

GEOCHEMICAL REPORT

on the

O.B. MINERAL CLAIM and CROWN GRANTS

SKYLARK CAMP PROPERTY

GREENWOOD - PHOENIX AREA

GRAND FORKS MINING DIVISION, BRITISH COLUMBIA

49°05' N.LATITUDE, 118°38' W. LONGITUDE

NTS 82E/2

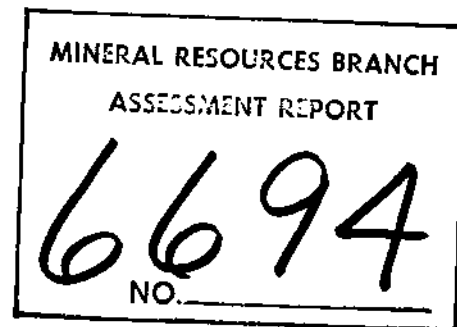
on behalf of

GEORGE O'BRIEN

by

JAMES W. McLEOD, BSc.

OCTOBER 17, 1977



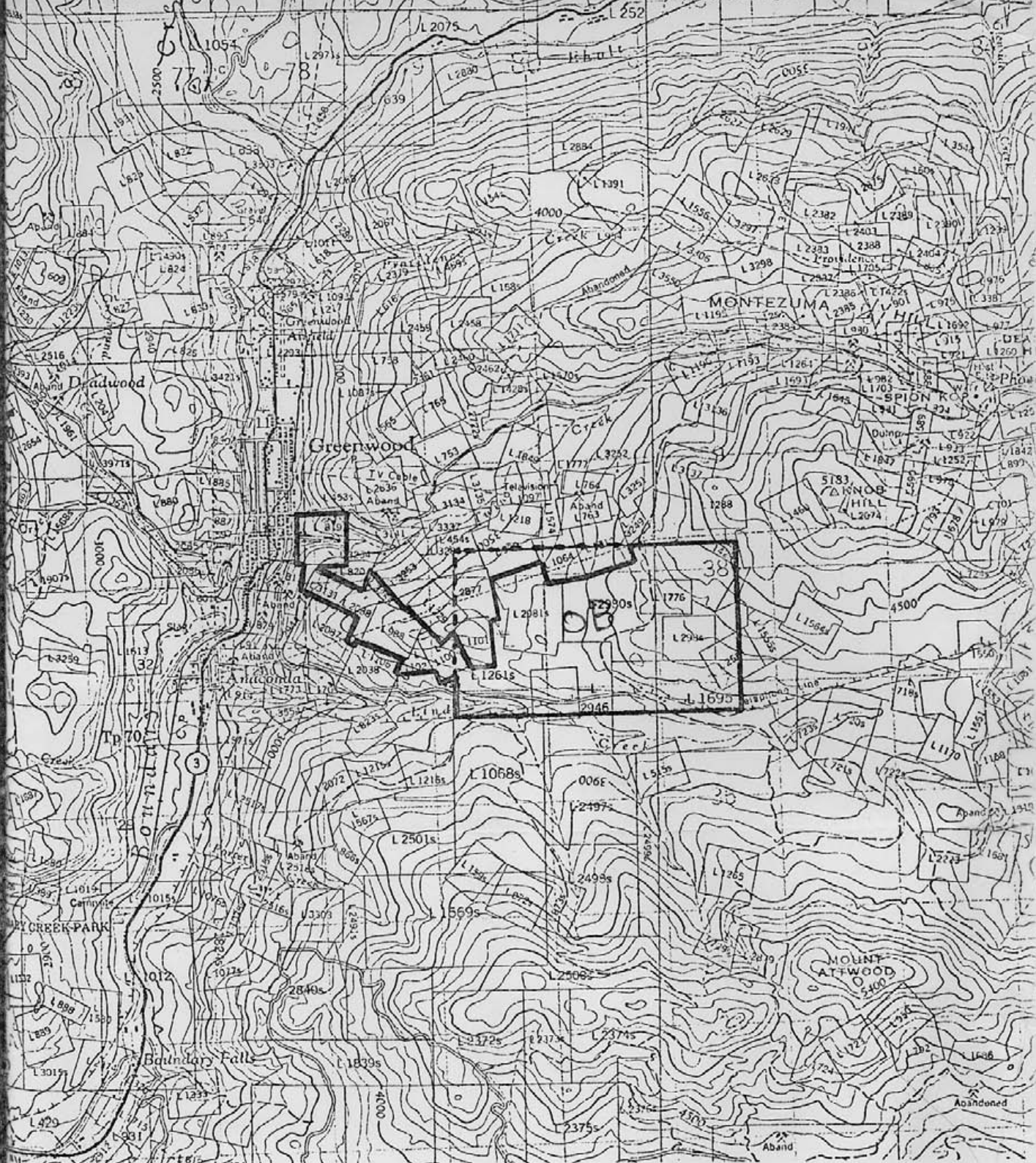
Summary of expenses re

Geochemical Survey on O B Plain and  
 Rented House, Grants, Davis, Comstock Tr.  
 Drilby, Lancaster Tr., Margie, Mountain View &  
 Ripper.

Geochemical Report	500
Assays	636
Laborer 2 men J. O'Brien	
W. Donder 21 days @ 150	3150
Meals	315
Transportation	350
Supplies	100
	<hr/>
	5051.8

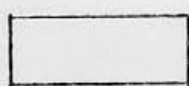
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TOPOGRAPHIC MAP  
GREENWOOD - PHOENIX AREA

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**6694**  
NO.



Outline of claims

Scale: 1: 50,000

## SUMMARY

Anomalous gold values have been obtained from the geochemical soil survey conducted over a portion of the O.B. mineral claim.

A continuing program of geochemical soil sampling and a trenching program of the anomalous areas is recommended.

## INTRODUCTION

During the period May 25th to June 21, 1977 a crew, under the direction of the writer, conducted a geochemical soil survey and prospecting program over a portion of the O.B. mineral claim and reverted Crown grants.

This report is being prepared at the request of .....

GEORGE O'BRIEN

## LOCATION AND ACCESS

The O.B. mineral claim and reverted Crown grants are located approximately 3 kilometres southwest of the town of Greenwood, British Columbia.

Access to the property is provided by travelling 3 kilometres up the Lind creek road from Greenwood.

## PROPERTY AND OWNERSHIP

The property consists of one mineral claim comprising 15 units and 6 reverted Crown granted mineral claims which are listed as follows:

<u>Claim name</u>	<u>Record number</u>	<u>Expiry date</u>
Twin	665	March 18, 1978
Connection Fr.	666	March 18, 1978
Margorie	669	March 18, 1978
Trilby	667	March 18, 1978

Clipper Fr.	670	March 18, 1978
Mountain View	671	March 18, 1978
O.B.(15 units)	696	March 11, 1978

The mineral claims are owned by Geonorm Development Corporation of Vancouver, B.C.

TOPOGRAPHICAL AND PHYSICAL ENVIRONMENT

The claims lie in rounded, moderately mountainous terrain and range in elevation from 780 to 1350 metres M.S.L.

The property is tree covered with second growth fir, willows and birch with cedar occuring near the creeks. The property experiences approximately 65 cm. of precipitation per annum, with about 1-1½ metres as snow. The area is generally free of snow from May to October.

GEOLOGY, ALTERATION AND MINERALIZATION

The claim area has been well described on a gross basis by Members of the Geological Survey of Canada ( see Map 6-1957 Kettle River, British Columbia, Sheet 82 E east half ). To generalize the claim area is underlain by Permian rocks which have been assigned to the Anarchist Group and which include greenstone, greywacke, limestone and paragneiss. The limestones of the area (Phoenix camp) have been most productive, these have been locally termed the Brooklyn formation.

The alteration minerals observed in the area are those typical of metamorphosed limestones, namely garnet, epidote, chlorite and calcite in a skarn. The following list of types of mineral occurrences are common to the general area :

- a) Chalcopyrite, pyrite and magnetite in an altered limestone or skarn, often carrying significant gold and silver values.
- b) Quartz-carbonate filled shears and veins containing galena,

sphalerite, silver and various silver sulphides.

- c) Porphyry type copper mineralization in argillaceous sediments, volcanics and intrusive rocks carrying significant gold and silver values.

All of the above types of mineralization can be sought for on the O.B. property.

#### WORK PROGRAM

GEORGE O'BRIEN has partially carried out the recommended geochemical, reconnaissance soil survey, this included the installation of flagged and blazed lines on two sizes of grids, one 60 by 60 metres and the other 15 by 15 metres (see geochemical grid plan). The samples were taken from the 'B' soil horizon, placed in Kraft bags and air dried. The samples were sent to Acme Analytical Laboratories Ltd. 6455 Laurel Street, Burnaby, B.C., V5B 3B4 where they were analysed by the atomic absorption method for Cu., Zn., Au., Ag. All analyses are reported in parts per million (see Appendices).

The exploration program so far performed also included detailed prospecting of much of the property, cleaning-out, and sampling a number of pits and a 3 metre shaft. A number of rock samples were obtained and sent in for analyses, these results are reported in the Appendix.

#### CONCLUSIONS AND RECOMMENDATIONS

To date not enough soil sample results are available to accurately establish "background" values for copper and gold by frequency distribution, but an estimate has been made by the writer of the lowest anomalous limits. They are 40 parts per million for copper and 0.01 parts per million for gold. On this basis two generally anomalous areas are

indicated on the O.B. claim. They are in the southwest and south central areas of the claim (see Geochemical Soil Survey Plan ). The prospecting to date has not revealed any new areas of mineralization, but has indicated the availability of outcrop on the property. The shaft and pits that were cleaned-out only exhibited sparse sulphide mineralization as chalcopyrite and sphalerite. The claim area shows some indications of mineralization and warrants further exploration work.

The writer recommends that the soil survey be continued over the entire claim group in conjunction with a magnetometer survey with stations every 30 metres. A geological mapping program should be undertaken at the same time. Any anomalous areas should be trenched and/or percussion drilled depending on the thickness of overburden encountered.

#### COST ESTIMATE

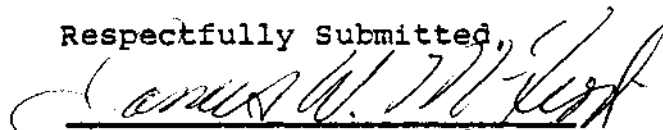
##### Phase I

Line installation, geochemical and mag. survey	\$2250
Geological mapping	1500
Room and board	900
Transportation	450
Equipment and supplies	250
Analyses	1500
Trenching	<u>1500</u>
	Sub-total 8300

##### Phase II

Percussion drilling	9000
Contingency	<u>2700</u>
	Total \$20,000

Respectfully Submitted,


  
 JAMES W. McLEOD, Geologist



CERTIFICATE

I, JAMES W. McLEOD, of the City of Vancouver,  
Province of British Columbia, hereby certify as follows:

- 1) I am a geologist and an Associate Member of the  
Geological Association of Canada.
- 2) I reside at 4086 West 17th Avenue, Vancouver, British  
Columbia, V6S 1A6.
- 3) I graduated in 1969 from the University of British  
Columbia, BSc. (Major Geology).
- 4) I have practised my profession since 1969.
- 5) The above report is based on fieldwork performed under  
my direction by others during 1977.

  
JAMES W. McLEOD, BSc.

Dated at Vancouver, B.C., this Thirteenth (13) Day of  
August, 1977.

**ACME ANALYTICAL LABORATORIES LTD.**

Assaying & Trace Analysis

6455 Laurel St., Burnaby, B.C. V5B 3B4

Tel: 299-5242

TO

George O'Brien

Box 254

Greenwood B.C.

File No. 7319

Type of Samples Soils

Disposition \_\_\_\_\_

**ANALYSES CERTIFICATE**

No.	Sample	Mo	Cu	Zn	Ag	Au						No.
01	ON- 0		34	119	.2	ND						01
02	50E		28	50	.1	ND						02
03	100E		29	49	.1	ND						03
04	150E		34	50	.2	ND						04
05	ON-200E		52	42	.2	ND						05
06												06
07	50N- 50E		29	55	.1	ND						07
08	100E		34	50	.1	ND						08
09	150E		34	55	.1	ND						09
10	50N-200E		28	46	.1	ND						10
11												11
12	100N- 0		31	46	.1	ND						12
13	150E		32	71	.1	ND						13
14	150E-1'		32	53	.1	ND						14
15	100N-200E		34	71	.1	ND						15
16												16
17	ON- 50W		30	51	.1	ND						17
18	100W		30	62	.1	ND						18
19	150W		44	70	.1	ND						19
20	200W		38	50	.1	ND						20
21	ON-250W		40	72	.1	ND						21
22												22
23	50N- 0		30	54	.1	ND						23
24	50W		26	49	.1	ND						24
25	100W		30	58	.1	ND						25
26	150W		30	70	.1	ND						26
27	200W		32	52	.1	ND						27
28	50N-250W		50	74	.1	ND						28
29												29
30	100N-100W		35	76	.1	ND						30
31	150W		30	74	.1	ND						31
32	200W		27	62	.1	ND						32
33	100N-250W		25	60	.1	ND						33
34												34
35												35
36												36
37												37
38												38
39												39
40												40

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 All results are in parts per million.

DATE SAMPLES RECEIVED July 5, 1977  
 DATE REPORTS MAILED July 8, 1977  
 ANALYST [Signature]

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

Telephone: 299-5242

To  
George O'Brien  
Box 254  
Greenwood B.C.

6455 Laurel Street \* Burnaby, B.C. V5B 3B4

File No. 7319  
Type of Samples Rocks  
Disposition \_\_\_\_\_

**ASSAY CERTIFICATE**

No.	Sample	Cu%	Zn%	Ag oz/ton	Au oz/ton			No.
1	462	.01	.01	.02	.001			1
2	463	.01	.01	.04	.001			2
3								3
4								4
5								5
6								6
7								7
8								8
9								9
10								10
11								11
12								12
13								13
14								14
15								15
16								16
17								17
18								18
19								19
20								20

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DATE SAMPLES RECEIVED July 5, 1977

DATE REPORTS MAILED July 8, 1977

ASSAYER Dean Toye

DEAN TOYE, B.Sc.  
CHIEF CHEMIST  
CERTIFIED B.C. ASSAYER

**ACME ANALYTICAL LABORATORIES LTD.**

Assaying & Trace Analysis

6455 Laurel St., Burnaby, B.C. V5B 3B4

Tel: 299-5242

TO

George O'Brien

Box 254

Greenwood, B.C.

File No. 7290

Type of Samples Rock

Disposition \_\_\_\_\_

**ANALYSES CERTIFICATE**

P.1

No.	Sample	Mo	Cu	Zn	Ag	Au					No.
01	452 R		15	27	.1	ND					01
02	453		21	44	.1	ND					02
03	454		25	57	.1	ND					03
04	455		9	38	.2	ND					04
05	456		11	17	.1	ND					05
06	457		59	50	.1	ND					06
07	458		20	29	.1	ND					07
08	459		64	51	.1	ND					08
09	460		107	72	.1	ND					09
10	461R		14	132	.1	ND					10
11											11
12											12
13											13
14											14
15											15
16											16
17											17
18											18
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31											31
32											32
33											33
34											34
35											35
36											36
37											37
38											38
39											39
40											40

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Assaying & Trace Analysis

6455 Laurel St., Burnaby, B.C. V5B 3B4

Tel: 299-5242

TO George O'Brien

Box 254

Greenwood, B.C.

File No. 7290

Type of Samples Soil

Disposition \_\_\_\_\_

**ANALYSES CERTIFICATE**

P.2

*or NW 10<sup>2</sup> appears to be discrepancy between sample names and line names*

No.	Sample	Mo	Cu	Zn	Ag	Au					No.
01	NW 1 0		11	23	.1	ND					01
02	200E		18	31	.2	ND					02
03	400		14	33	.1	.16					03
04	600		17	32	.1	ND					04
05	800E		19	50	.1	.01					05
06	200W		17	42	.1	ND					06
07	400		13	31	.1	.08					07
08	600		21	34	.1	ND					08
09	NW 1 800W		23	41	.1	.02					09
10											10
11	NW 2 0		22	52	.2	.02					11
12	200E		17	57	.1	ND					12
13	400		33	65	.1	ND					13
14	600		21	62	.1	ND					14
15	800E		44	62	.1	ND					15
16	200W		22	44	.1	.07					16
17	400		18	36	.1	ND					17
18	600		27	38	.1	.05					18
19	NW 2 800W		20	43	.2	.02					19
20	<i>etc</i>										20
21	NW 3 0		27	48	.1	ND					21
22	200E		22	72	.3	ND					22
23	400		15	52	.2	ND					23
24	600		15	43	.1	ND					24
25	800E		12	37	.1	ND					25
26	200W		14	48	.1	ND					26
27	400		27	73	.3	ND					27
28	600		22	52	.1	ND					28
29	NW 3 800W		12	32	.1	ND					29
30											30
31	NW 4 0		17	70	.2	ND					31
32	200E		9	69	.1	ND					32
33	400		14	51	.1	ND					33
34	600		12	36	.1	ND					34
35	800E		11	35	.1	ND					35
36	200W		13	39	.1	ND					36
37	400		17	92	.3	ND					37
38	600		23	74	.1	ND					38
39	NW 4 800W		25	52	.1	ND					39
40											40

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Assaying & Trace Analysis  
6455 Laurel St., Burnaby, B.C. V5B 3B4

Tel: 299-5242

TO George O'Brien  
Box 254  
Greenwood, B.C.

File No. 7290

Type of Samples Soil

Disposition \_\_\_\_\_

**ANALYSES CERTIFICATE**

P. 3

No.	Sample	Mo	Cu	Zn	Ag	Au					No.
01	NW5 0		13	34	.1	ND					01
02	200E		10	42	.1	ND					02
03	400		13	54	.1	ND					03
04	600		7	50	.1	ND					04
05	800E		16	47	.2	ND					05
06	200W		13	34	.1	ND					06
07	400		25	64	.1	ND					07
08	600		26	70	.1	ND					08
09	NW5 800W		19	65	.1	ND					09
10											10
11	NW6 0		13	47	.1	ND					11
12	200E		11	38	.1	ND					12
13	400		8	26	.1	ND					13
14	600		10	35	.1	ND					14
15	800E		8	36	.1	.02					15
16	200W		21	43	.1	ND					16
17	400		15	52	.1	ND					17
18	600		16	74	.1	ND					18
19	NW6 800W		21	54	.1	ND					19
20											20
21	SE4 200E		9	28	.1	ND					21
22	400		17	40	.1	ND					22
23	600		19	60	.1	ND					23
24	SE4 800E		22	44	.1	ND					24
25											25
26	SE5 0		11	25	.1	ND					26
27	200E		16	44	.1	ND					27
28	400		16	45	.1	ND					28
29	600		17	54	.1	ND					29
30	SE5 800E		12	40	.1	ND					30
31											31
32	SE6 0		30	40	.1	ND					32
33	200E		19	43	.1	ND					33
34	400		15	41	.1	ND					34
35	600		17	33	.1	ND					35
36	SE6 800E		21	66	.1	ND					36
37											37
38											38
39											39
40											40

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6455 Laurel St., Burnaby, B.C. V5B 3B4

Tel: 299-5242

TO

George O'Brien

Box 254

Greenwood, B.C.

File No. 7290

Type of Samples Soil

Disposition \_\_\_\_\_

**ANALYSES CERTIFICATE**

P. 4

No.	Sample	Mo	Cu	Zn	Ag	Au					No.
01	SE 7 0		28	44	.1	ND					01
02	200E		15	36	.1	ND					02
03	400		14	48	.1	ND					03
04	600		27	52	.1	ND					04
05	SE 7 800E		24	51	.1	ND					05
06											06
07	SE 8 0		28	45	.2	.06					07
08	200E		13	28	.1	.01					08
09	400		43	40	.2	ND					09
10	600		21	32	.1	ND					10
11	SE 8 800E		26	33	.1	.04					11
12											12
13	SE 9 200E		23	43	.1	ND					13
14	400		29	62	.1	ND					14
15	600		16	29	.1	.01					15
16	SE 9 800E		23	31	.1	ND					16
17											17
18	SE 10 400E		32	41	.1	ND					18
19	600		25	44	.1	ND					19
20	SE 10 800E		28	39	.2	ND					20
21											21
22	SE 2 0		16	42	.1	ND					22
23	200E		17	37	.1	.03					23
24	400		15	44	.1	ND					24
25	600		19	34	.1	ND					25
26	800E		22	53	.1	ND					26
27	200W		21	30	.2	ND					27
28	400		26	55	.1	ND					28
29	600		23	29	.1	ND					29
30	SE 2 800W	y	46	34	.3	ND					30
31											31
32	SE 3 0		18	39	.1	ND					32
33	200E		29	52	.1	ND					33
34	400		12	34	.1	ND					34
35	600		17	32	.1	ND					35
36	800E		11	37	.1	ND					36
37	200W		23	31	.2	ND					37
38	400		24	32	.2	ND					38
39	600		17	48	.1	ND					39
40	SE 3 800W		12	31	.1	ND					40

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ANALYST [Signature]

TO

George O'Brien

Box 254

Greenwood, B.C.

**ACME ANALYTICAL LABORATORIES LTD.**

Assaying & Trace Analysis  
6455 Laurel St., Burnaby, B.C. V5B 3B4

Tel: 299-5242

File No. 7290

Type of Samples Soil

Disposition \_\_\_\_\_

**ANALYSES CERTIFICATE**

P.5

No.	Sample	Mo	Cu	Zn	Ag	Au					No.
01	SE 4 200W		31	32	.1	ND					01
02	SE 4 400W		34	50	.2	ND					02
03											03
04	SE 5 200W		90	42	.4	.05					04
05											05
06	SE 6 200W		17	26	.1	ND					06
07											07
08	SE 7 200W		27	43	.1	.01					08
09											09
10	SE 8 200W		27	31	.1	ND					10
11											11
12	SE 9 0		14	30	.1	ND					12
13	SE 9 200W		42	31	.3	.03					13
14											14
15	SE10 0		29	38	.1	.02					15
16	SE10 200W		36	48	.1	.01					16
17	SE10 200E		44	56	.2	.02					17
18											18
19											19
20											20
21											21
22											22
23											23
24											24
25											25
26											26
27											27
28											28
29											29
30											30
31											31
32											32
33											33
34											34
35											35
36											36
37											37
38											38
39											39
40											40

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82E 2E

TOBY 803 (6)

CREEK 770(5)

Jewel

Railway E.H.C.

YZ 722 (4)

Little Valley

Greenwood Camp

Providence

MIN. & PLACER RES.

NOV. 28/56 NO STAKING

Greenwood

Twin Cr.

Cr.

Camp

OB 696(3)

Lind

Porter

TIGER FRACTION 746 (5)

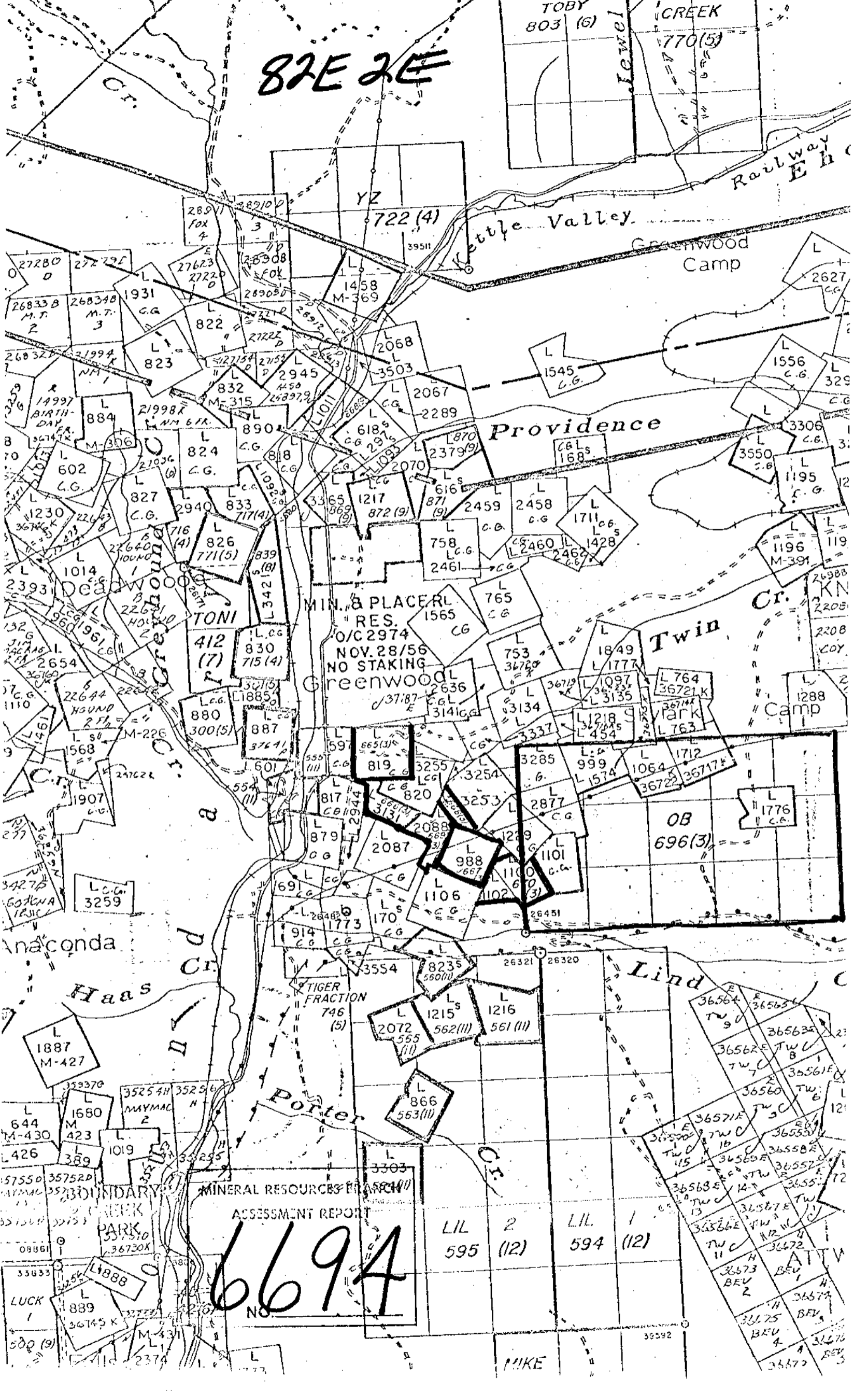
MINERAL RESOURCES BRANCH ASSESSMENT REPORT

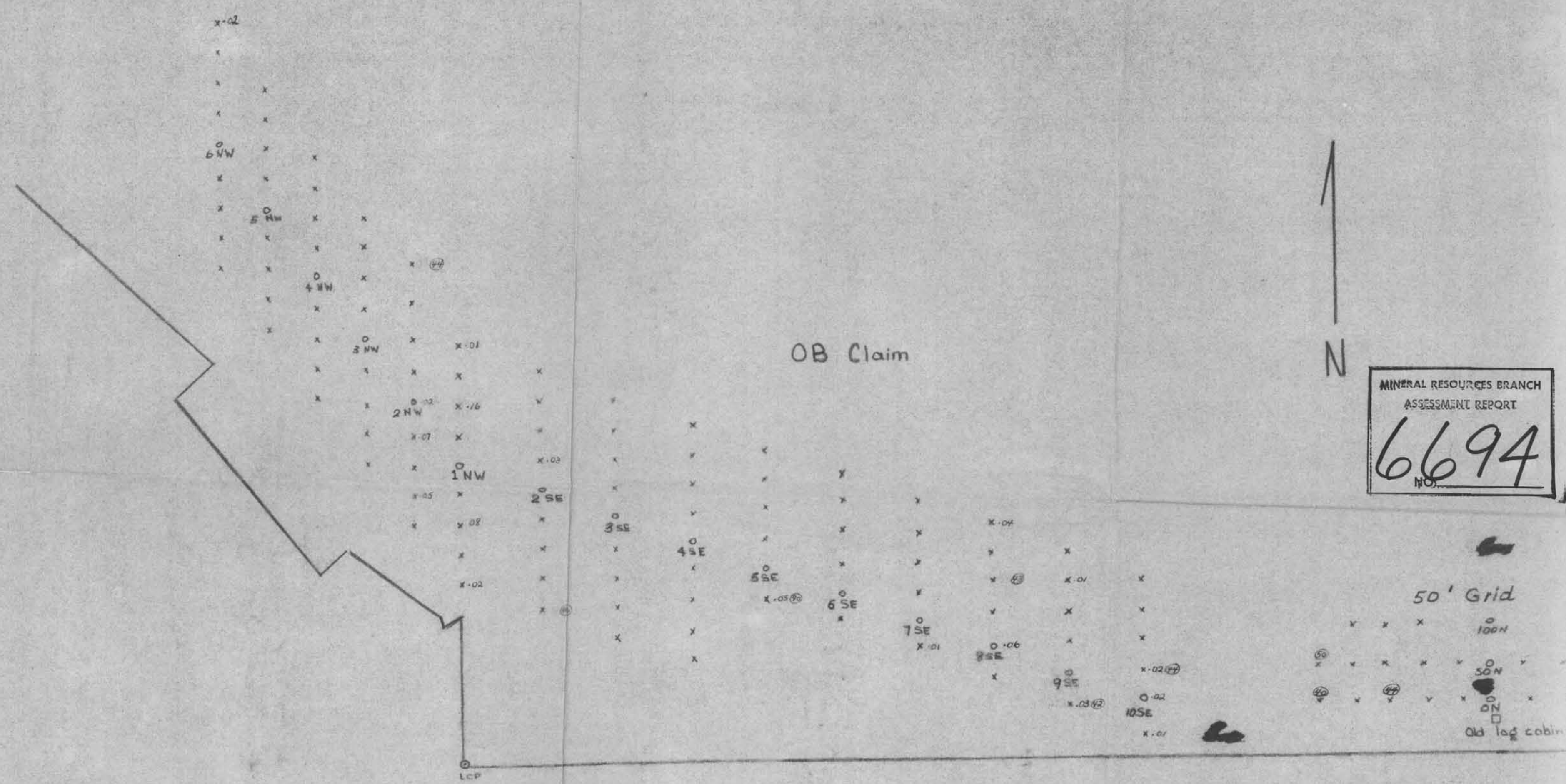
6694

LIL 2 595 (12)

LIL 1 594 (12)

MIKE





GEOCHEMICAL SURVEY  
for  
GEONORM DEVELOPMENT  
CORPORATION

Scale  
Main grid 1" = 150 metres  
Small grid 1" = 30 metres

Legend  
○ Anomalous Copper in 1 ppm  
⊙ Anomalous Gold in 1 ppm