD.

1978 DUBLIN GULCH DETAILED GEOCHEMISTRY

RAY GULCH GRID AND DUBLIN GULCH GRID

METRES 1:1000 FEET

SCALE 1:4 METRES 1:5000 FEET

DATE FEB. 1978

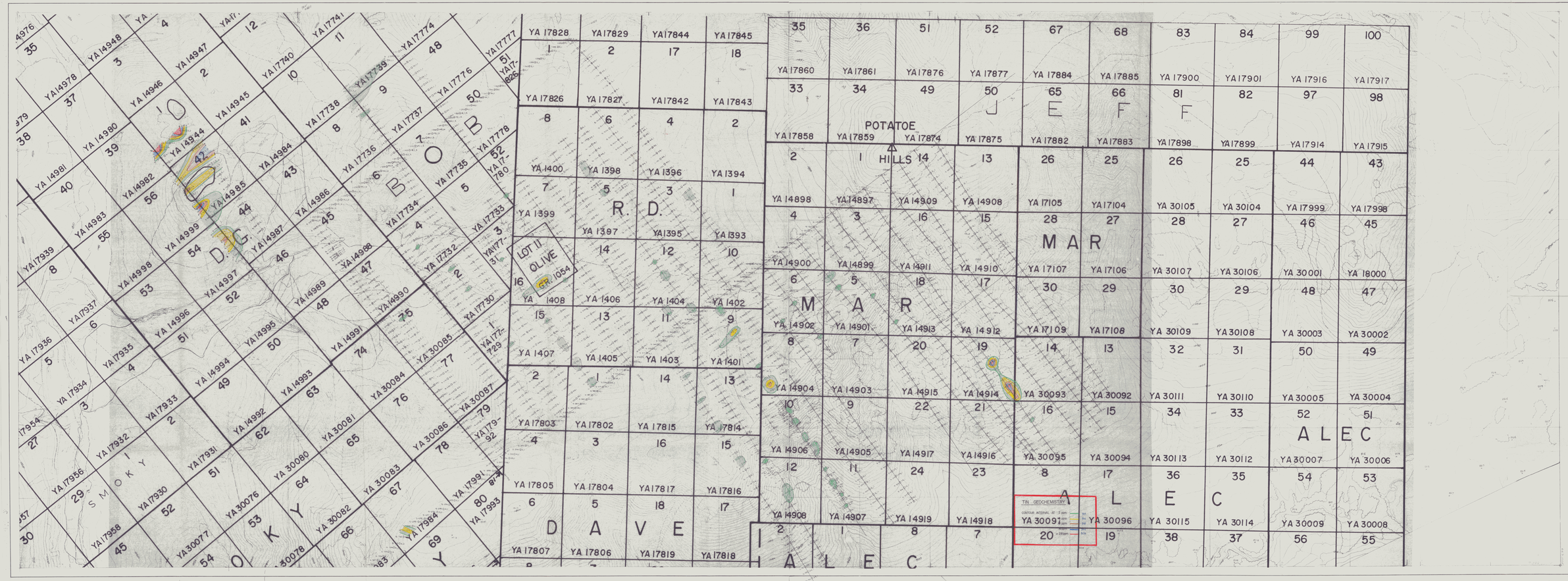
DRAWN BY R. JENNINGS

REVISED BY

NTS No. 1 1

MAP No. 10

PROJECT MAGNET MINERAL & PLACER




## LEGEND

GEOCHEMICAL SAMPLING

S-113 ○ SAMPLE LOCATION WITH SAMPLE NUMBER

SAMPLE LOCATIONS

△ STREAM SAMPLE
○ SOIL SAMPLE
□ ROCK SAMPLE

SAMPLE NUMBERS

SAMPLES ARE DESIGNATED BY A LETTER FOLLOWED BY A SEQUENTIAL NUMBER THE LETTER INDICATES AN INDIVIDUAL SAMPLER

SAMPLE ANALYSIS RESULTS

A SUITE OF 3 ELEMENTS - TUNGSTEN,TIN & MOLYBDENUM ARE DISPLAYED IN SERIES AS SHOWN

S-113 ○ 2,1,1 Sample Number ○ Tungsten,Tin,Moly

DETECTION LIMITS

TUNGSTEN 4 PPM VALUES BELOW LIMIT SHOWN AS 2 PPM
TIN 2 PPM VALUES BELOW LIMIT SHOWN AS 1 PPM

SYMBOLS

TREE VEGETATION LIMITS
CUT ROADS AND TRENCHES
CONTOUR INTERVAL = 10 Metres

NOTE: See Map No # 9 For Stream & Rock Geochemistry

SHEET INDEX

| | | | |
|---|---|---|---|
| | 3 | 2 | 1 |
| 6 | 5 | 4 | |
| 7 | 10 | 9 | 8 |
| 12 | 13 | | |

CANADA TUNGSTEN MINING CORP LTD

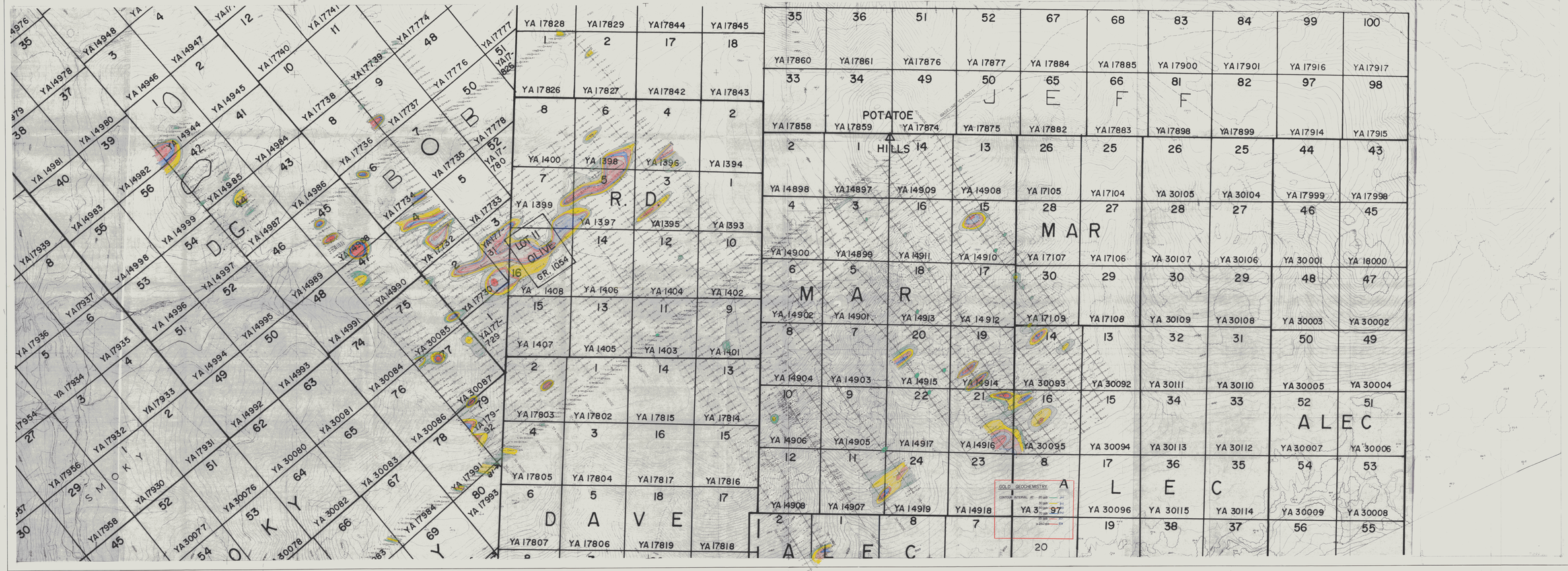
1978 DUBLIN GULCH DETAILED GEOCHEMISTRY

RAY GULCH GRID AND DUBLIN GULCH GRID

METRES CALCULATIONAL FEET

SCALE IN METRES 1:5000
DATE FEB 1979
DRAWN BY J. LENNAN
REVISED BY

NTS No. 115 A
REF No. 11
T. Kennedy Report NEW DUBLIN GULCH
PROJECT REPORT MINERAL & PLACER




## LEGEND

GEOCHEMICAL SAMPLING

S-13 ○ SAMPLE LOCATION WITH SAMPLE NUMBER

SAMPLE LOCATIONS

△ STREAM SAMPLE
○ SOIL SAMPLE
□ ROCK SAMPLE

SAMPLE NUMBERS

SAMPLES ARE DESIGNATED BY A LETTER FOLLOWED BY A SEQUENTIAL NUMBER THE LETTER INDICATES AN INDIVIDUAL SAMPLER

SAMPLE ANALYSIS RESULTS

A SUITE OF 2 ELEMENTS - GOLD & SILVER ARE DISPLAYED IN SERIES AS SHOWN

S-13 ○ 10,0 Sample Number ○ Gold Silver (PPB) (PPM)

DETECTION LIMITS

GOLD 0.1 PPB, VALUES BELOW LIMIT SHOWN AS < 0.1 PPB

SILVER 0.2, VALUES BELOW LIMIT SHOWN AS 0.1 PPM

SYMBOLS

TREE VEGETATION LIMITS
CUT ROADS AND TRENCHES
CONTOUR INTERVAL 1.0 Metres

NOTE: See Map No. 4 For Stream & Rock Geochemistry

SHEET INDEX

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |

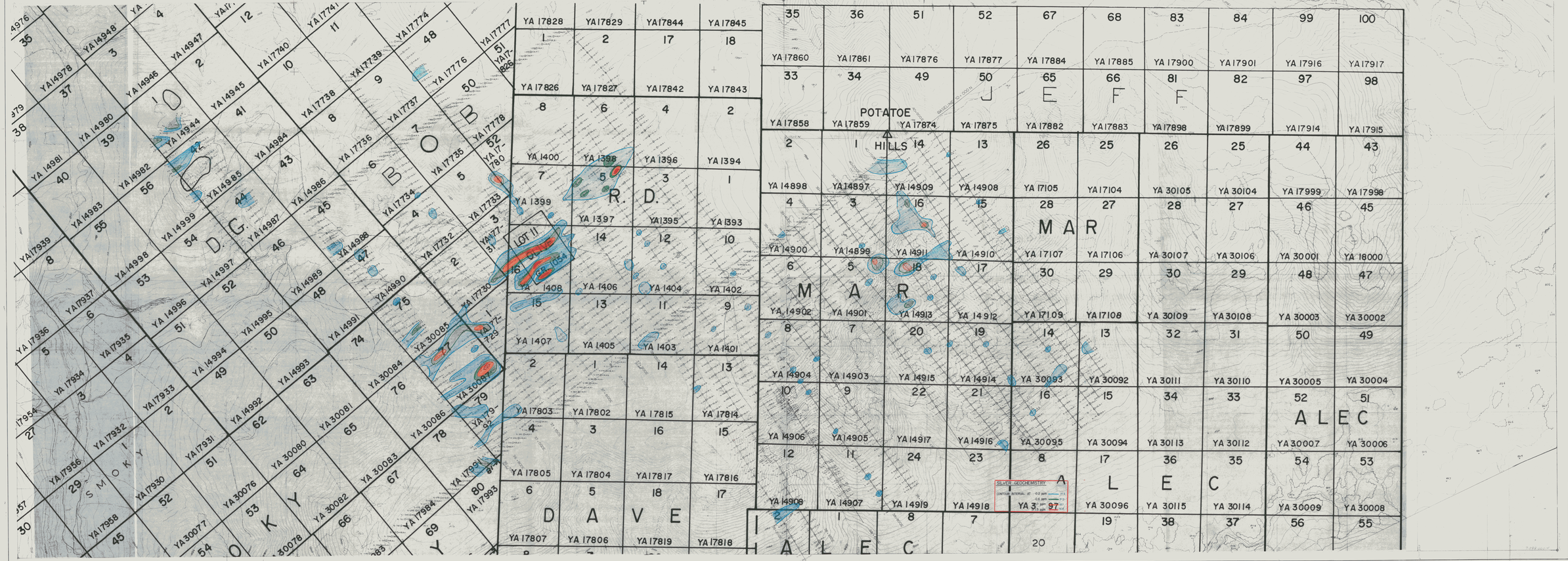
CANADA TUNGSTEN MINING CORP. LTD.

1978 DUBLIN GULCH DETAILED GEOCHEMISTRY

RAY GULCH GRID AND DUBLIN GULCH GRID

METRIC CONTOUR INTERVAL 1 FEET

| | |
|---|---|
| PROJECT NO. 1978-1 | NO. 12 |
| DATE: FEB. 1979 | MAP NO. 12 |
| DRAWN BY: D. LENNAN | TO ACCOMPANY REPORT 1978 DUBLIN GULCH PROJECT REPORT MINERAL & PLACER |




## LEGEND

GEOCHEMICAL SAMPLING

S-13 ○ SAMPLE LOCATION WITH SAMPLE NUMBER

SAMPLE LOCATIONS

△ STREAM SAMPLE
○ SOIL SAMPLE
□ ROCK SAMPLE

SAMPLE NUMBERS

SAMPLES ARE DESIGNATED BY A LETTER INDICATED BY A SEQUENTIAL NUMBER THE LETTER INDICATES AN INDIVIDUAL SAMPLER

SAMPLE ANALYSIS RESULTS

A SUITE OF 2 ELEMENTS - GOLD & SILVER ARE DISPLAYED IN SERIES AS SHOWN

S-13 ○ 0.01 Sample Number ○ Gold (Silver) (ppm) (ppm)

DETECTION LIMITS

GOLD: 10 PPB - VALUES BELOW LIMIT SHOWN AS < 10 PPB

SILVER: 0.2 - VALUES BELOW LIMIT SHOWN AS 0.1 PPM

SYMBOLS

TREE VEGETATION LIMITS
CUT ROADS AND TRENCHES
CONTOUR INTERVAL 1.0 Metres

NOTE: See Map No. #4/9 For Stream & Rock Geochemistry

SHEET INDEX

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |

CANADA TUNGSTEN MINING CORP LTD

1978 DUBLIN GULCH DETAILED GEOCHEMISTRY

RAY GULCH GRID AND DUBLIN GULCH GRID

| | |
|---|---|
| DRAWN BY: J. LENNOX | SCALE: 1:2 |
| DATE: FEB. 1979 | REF. NO. 13 |
| DRAWN BY: J. LENNOX | FILE NO. 1978 DUBLIN GULCH |
| APPROVED BY: | PROJECT: MOORE, MINERAL & PLACER |

SECRET CREEK

SECRET CREEK

SWEDE CREEK

SWEDE CREEK

SWEDE CREEK

HAGGART CREEK

S.A. 1-30

SWEDE 1-42

N

TUNSTEN GEOCHEMISTRY

3ppm's

6ppm's

>6ppm's

▲ J-49
2
2
∠10
10

Typical sample location with alphabetically coded sample number and analysis results.

▲ J-50
84, 166, 5600, 480
Pb(lead), Zn(zinc), Ti(titanium), Zr(zirconium)
ppm ppm ppm ppm

SAMPLE LOCATION SYMBOLS

▲ stream sediments

● soil

■ rock

SAMPLE NUMBERS

letter identifies sampler.
each sampler has a complete number series.

SAMPLE VALUES

The number sequence indicates element geochemical analysis in ppm as shown below

W (ppm)
Sn (ppm)
Au (ppb)
Ag (ppm)

Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

S.A. & SWEDE - claim names
34 - claim number
YA30384 - grant number

OTHER SYMBOLS

< less than

> more than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS

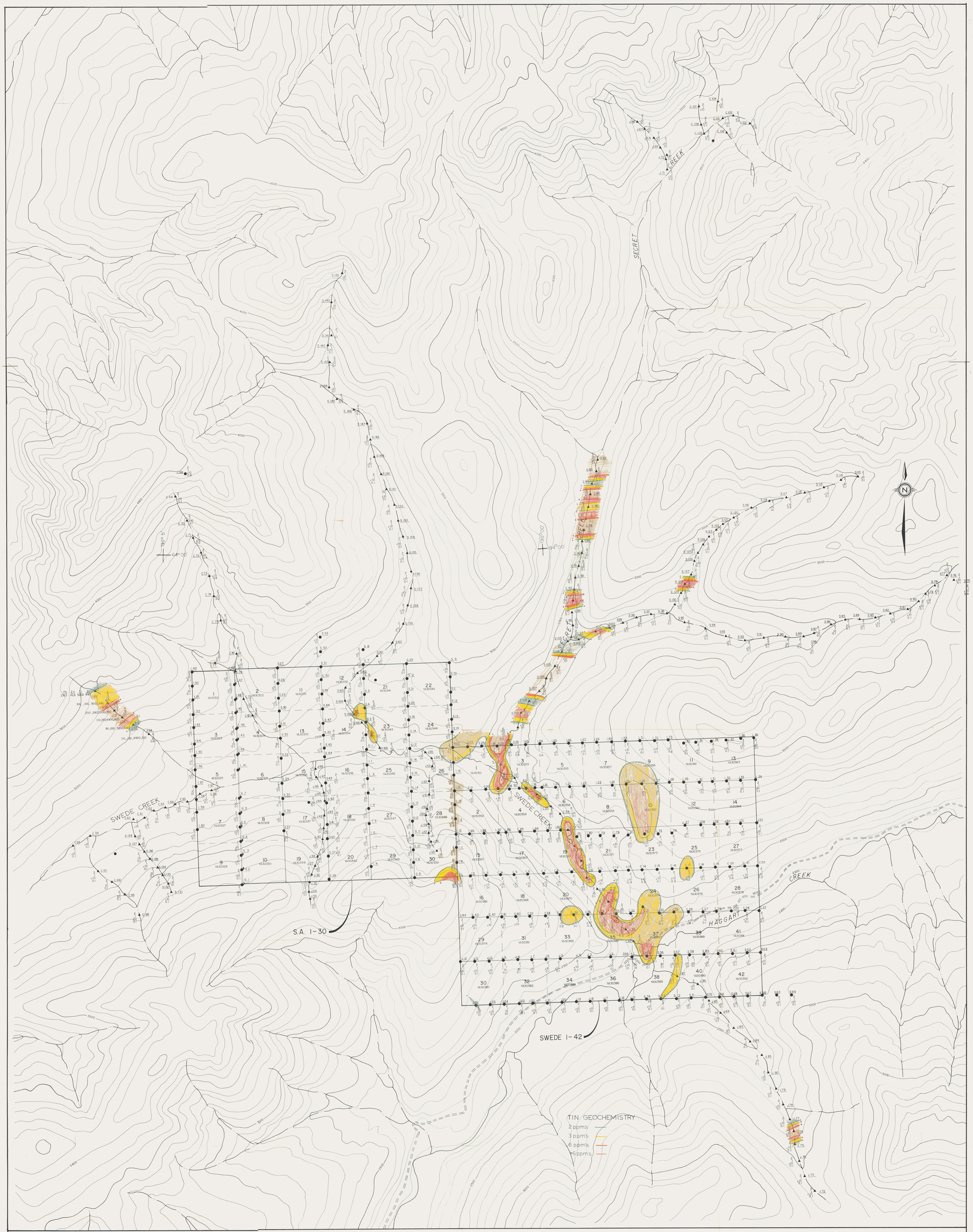
W 4 ppm, values below detection limit reported as 2 ppm
Sn 2 ppm, values below detection limit reported as 1 ppm
Au 10 ppb, values below detection limit reported as < 10 ppb
Ag 0.2 ppm, values below detected limit reported as 0.1 ppm

CANADA TUNGSTEN MINING CORP. LTD.

# 1978 SECRET CREEK CLAIM AREA
## MAYO MINING DISTRICT, YUKON TERRITORY
## SWEDE CLAIMS & S.A. CLAIMS
## GEOCHEMICAL SURVEY
## SOIL and STREAM SEDIMENTS

METRES 100 0 100 200 300 400 FEET 833 0 833 1666

| | |
|---|---|
| SCALE: IN METERS 1:10,000 | NTS No. 105 M/13, 15 P/16 |
| DATE: JUNE 1978 | MAP No. 3 |
| DRAWN BY: | To accompany report: SECRET CREEK |
| REVISED BY: | PROJECT REPORT |




▲ J-49 — Typical sample location with alphabetically coded sample number and analysis results.
2
2
410
10

▲ J-50
84, 166, 5600, 480 — Pb(lead), Zn(zinc), Ti(titanium), Zr(zirconium) ppm ppm ppm ppm

SAMPLE LOCATION SYMBOLS
- ▲ stream sediments
- ● soil
- ■ rock

SAMPLE NUMBERS
letter identifies sampler.
each sampler has a complete number series.

SAMPLE VALUES
The number sequence indicates element geochemical analysis in ppm as shown below
W (ppm)
Sn (ppm)
Au (ppb)
Ag (ppm)
Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

S.A. & SWEDE - claim names
34 - claim number
YA 30384 - grant number

OTHER SYMBOLS
- < less than
- > more than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS
W 4 ppm, values below detection limit reported as 2 ppm
Sn 2 ppm, values below detection limit reported as 1 ppm
Au 10 ppb, values below detection limit reported as < 10 ppb
Ag 0.2 ppm, values below detected limit reported as 0.1 ppm

CANADA TUNGSTEN MINING CORP. LTD.

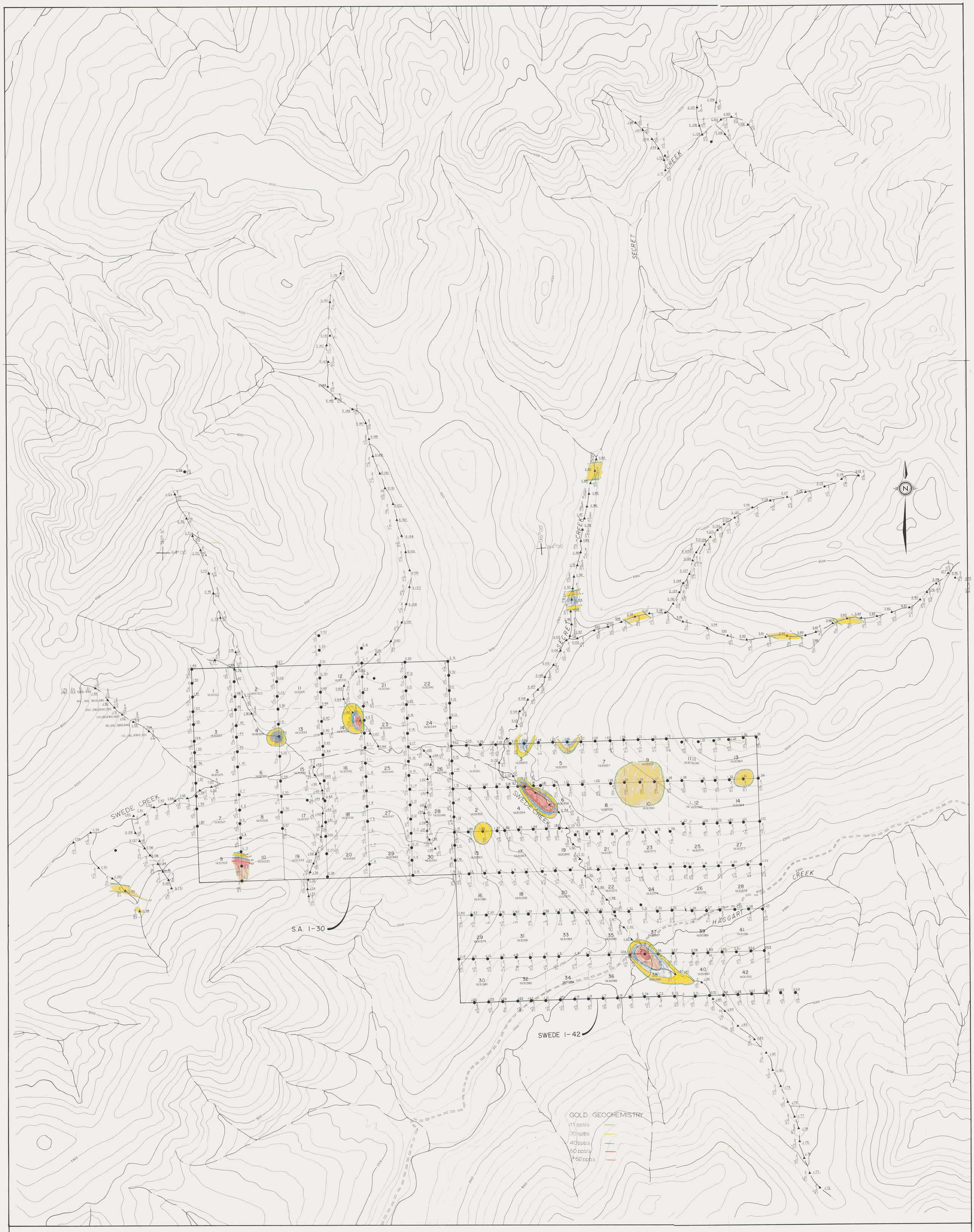
# 1978 SECRET CREEK CLAIM AREA
# MAYO MINING DISTRICT, YUKON TERRITORY

## SWEDE CLAIMS & S.A. CLAIMS

## GEOCHEMICAL SURVEY
## SOIL and STREAM SEDIMENTS

METRES 100 0 100 200 300 400 — FEET 833 0 833 1666

| | |
|---|---|
| SCALE: IN METERS 1 : 10,000 | NTS No. 105 M/13, 115 P/16 |
| DATE JUNE 1978 | MAP No. 4 |
| DRAWN BY | To accompany report: SECRET CREEK |
| REVISED BY | PROJECT REPORT |




▲ J-49
2
2
∠10
10

Typical sample location with alphabetically coded sample number and analysis results.

▲ J-50
84, 166, 5600, 480
Pb (lead), Zn (zinc), Ti (titanium), Zr (zirconium)
ppm ppm ppm ppm

SAMPLE LOCATION SYMBOLS

▲ stream sediments
● soil
■ rock

SAMPLE NUMBERS
letter identifies sampler.
each sampler has a complete number series.

SAMPLE VALUES
The number sequence indicates element geochemical analysis in ppm as shown below

W (ppm)
Sn (ppm)
Au (ppb)
Ag (ppm)

Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

S.A. & SWEDE - claim names
34 - claim number
YA30384 - grant number

OTHER SYMBOLS
< less than
> more than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS
W 4 ppm, values below detection ion limit reported as 2 ppm
Sn 2 ppm, values below detection ion limit reported as 1 ppm
Au 10 ppb, values below detection tion limit reported as < 10 ppb
Ag 0.2 ppm, values below detected ted limit reported as 0.1 ppm

CANADA TUNGSTEN MINING CORP. LTD.

# 1978 SECRET CREEK CLAIM AREA
## MAYO MINING DISTRICT, YUKON TERRITORY
## SWEDE CLAIMS & S.A. CLAIMS
## GEOCHEMICAL SURVEY
## SOIL and STREAM SEDIMENTS

METRES 100 0 100 200 300 400 — FEET 833 0 833 1666

| | |
|---|---|
| SCALE IN METERS 1:10,000 | NTS No. 105 M/13, 15 P/16 |
| DATE JUNE 1978 | MAP No. 5 |
| DRAWN BY | To accompany report SECRET CREEK |
| REVISED BY | PROJECT REPORT |

SECRET CREEK

SWEDE CREEK

SECRET CREEK

SWEDE CREEK

HAGGART CREEK

S.A. 1-30

SWEDE 1-42

64° 00'

135° 15'

64° 00'

135° 00'

N

SILVER GEOCHEMISTRY

.15 ppm's

20 ppm's

40 ppm's

> 40 ppm's

▲ J-49
2
2
410
10

Typical sample location with alphabetically coded sample number and analysis results. Its

▲ J-50
84, 166, 5600, 480
Pb (lead), Zn (zinc), Ti (titanium), Zr (zirconium)
ppm ppm ppm ppm

SAMPLE LOCATION SYMBOLS

▲ stream sediments

● soil

■ rock

SAMPLE NUMBERS

letter identifies sampler.

each sampler has a complete number series.

SAMPLE VALUES

The number sequence indicates element geochemical analysis in ppm as shown below

W (ppm)
Sn (ppm)
Au (ppb)
Ag (ppm)

Other elements may be added to the sequence and are shown with element symbol in ppm unless otherwise noted.

S.A. & SWEDE - claim names
34 - claim number
YA30384 - grant number

OTHER SYMBOLS

< less than

> more than

DETECTION LIMITS FOR GEOLOGICAL ANALYSIS

W 4 ppm, values below detection limit reported as 2 ppm

Sn 2 ppm, values below detection limit reported as 1 ppm

Au 10 ppb, values below detection limit reported as < 10 ppb

Ag 0.2 ppm, values below detected limit reported as 0.1 ppm

CANADA TUNGSTEN MINING CORP. LTD.

# 1978 SECRET CREEK CLAIM AREA
## MAYO MINING DISTRICT, YUKON TERRITORY

SWEDE CLAIMS & S.A. CLAIMS

GEOCHEMICAL SURVEY
SOIL and STREAM SEDIMENTS

METRES 100 0 100 200 300 400 — FEET 833 0 833 1666

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|---|---|
| SCALE: IN METERS 1:10,000 | NTS No.: 105 M/13, 105 P/16 |
| DATE: JUNE 1978 | MAP No. 6 |
| DRAWN BY: | To accompany report: SECRET CREEK |
| REVISED BY: | PROJECT REPORT |