

GRANADA EXPLORATION CORPORATION

Geological and Geochemical Survey
of the
Silver Reef Claim
Toodoggone River Area,
Omineca M.D., B.C.

Claims: Silver Reef - Record No. 2275(11)

Location: NTS Sheets 94E/2, 3, 6 and 7
Latitude 57° 15'N
Longitude 126° 15'W

Owner: Charles Kowall

Operator: Granada Exploration Corporation

Authors: S. Croft, B.D. Fairbank
Nevin Sadlier-Brown Goodbrand Ltd.

Date: November 15, 1981



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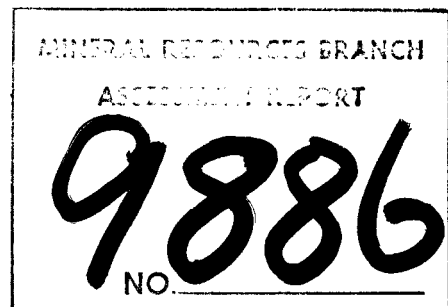
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SUMMARY

Exploration on the Silver Reef claim, in the Toodoggone River area of north-central B.C. consisted of geological mapping at a scale of 1:5 000 and soil sampling on 100m centers. Mapping has identified several zones of silicified, feldspathized volcanic rocks located largely in the southeastern part of the claim. Although considered to be a favourable environment for precious metal deposits, "vein" material from the silicified zones yielded generally low assays in silver, gold, copper, lead and zinc. Results of the soil geochemical survey are encouraging. Two areas with coincident anomalies in silver and gold (and to a lesser degree, lead and zinc) appear immediately northwest of the legal corner post and approximately 1.1km north of the legal corner post. Further exploration would entail a follow-up geochemical and mapping program in order to focus on these anomalous areas.

1.0 INTRODUCTION

1.1 Terms of Reference

This report is based on information obtained during the course of field work conducted on the Silver Reef claim during August and September of 1981. The work was performed by Nevin Sadlier-Brown Goodbrand Ltd. personnel on behalf of Granada Exploration Corporation, (formerly Skidagate Exploration Ltd.), operator of the claim. The mapping and sampling program was performed at the recommendation of earlier reports by C. Kowall and N. Carter.

1.2 Claims and Ownership

Granada Exploration Corporation holds, by option agreement with Charles S. Kowall, the following mineral claim:

<u>Name</u>	<u>Record No.</u>
Silver Reef	2275

Figure 2 is a claim map compiled from B.C. Department of Energy, Mines and Petroleum Resources claim maps. According to a chain and compass survey undertaken during the course of current field work, the Silver Reef claim borders the SHA 1, SHA 2 and SHAS claims of International Shasta Resources Ltd. on the north, south, east and west as shown in Figure 3.

The mineral claim is recorded in the name of Charles Kowall, dated November 15, 1979 and is in good standing until November 15, 1981.

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1.3 Location and Access

The Silver Reef claim is located in the Toodoggone River area of north-central British Columbia (Figure 1). The claim is situated at the headwaters of Jock Creek approximately 3km east of Black Lake (on NTS Sheet 94E) at latitude 57° 15'N and longitude 126° 15'W (Figure 2).

The Toodoggone River area is serviced by the Sturdee River airstrip, a gravel surface runway equipped with lights, 270km by aircraft north of Smithers. Hurcules aircraft use the strip on a regular basis to service the nearby Baker Mine. The Silver Reef claim is accessed by way of an 8km helicopter flight northwest from the Sturdee River airstrip.

1.4 Physiography and Vegetation

The Silver Reef claim is situated on the steep southeast side of Jock Creek valley. Elevations range from 1350m in the valley bottom to approximately 2100m. Much of the claim is situated in an old burn area below treeline and is covered by shrubs and undergrowth. The southeastern portion of the claim is in alpine terrain consisting of grasses and sparse stands of scrub hemlock. Wildlife is abundant and includes moose, bear, cariboo and a variety of small game and birds of prey.

The climate of the area is characterized by cold winters and long moderate summers. The heavy winter snowfall may last until mid June. Weather during summer is variable although fair weather may extend well into September.

. . .

1.5 History

The Toodoggone River area has recently become an important precious metal district. Carter (1981) describes mineral exploration and development as follows:

"The area was first investigated for gold in the early 1930's and placer claims were worked on McClair Creek north of Toodoggone River. Sporadic base metal exploration took place in subsequent years culminating in intense activity for porphyry-type deposits in the late 1960's.

"The Chappelle (Baker Mine) gold-silver deposit was recognized in 1969 and the Lawyers property was discovered in 1971 (see Figure 2). Several other gold-silver showings have undergone investigation in recent years, including the SHA, McClair, Metsantan and Saunders properties.

"Baker Mine of DuPont of Canada Exploration recently commenced production at a daily milling rate of 90 tonnes per day and the Lawyers property, operated by S.E.R.E.M. Ltd., is currently undergoing development drilling. Some 4,000 claim units in the area are being actively explored by several companies."

The Silver Reef claim was staked to cover possible extensions of mineralized veins occurring on the adjacent SHA and SHAS properties, owned by International Shasta Resources Ltd. Geological, geochemical and magnetic surveys were conducted on the International Shasta property in the mid-1970's. Promising results for trench samples with gold grading to 0.79 oz/ton and silver at least 2.9 oz/ton are indicated for the area (Meyer and Folk, 1975).

. . .

1.6 Work Completed

During August and September of 1981, a 2-man party led by Stuart Croft conducted a geological mapping and soil sampling survey on the Silver Reef claim. Soil samples were taken at 100m intervals along traverse lines spaced 100m apart. 91 soil samples from the property were analyzed for copper, lead, zinc, silver and gold. Geological mapping at a scale of 1:5 000 was conducted on the southern and eastern portions of the claim using the sampling grid as control. Rock samples were collected from fresh exposures in geologically favourable areas and assayed for copper, lead, zinc, silver and gold.

2.0 GEOLOGY

2.1 General Setting

The Toodoggone area is typified by a complex volcanic terrane within the eastern margin of the Intermontane Belt. The oldest rocks consist of Permian limestone of the Asitka Group and andesite flows and pyroclastics of the late Triassic Takla Group. These are intruded by the Jurassic to Cretaceous Omineca intrusives which range in composition from granodiorite to quartz monzonite. Lower to middle Jurassic aged "Toodoggone" volcanics conformably overlie the Takla Group rocks along the west flank of a northwesterly trending belt of "basement" rocks at least 90km in length by 50km in width. The Toodoggone rocks, 500m or more in thickness, are an intercalated volcanic-sedimentary assemblage in which four major subdivisions have been identified. The entire sequence has been subjected to extensive normal block faulting from Jurassic to

. . .

Tertiary time. A linear zone of volcanic centres coincident with these major fault structures appears to be intimately related to precious metal deposits in the area (Schroeter, 1981).

Gold-silver prospects in the Toodoggone River area consist largely of the fissure-vein epithermal deposits associated with block faulting and tensional fracturing occurring late in the volcanic cycle. These deposits are typically associated with silicified zones, vein fillings, stockworks and brecciated fault zones bearing fine-grained argentite, electrum, native gold, native silver and extensive pyrite.

Known and suspected precious metal deposits in the Toodoggone River area include the Baker Mine, Lawyers property and the Saunders, Metsantan, McClair Creek and Fin prospects. Production at the Baker Mine, 10km northwest of the Silver Reef claim, is from a highly fractured and brecciated quartz system cutting Takla Group andesites. Reserves of approximately 90,000 tonnes grading 25.5 grams gold and 594 grams silver per tonne are produced at a rate of 90 tonnes per day. Exploration on the Lawyers property has identified significant argentite, electrum, native gold, and native silver mineralization within the Toodoggone volcanics. Production drilling and exploratory adits served to further delineate the deposit during the summer.

2.2 Property Geology and Mineral Occurrences

Much of the Silver Reef property is underlain by Toodoggone volcanic rock, which host the majority of known gold-silver mineralization in the area. Although overburden obscures bedrock over much of the northern and western portions; extensive outcrop

- 6 -

occurs on the southeast units of the claim. Here, in bluffs and in sub-alpine terrain, exposures of dark grey-green fragmental dacite are numerous. Small faults and shear zones trend northwesterly across the area resulting in several small, sharp gulleys up to 10m deep (Figure 3).

Locally, the volcanic rocks are "feldspathized" and silicified in quartz stockwork veins and brecciated zones. These "veins" are weathered to a distinctive pink-white colour on surface and are commonly discoloured by rusty limonite staining. The veins invariably contain from 30% to 70% orange-pink feldspar crystals, presumably coloured by fine-grained hematite, in a dark grey-green fine-grained matrix. Small vitreous quartz crystals commonly accompany extensive finely disseminated pyrite mineralization within the matrix. Brecciated zones within the veins contain elongate drusy cavities 2 to 10mm wide. Well formed quartz crystals up to 4mm across are commonly stained with manganese oxide. Typically, rock bordering the breccia zones is extensively silicified.

Visible sulphide mineralization in the veins consists mainly of pyrite. Limonite including jarosite and goethite is present near surface as a weathering product of the fine-grained pyrite and wad occurs as coatings on quartz crystals in cavities. Several samples of vein material from the Silver Reef property were assayed for base and precious metals. Samples contained insignificant amounts of copper, lead and zinc and only very low values in gold and silver. The highest assays were 0.010 oz/ton gold and 0.003 oz/ton silver.

. . .

- 7 -

From the SHAS property, portions of the silicified quartz stockwork vein were traced east-southeastward onto the Silver Reef property in the vicinity of station 1+00N, 10+00W. The vein, here exposed in a steep bluff, strikes approximately 120° with an easterly dip ranging from 50° to 90°. The altered zones range in width from 1 to 3m and consist mainly of silicified stockwork bands within fresh, unaltered volcanics. Pink feldspar alteration envelopes major fractures in this area. Mineralization is minimal and vein samples (32128, 32130 and 32134) assayed negligible base metals with up to 0.03 oz/ton silver and 0.008 oz/ton gold.

In the region of coordinates 2+00N, 3+00W, two distinct silicified zones trend northwestward and dip steeply northeast. One band was traced in felsemeer for approximately 100m along strike and continuity downdip is suggested from surface exposures and from limited trenching. Pyrite mineralization in the veins is variable although some samples contain up to 15 percent. Jarosite appears to be the most common iron oxide. Four small hand trenches were blasted to expose fresh vein material for sampling. Assays (32120-32125) were generally low with nil copper, up to 0.04% Pb, 0.02% Zn, 0.02 oz/ton Ag and 0.010 oz/ton Au.

Approximately 200m south of this area lie a series of craggy, volcanic bluffs. An ochre weathered horizon within the bluffs contains substantial pyrite mineralization. Whether the horizon is related to faulting or is an altered rhyolite sill is uncertain, however, it does not appear to be related to other vein systems on the property. An assay (32126) from the pyritiferous horizon indicated negligible Cu, Pb and Zn content with 0.02 oz/ton Ag and 0.005 oz/ton Au.

. . .

Further silicification was noted in volcanics on the eastern boundary of the Silver Reef claim near coordinates 11+00N, 0+00W. Silicification is limited and pink feldspar replacement is absent in surface samples. Vein material was assayed (32129, 32132) and contains only traces of base and precious metals. Soil samples from the immediate area indicate strong anomalies in Pb, Zn, Ag and Au, suggesting mineralized vein material may be present nearby (refer to Section 3.2).

An extensive area of exotic gossan occurs near the northeast corner of the claim. Nearby, ferricrete forms the matrix of a conglomeritic unit near the base of a small rusty creek which cuts the northeast corner of the Silver Reef claim. There is insufficient outcrop in the area to determine the source of these features or how they relate to mineralization of the silicified zones noted elsewhere on the property.

In several areas, siliceous breccia was noted in angular float ("SB" on Figure 3) suggesting siliceous vein material is present in near-surface subcrop.

3.0 GEOCHEMISTRY

3.1 Survey Methods

Soil samples were taken at 100m intervals along grid lines spaced 100m apart. Grid lines were controlled by chain and compass, and were marked by flagging and wooden laths.

. . .

Samples of B horizon soil were collected with a spade, and placed in paper envelopes. The samples were dried and shipped to Chemex Labs Ltd., North Vancouver, where they were assayed for copper, lead, zinc, silver and gold. Analytical methods are described in Appendix C.

Results are plotted in plan on Figures 4-8. Because of the configuration of the sample grid, it is not considered justified to contour the geochemical data.

3.2 Discussion of Results

3.2.1 Copper

Soil copper values throughout the sample grid were generally low with an average background of approximately 30 parts per million (ppm). Values range from a low of 9 ppm through to a maximum of 160 ppm. Results indicate small copper anomalies along the southern border of the claim approximately 900m west of the legal corner post and in the northeast corner of the property (Figure 4).

3.2.2 Lead

Lead values range from 2-640 ppm with an average background of approximately 15 ppm. Two single sample lead anomalies are located on the eastern boundary of the property approximately 1.1km and 1.4km north of the legal corner post (Figure 5). The southern anomaly is coincident with an outcrop of silicified volcanics and anomalous silver and zinc content in soil. A third anomaly occurs in the northeast corner of the property coincident

. . .

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with elevated copper and silver content. Soil anomalies in this area may be associated with a large area of exotic gossan and ferricrete conglomerate on the lower slopes of the Jock Creek valley.

3.2.3 Zinc

Zinc content in soils averaged 80 ppm and reached a local high of 500 ppm. Anomalies are located on the eastern boundary approximately 1.1km north of the legal corner post, in the northeast corner of the property, and in an area approximately 300m northwest of the legal corner post (Figure 6). Small and generally low grade zinc anomalies on the eastern and northern boundaries of the property coincide with anomalous lead values.

3.2.4 Silver

The threshold value for soil silver on the property is 1.0 ppm and is considered strongly anomalous above 3.0 ppm. Significant anomalies are indicated along the southern border of the claim approximately 500m west of the legal corner post and along the eastern boundary of the claim approximately 1.1km north of the legal corner post (Figure 7). In both these areas silver was detected up to 4.5 ppm. Four weaker silver anomalies were located with values up to approximately 3.0 ppm. These include a strip running roughly northwesterly across the north-eastern edge of the property, the area around the legal corner post, an area approximately 500m north of the legal corner post and a large area surrounding the significant anomalies 500m west of the legal corner post.

. . .

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Few parallels can be drawn between soil results for silver with base metals with the exception of station 11+00N, 0+00W where anomalous values for lead, zinc and silver are located. The largest silver anomaly located 500m west of the legal corner post is coincident with a strong gold anomaly. Other silver anomalies on the southern half of the property are adjacent to small gold anomalies.

3.2.5 Gold

Soil gold content on the Silver Reef claim averages about 20 ppb ranging up to a maximum of 600 ppb. The threshold value for gold is taken to be 50 ppb and is considered strongly anomalous above 150 ppb. Significant anomalies are located approximately 500m west of the legal corner post and near the southwest corner of the SHA 1 claim (Figure 8). Another single sample anomaly is indicated approximately 1km north of the legal corner post along the eastern edge of the claim.

Anomalies are isolated and small yet of sufficient magnitude to be considered worthy of further investigation. Silver and gold anomalies coincide quite well although silver anomalies tend to be more dispersed. Anomalous copper, lead and zinc values do not appear to accurately coincide with areas of anomalous gold values and, as such, do not appear from the limited data to be accurate geochemical tracer elements for gold on the Silver Reef property.

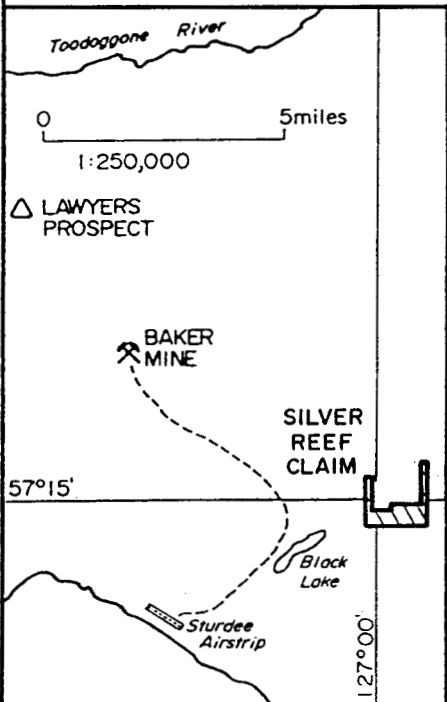
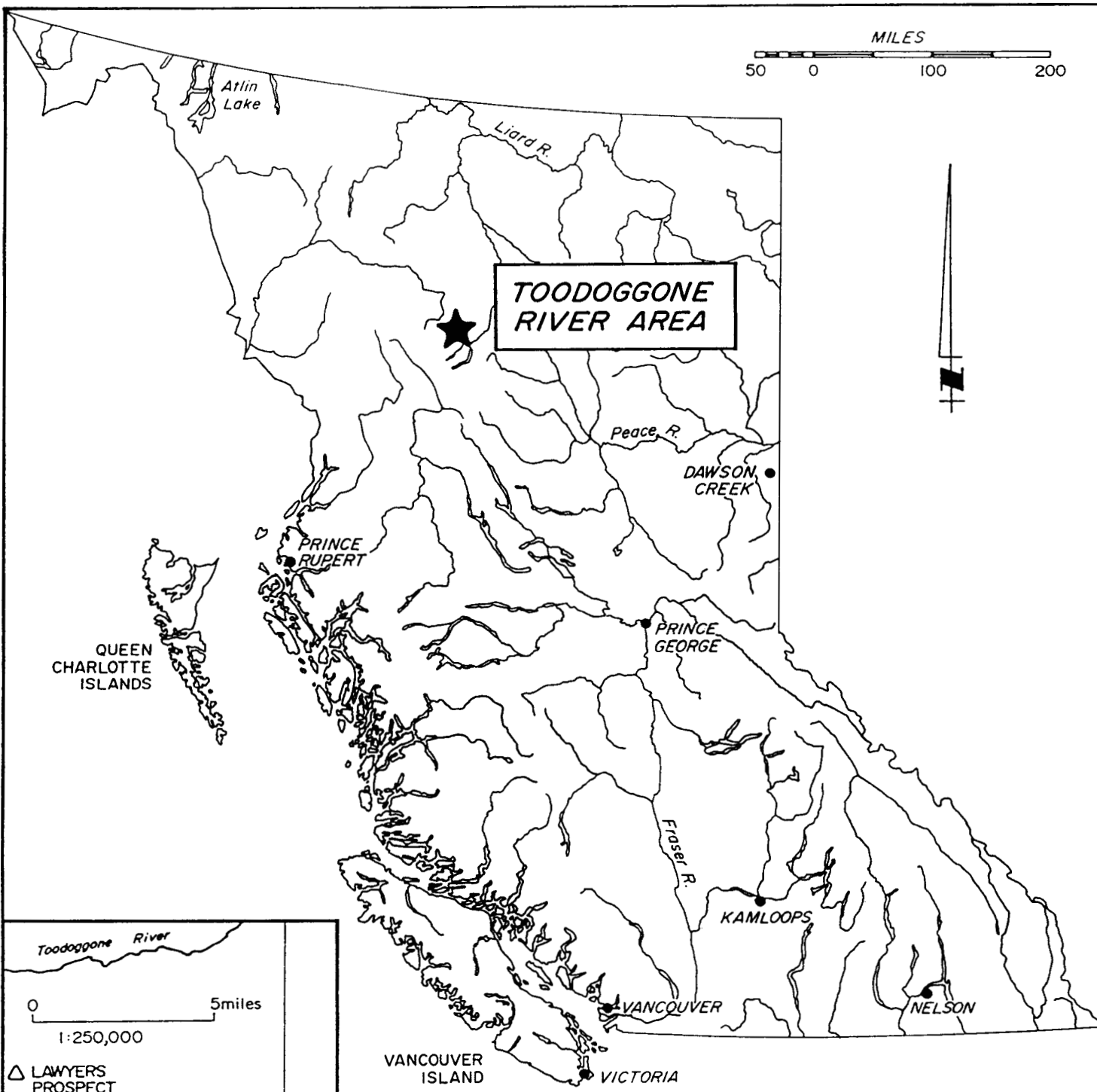
4.0 CONCLUSIONS AND RECOMMENDATIONS

The geological and geochemical surveys conducted on the Silver Reef claim during August and September, 1981 indicate somewhat equivocal results. Mapping has confirmed that the quartz-stockwork vein system discovered on the SHAS property does extend, at least in part, onto the Silver Reef claim. Although assay values for rock samples did not detect any ore grade veins, results of the soil geochemical survey indicate significant anomalies in copper, lead, zinc, silver and gold. Two areas with multi-element anomalies are indicated; one approximately 1.1km north of the legal corner post and another approximately 350m northwest of the legal corner post. Because of the configuration of the sampling grid dictated by the shape of the property, the anomalies are not closed or well defined.

Although the geological environment on the property and in the general area along with the results of the present soil survey indicate good potential for the occurrence of gold veins, the configuration of the Silver Reef claim itself presents a difficult exploration target. Limited follow-up float prospecting, chip sampling and soil sampling in the areas of soil anomalies is recommended in order to determine an appropriate course of action in the further development of the property.

REFERENCES

- Carter, N.C., 1981; Report on the Silver Reef Claim; unpublished file report to Granada Exploration Corporation.
- Kowall, C., 1980; A Prospecting Report covering the Silver Reef Claim; B.C. Department of Energy, Mines and Petroleum Resources Assessment Report (unreleased to date).
- Meyer, W. and Folk, P., 1975; Geological and Geochemical Survey on the SHA Claims; B.C. Department of Mines and Petroleum Resources Assessment Report No. 5559.
- Schroeter, T.G., 1981; Toodoggone River: Geological Fieldwork, 1980; British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1981-1, pp. 124-131.
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-



GRANADA EXPLORATION CORPORATION	
SILVER REEF MINE CLAIM LOCATION MAP	
OMINECA M.D., B.C.	NTS MAP 94E
FIGURE I	
NEVIN SADLIER-BROWN GOODBRAND LTD. NOVEMBER 1981	

 **BAKER MINE**

CHAPPELLE CLAIMS

NTS
94E/7W

NTS
94E/6E

SHA 2

SHA 1

SHAS

JOCK CLAIMS

57°15'

JOCK CREEK

SILVER REEF

48480

NTS
94E/3E

BLACK LAKE

NTS
94E/2W

GRANADA EXPLORATION CORPORATION

**SILVER REEF MINE CLAIM
CLAIM MAP**

OMINECA M.D., B.C.

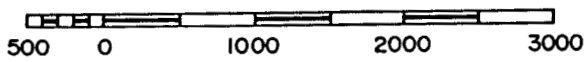
NTS MAP 94E

FIGURE 2

SCALE 1:50 000

NEVIN SADLIER-BROWN GOODBRAND LTD.
NOVEMBER 1981

SCALE - METRES



127°00'

Appendix A - Statement of Costs IncurredFees Paid

S. Croft, geologist; August 29-September 15, 1981 (18 days @ \$258/day)		\$ 4,644.00
R. Bruce, assistant; August 29-September 10, 1981 (13 days @ \$165/day)		<u>2,145.00</u>
Total Wages		\$ 6,789.00

Expenses

Transportation			
Airfare and taxi (Smithers-Vancouver x2)	\$ 242.00		
Camp de-mobilization	150.00		
Helicopter support (2.7 hours)	<u>1,401.00</u>		
Sub Total	\$ 1,793.00	\$ 1,793.00	
Food and Accommodation			
Camp Support (August 29-September 15, 1981)	547.00		
Tye Hotel, Smithers, B.C. (1 day)	68.00		
Meals	<u>31.00</u>		
Sub Total	\$ 646.00	646.00	
Geochemical Analysis			
Chemex Laboratories Ltd. (91 soil samples for Cu, Pb, Zn, Ag, Au; @ \$0.86/sample)			852.00
Expendable Supplies			
Explosives			159.00
Administration and Report Preparation			
Drafting, printing	\$ 593.00		
Typing, copying	<u>116.00</u>		
Sub Total	\$ 709.00	<u>709.00</u>	
TOTAL			<u>\$10,948.00</u>

Appendix B

CERTIFICATE AND STATEMENT OF QUALIFICATIONS

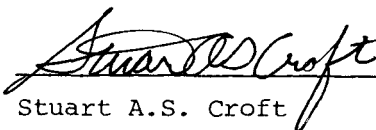
I, Stuart A.S. Croft hereby certify that:

1. My residence address is 1340 Inglewood Avenue,
West Vancouver, B.C. V7T 1Y9

2. I am a consulting geologist with the firm of Nevin
Sadlier-Brown Goodbrand Ltd., 401-134 Abbott Street,
Vancouver, B.C. V6B 2K4

3. I was educated at the University of British Columbia
in geological engineering and have been practicing
my profession since June, 1981

4. I have examined the Silver Reef claim and supervised
the exploration program conducted August and September,
1981.


Stuart A.S. Croft

Appendix B

CERTIFICATE AND STATEMENT OF QUALIFICATIONS

I, Brian D. Fairbank, hereby certify that:

1. My residence address is 342 West 15th Street, North Vancouver, B.C. V7M 1S5
2. I am a consulting geologist and partner with the firm of Nevin Sadlier-Brown Goodbrand Ltd., 401-134 Abbott Street, Vancouver, B.C. V6B 2K4
3. I hold a B.A.Sc. in Geological Engineering from the University of British Columbia. I have been practicing my profession since 1973, and I am a member of the Association of Professional Engineers (Geological) of the Province of British Columbia
4. I am a Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy
5. I have reviewed the data on the Silver Reef claim and have overseen the preparation of this report personally.



B. D. Fairbank, P.Eng.

Appendix C - Geochemical Laboratory Methodology

Sample Preparation

1. Soil samples are dried at 60°C and sieved to -80 mesh.
2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis for Ag*, Cu, Pb, Zn

0.5 gram samples are digested hot dilute aqua regia in a boiling water bath and diluted to 10 ml with demineralized water.

All of the above elements are determined in the acid solution by Atomic Absorption.

* denotes background detection.

Geochemical Analysis for Au

10.0 gram samples that have been ignited overnight at 600°C are digested with hot dilute aqua regia, and the clear solution obtained is extracted with Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit - 5 ppb direct AA and 1 ppb graphite AA.)

APPENDIX D

Soil Geochemical Results



CHEMEX LABS LTD.

212 BROOKSBANK AVE
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604)984-0221
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : Nevin Sadler-Brown Geosystems Ltd.,
401 - 134 Abbott St.,
Vancouver, B.C.
V6B 2K4

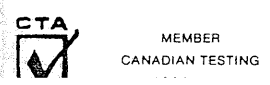
CEPT. # : AB114714-001-A
INVOICE # : 18114714
DATE : 30-OCT-81
P.O. # : NONE
094

ATTN: S. CROFT

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA ppm	
0+00 N 0+00 W	201	49	26	100	3.1	30	--
0 N 01 W	201	23	11	80	0.1	10	--
0 N 02 W	201	25	10	90	0.5	<10	--
0 N 03 W	201	20	17	83	0.4	10	--
0 N 04 W	203	24	25	85	1.1	<10	--
0 N 05 W	201	22	24	100	4.2	600	--
0 N 06 W	201	53	3	110	0.4	10	--
0 N 07 W	201	63	5	72	0.2	<10	--
0 N 08 W	201	67	+	80	0.4	<10	--
0 N 09 W	201	116	5	85	0.2	<10	--
0 N 10 W	201	136	3	106	0.3	10	--
0 N 11 W	203	34	4	82	0.1	<10	--
0 N 12 W	201	26	3	70	0.4	<10	--
0 N 13 W	201	72	3	98	0.2	<10	--
0 N 14 W	203	34	3	90	0.1	<10	--
0 N 15 W	203	51	2	68	0.1	<10	--
0 N 16 W	201	40	4	110	0.1	<10	--
0 N 17 W	201	33	3	72	0.2	<10	--
0 N 18 W	203	56	4	84	1.0	10	--
0 N 19 W	201	15	2	39	0.1	<10	--
0 N 20 W	201	10	5	60	0.2	10	--
1 N 00 W	201	18	35	128	2.3	<10	--
1 N 01 W	201	15	5	104	0.2	10	--
1 N 02 W	201	26	10	133	0.8	20	--
1 N 03 W	201	13	2	63	0.6	<10	--
1 N 04 W	203	54	8	59	1.4	330	--
1 N 05 W	203	19	12	68	1.2	20	--
1 N 06 W	201	33	35	99	1.7	10	--
1 N 07 W	201	44	23	65	0.2	10	--
1 N 08 W	201	32	17	88	0.3	20	--
1 N 09 W	203	47	9	42	0.2	<10	--
1 N 10 W	203	37	23	102	1.1	<10	--
2 N 00 W	201	9	4	65	0.1	<10	--
2 N 01 W	201	13	7	80	0.1	<10	--
2 N 02 W	203	17	11	70	0.6	<10	--
2 N 03 W	203	13	7	126	0.3	20	--
2 N 04 W	203	15	25	98	3.5	<10	--
2 N 05 W	203	12	2	49	0.5	10	--
2 N 06 W	203	29	18	94	0.1	10	--
2 N 07 W	203	33	4	75	0.1	<10	--

Handwritten signature

Certified by





CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604)984-0221
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : Mevin Sadler-Brown Goodbrand Ltd.,
401 - 134 Abbott St.,
Vancouver, B.C.
V6B 2K4

CERT. # : 28114714-002-A
INVOICE # : 18114714
DATE : 30-OCT-81
P.O. # : NONE
094

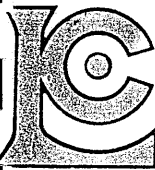
ATTN: S. CROFT

Sample Description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AJ-AA ppm	
2 N 08 W	203	50	8	92	0.5	<10	--
2 N 09 W	201	33	9	92	0.4	250	--
2 N 10 W	203	26	37	102	1.0	10	--
3 N 00 W	201	37	8	93	3.1	20	--
3 N 01 W	201	14	8	68	0.2	10	--
3 N 02 W	201	25	5	75	2.3	<10	--
3 N 03 W	203	14	13	122	0.3	20	--
3 N 04 W	203	17	10	63	0.5	20	--
3 N 05 W	201	29	6	71	1.0	10	--
3 N 06 W	201	76	2	84	0.5	10	--
3 N 07 W	201	63	3	80	0.3	<10	--
3 N 08 W	203	79	4	75	0.9	<10	--
3 N 09 W	201	67	8	73	0.3	10	--
3 N 10 W	201	39	4	66	0.4	130	--
04 N 0 W	201	34	9	115	1.5	<10	--
05 N 0 W	201	16	18	70	0.5	10	--
06 N 0 W	203	15	25	86	0.2	10	--
07 N 0 W	201	16	11	112	1.1	<10	--
08 N 0 W	201	14	8	69	0.3	10	--
09 N 0 W	201	18	8	68	0.6	20	--
10 N 0 W	203	13	10	78	0.1	170	--
11 N 0 W	201	16	360	500	4.5	40	--
12 N 0 W	201	54	40	92	0.7	10	--
13 N 0 W	201	17	24	39	0.1	20	--
14 N 0 W	203	137	640	138	0.9	50	--
15 N 0 W	201	22	28	72	0.2	<10	--
16 N 0 W	201	33	42	64	0.1	10	--
17 N 0 W	201	14	10	50	0.1	10	--
18 N 0 W	203	132	35	105	0.3	10	--
19 N 0 W	201	93	68	68	2.6	40	--
04 N 1 W	201	33	9	87	0.5	10	--
05 N 1 W	203	32	7	72	3.0	40	--
07 N 1 W	201	25	18	65	1.0	10	--
08 N 1 W	203	19	9	87	0.1	50	--
09 N 1 W	201	18	10	75	0.4	50	--
10 N 1 W	201	40	16	165	1.8	40	--
11 N 1 W	201	10	11	74	0.3	20	--
12 N 1 W	201	16	10	64	0.2	20	--
13 N 1 W	201	15	12	71	0.7	10	--
14 N 1 W	201	11	15	72	0.2	10	--

Certified by



MEMBER
CANADIAN TESTING



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : Nevin Sadlier-Brown Goodbrand Ltd.,
401 - 134 Abbott St.,
Vancouver, B.C.
V6B 2K4

CERT. # : A8114714-003-A
INVOICE # : 18114714
DATE : 30-OCT-81
P.O. # : NONE
094

ATTN: S. CROFT

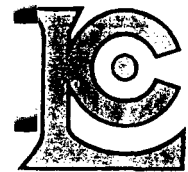
Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AJ-AA ppb	
15 N 1 W	201	14	31	70	0.6	100	--
16 N 1 W	201	12	11	42	0.5	<10	--
17 N 1 W	201	15	24	65	0.3	20	--
18 N 1 W	201	29	31	85	0.1	10	--
19 N 1 W	201	22	151	49	0.1	20	--
20 N 0 W	201	50	86	110	0.5	70	--
20 N 1 W	201	65	75	70	1.4	20	--
20 N 2 W	201	66	73	96	1.2	10	--
20 N 3 W	201	20	28	71	0.3	40	--
20 N 4 W	201	45	87	88	0.5	20	--
20 N 5 W	201	160	24	410	0.1	<10	--

Handwritten signature

Certified by

APPENDIX E

Assay Results



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

ANALYTICAL CHEMISTS · GEOCHEMISTS · REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

TO : Nevin Sadlier-Brown Goodbrand Ltd.,
401 - 134 Abbott St.,
Vancouver, B.C.
V6B 2K4

CERT. # : A8114713-001-A
INVOICE # : I8114713
DATE : 04-NOV-81
P.C. # : NONE
094

ATTN: S. CROFT

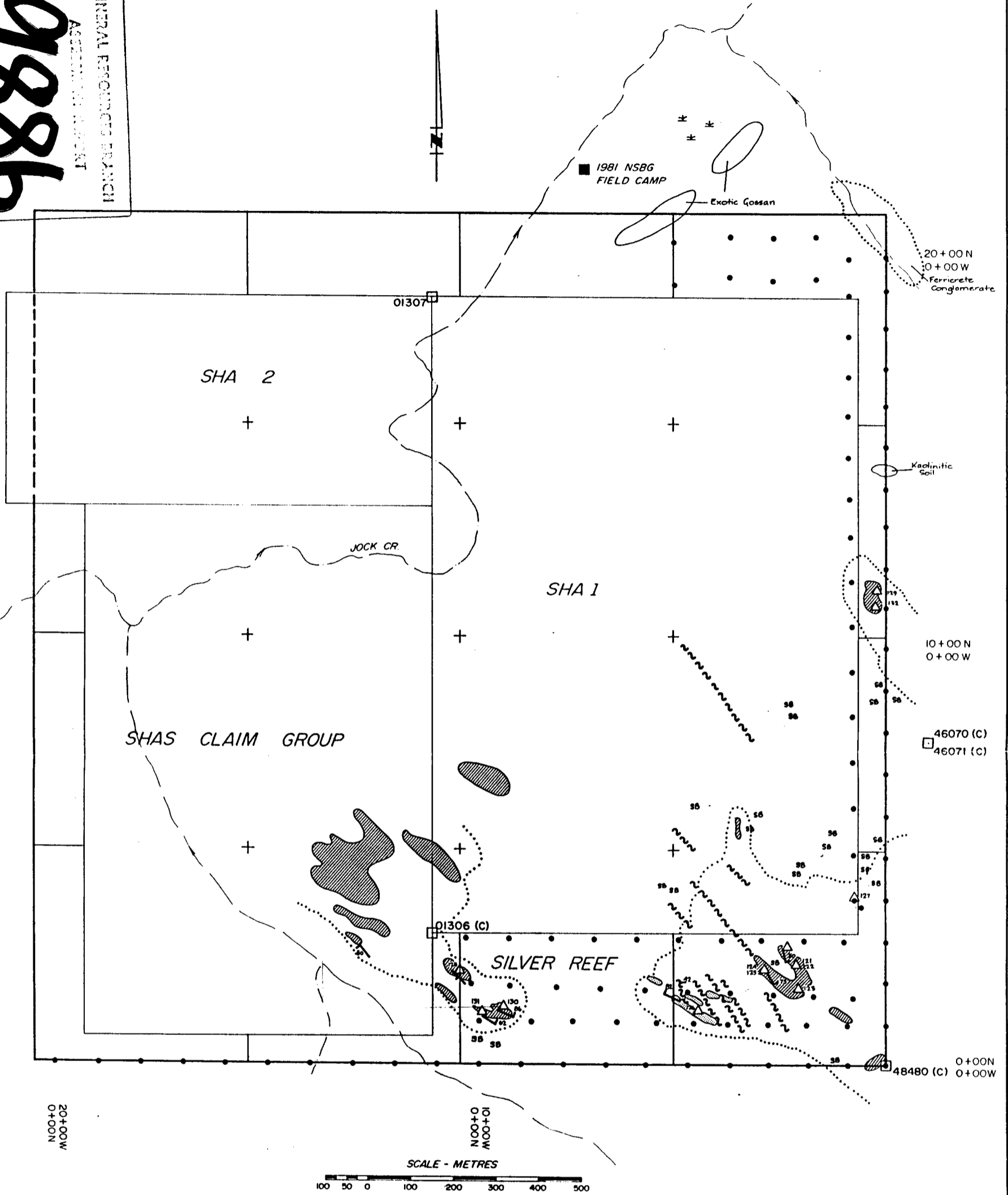
Sample description	Prep code	Cu %	Pb %	Zn %	Ag FA oz/T	Au FA oz/t	
32120	207	<0.01	<0.01	<0.01	0.01	<0.003	--
32121	207	<0.01	0.04	0.02	0.02	0.010	--
32122	207	<0.01	<0.01	0.01	0.01	0.003	--
32123	207	<0.01	0.01	0.01	0.01	0.005	--
32124	207	<0.01	<0.01	0.01	0.01	0.003	--
32125	207	<0.01	<0.01	0.01	0.01	<0.003	--
32126	207	<0.01	<0.01	<0.01	0.02	0.005	--
32127	207	<0.01	<0.01	0.01	0.01	<0.003	--
32128	207	<0.01	<0.01	0.01	0.02	<0.003	--
32129	207	<0.01	<0.01	0.01	0.02	<0.003	--
32130	207	0.02	<0.01	0.01	0.03	0.008	-- *
32131	207	<0.01	<0.01	0.01	0.01	<0.003	--
32132	207	<0.01	0.01	0.01	0.01	<0.003	--

.....
Registered Assayer, Province of British Columbia



MEMBER
CANADIAN TESTING
ASSOCIATION

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
9886
 No.



LEGEND

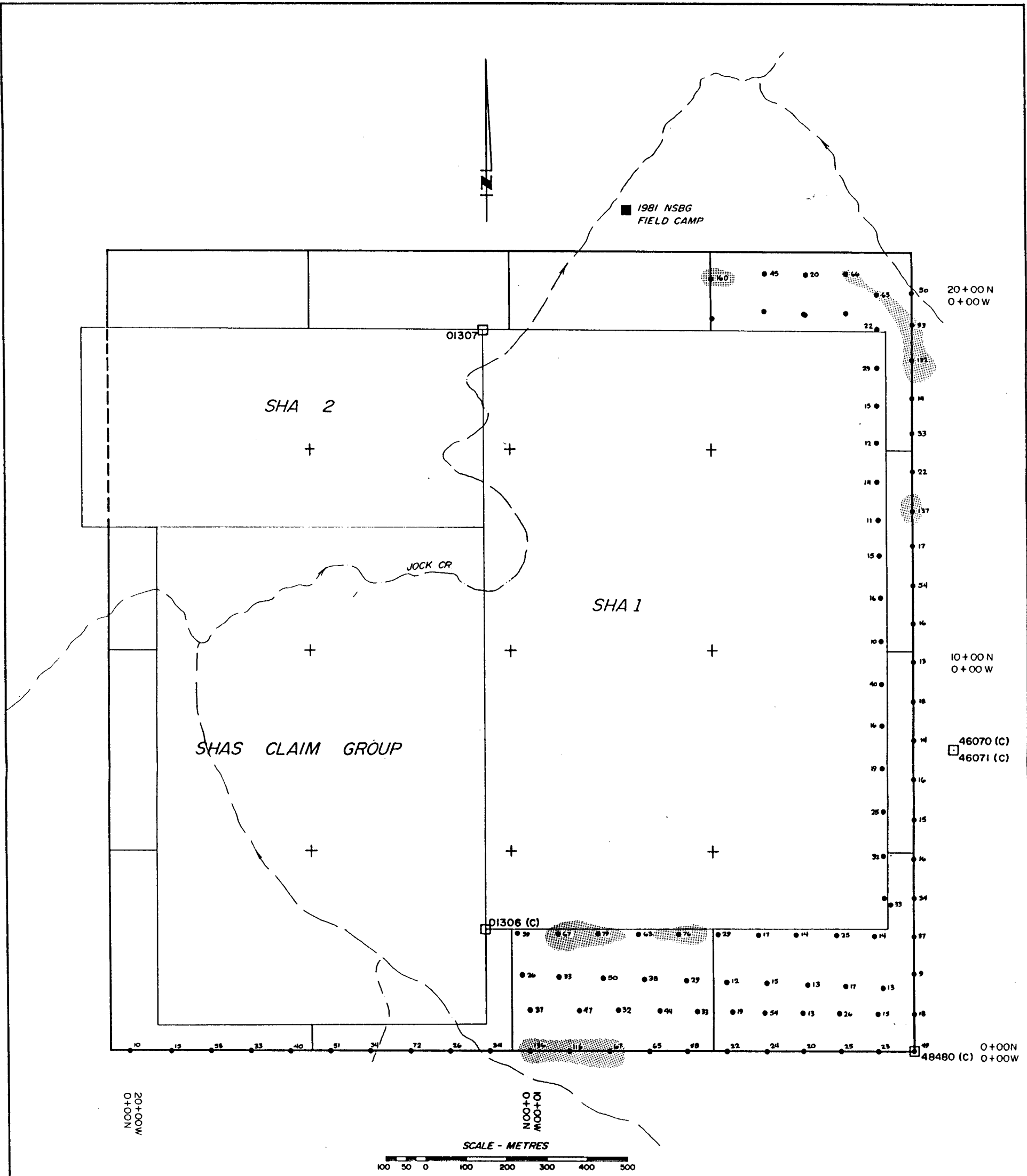
- LEGAL CLAIM POST (C) - CONFIRMED LOCATION
- CREEK
- SOIL SAMPLE LOCATION
- AREAS OF EXTENSIVE OUTCROP (DARK GREY-GREEN FRAGMENTAL DACITE; FELDSPAR PHENOCRYSTS TO 2mm, SOME QUARTZ EYES)
- SHEAR ZONE WITH KAOLINITE, SOME SILICIFICATION
- SILICIFIED VOLCANICS (QUARTZ STOCKWORK, ALTERED PHENOCRYSTS, DRUSY QUARTZ-LINED CAVITIES, PYRITE MINERALIZATION)
- SILICEOUS BRECCIA FOUND IN FLOAT (SILICIFIED VEIN MATERIAL MAY BE PRESENT IN SUBCROP)
- GEOLOGIC SAMPLE LOCATION (NUMBER REFERS TO ASSAY SHEET)
- FAULT, WITH DIP DIRECTION IF KNOWN
- STRIKE AND DIP OF SILICIFIED VEIN; INCLINED, VERTICAL

To accompany a report entitled
 "GEOLOGICAL & GEOCHEMICAL SURVEY OF
 THE SILVER REEF CLAIM IN THE
 TODDOGGONE RIVER AREA, OMINACA M.D., B.C.",
 dated November 15, 1981, by

STUART CROFT

 BRIAN FAIRBANK NEW

GRANADA EXPLORATION CORPORATION	
SILVER REEF MINE CLAIM	
PROPERTY GEOLOGY	
OMINECA M.D., B.C.	NTS MAP 94E
FIGURE 3	SCALE 1:10 000
NEVIN SADLIER-BROWN GOODBRAND LTD. NOVEMBER 1981	



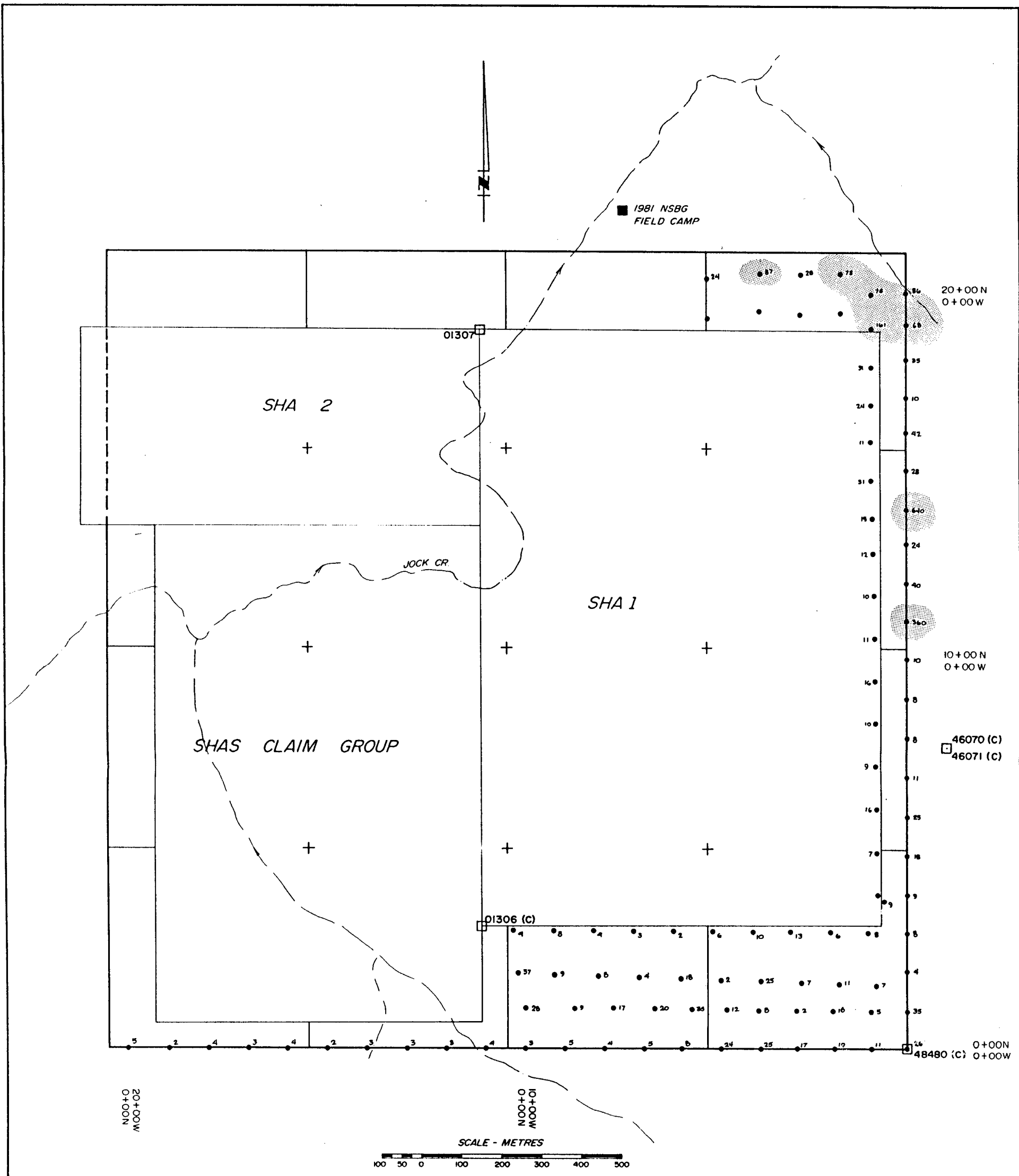
- ☐ LEGAL CLAIM POST
(C)- CONFIRMED LOCATION
- CREEK
- SOIL SAMPLE LOCATION
COPPER VALUE (ppm)
- ANOMALOUS - > 65 ppm

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9886
NO

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TOODOGGONE RIVER AREA, Omineca M.D., B.C.",
dated November 15, 1981, by

Stuart Croft
STUART CROFT
Brian Fairbank
BRIAN FAIRBANK P.ENG.

GRANADA EXPLORATION CORPORATION	
SILVER REEF MINE CLAIM GEOCHEMICAL PLAN COPPER (ppm)	
OMINECA M.D., B.C.	NTS MAP 94E
FIGURE 4	SCALE 1:10 000
NEVIN SADLER-BROWN GOODBRAND LTD. NOVEMBER 1981	



- LEGAL CLAIM POST
(C)-CONFIRMED LOCATION
- CREEK
- SOIL SAMPLE LOCATION
LEAD VALUES (ppb)
- ◐ ANOMALOUS - VALUES > 50 ppb

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

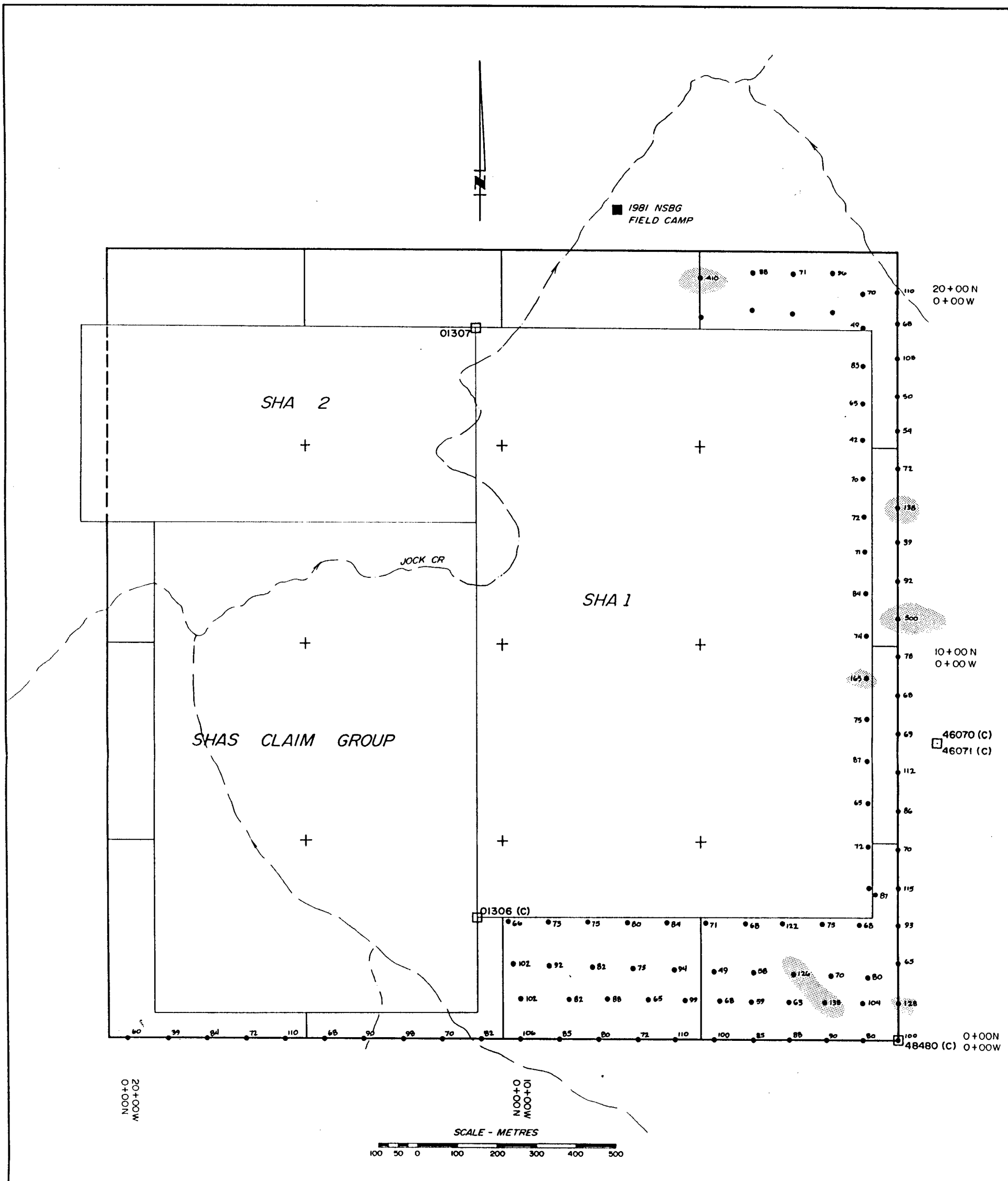
9886

To accompany a report entitled
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TOODOGGONE RIVER AREA, OMINECA M.D., B.C.",
dated November 15, 1981, by

Stuart Croft
STUART CROFT

Brian Fairbank
BRIAN FAIRBANK PEWU

GRANADA EXPLORATION CORPORATION	
SILVER REEF MINE CLAIM GEOCHEMICAL PLAN LEAD (ppb)	
OMINECA M.D., B.C.	NTS MAP 94E
FIGURE 5	SCALE 1:10 000
NEVIN SADLIER-BROWN GOODBRAND LTD. NOVEMBER 1981	



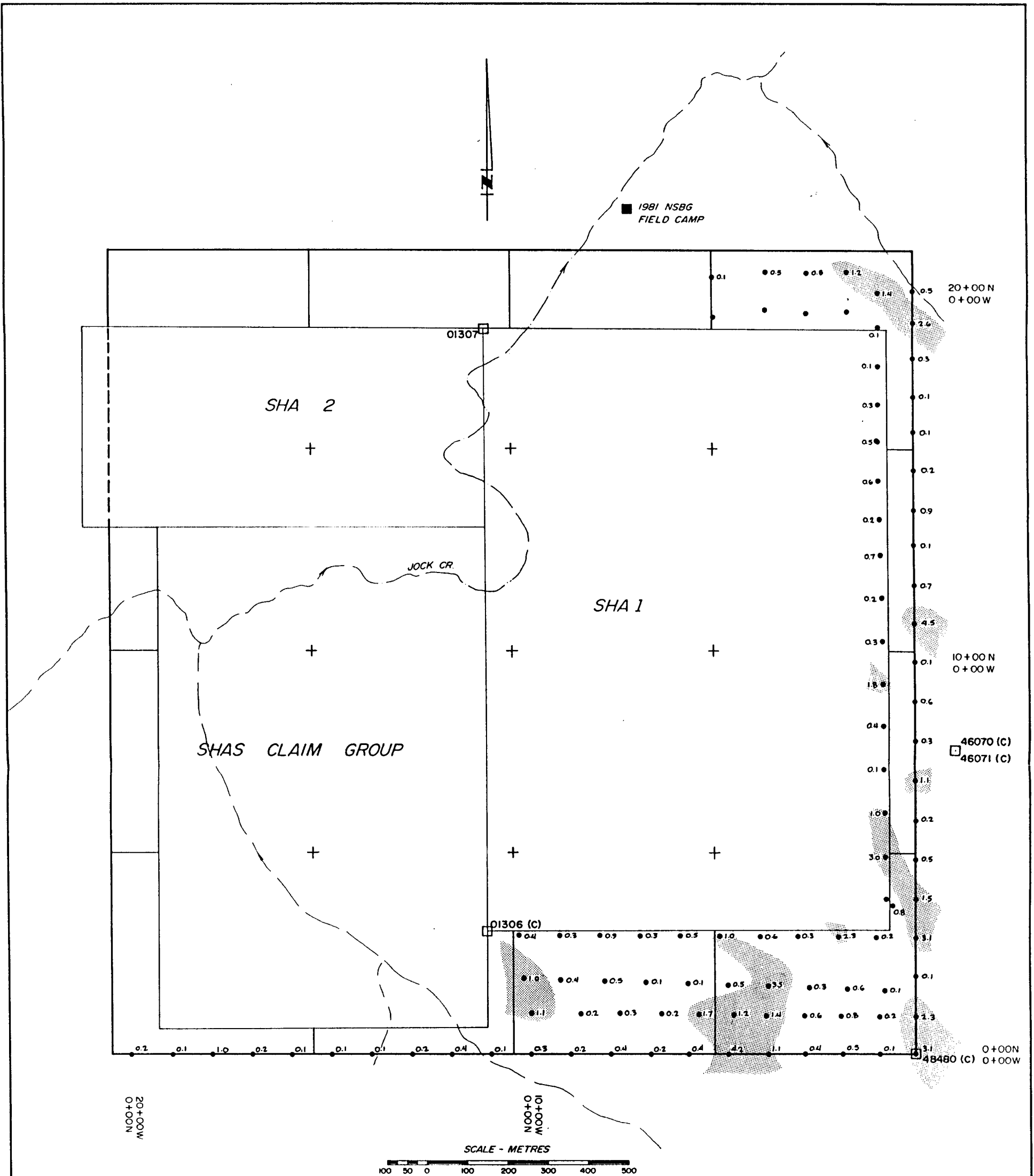
- LEGAL CLAIM POST
(C)-CONFIRMED LOCATION
- CREEK
- SOIL SAMPLE LOCATION
ZINC VALUES (ppm)
- ◐ ANOMALOUS - VALUES >125 ppm

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
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TOODOGGONE RIVER AREA, OMINECA M.D., B.C.",
dated November 15, 1981, by

Stuart Croft
STUART CROFT
Brian Fairbank
BRIAN FAIRBANK P.E.M.

GRANADA EXPLORATION CORPORATION	
SILVER REEF MINE CLAIM GEOCHEMICAL PLAN ZINC (ppm)	
OMINECA M.D., B.C.	NTS MAP 94E
FIGURE 6	SCALE 1:10 000
NEVIN SADLIER-BROWN GOODBRAND LTD. NOVEMBER 1981	



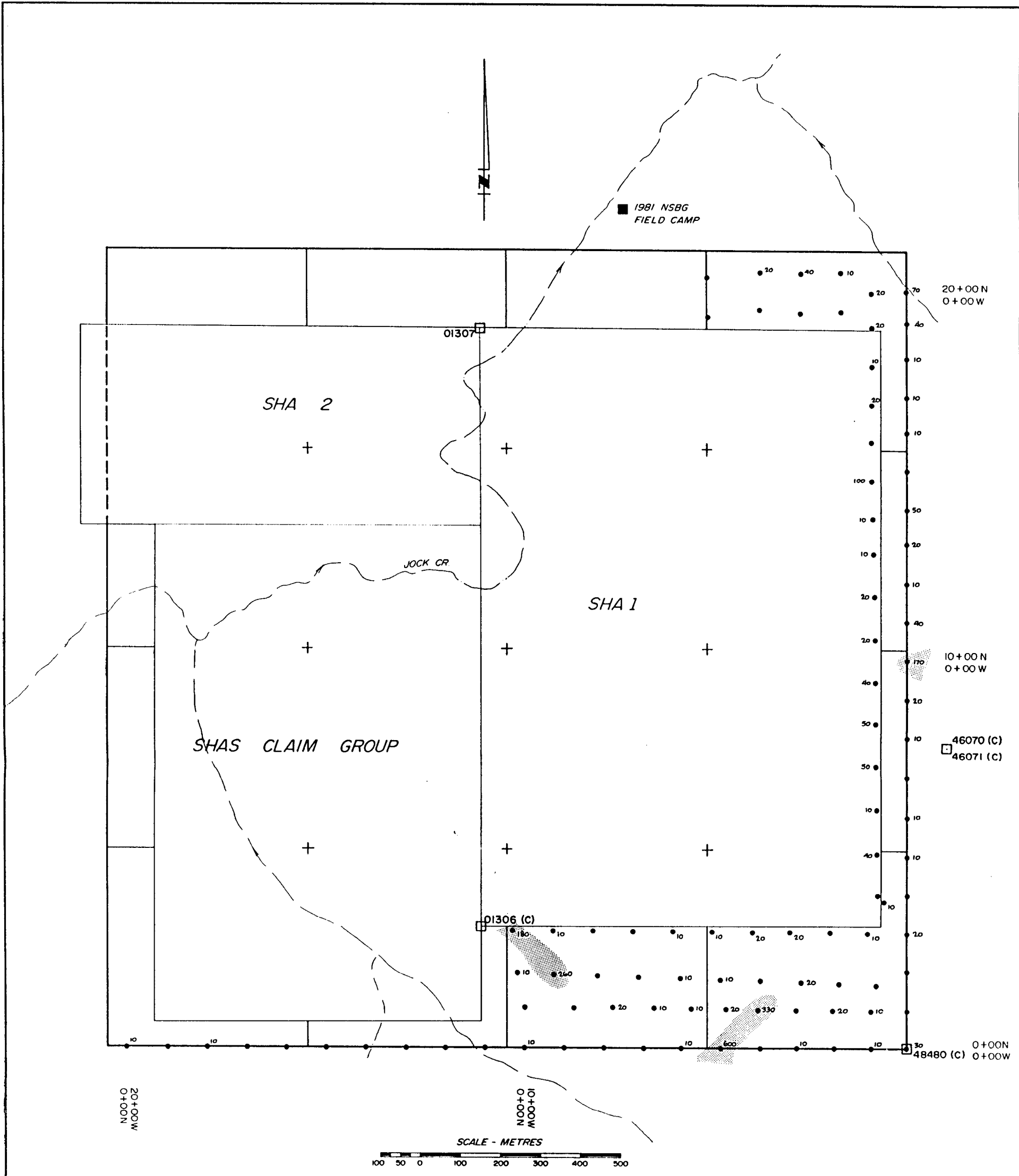
- LEGAL CLAIM POST
(C)-CONFIRMED LOCATION
- CREEK
- SOIL SAMPLE LOCATION
SILVER VALUES (ppm)
- ANOMALOUS - VALUES > 1.0 ppm

MINERAL SERVICES BRANCH
 REPORT
9886

To accompany a report entitled
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 THE SILVER REEF CLAIM IN THE
 TOODOGGONE RIVER AREA, OMINICA M.D., B.C.",
 dated November 15, 1981, by

Stuart Croft
 STUART CROFT
Brian Fairbank
 BRIAN FAIRBANK PENN

GRANADA EXPLORATION CORPORATION	
SILVER REEF MINE CLAIM	
GEOCHEMICAL PLAN	
SILVER (ppm)	
OMINECA M.D., B.C.	NTS MAP 94E
FIGURE 7	SCALE 1:10 000
NEVIN SADLIER-BROWN GOODBRAND LTD. NOVEMBER 1981	



- LEGAL CLAIM POST
(C)- CONFIRMED LOCATION
- CREEK
- ²⁶⁰ SOIL SAMPLE LOCATION
GOLD VALUES (ppb)
- STRONGLY ANOMALOUS -
VALUES > 150 ppb

MINERAL SERVICES BRANCH
FIELD REPORT
9886

To accompany a report entitled
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THE SILVER REEF CLAIM IN THE
TOODOGGONE RIVER AREA, OMINECA M.D., B.C.",
dated November 15, 1981, by

Stuart Croft
STUART CROFT
Brian Fairbank
BRIAN FAIRBANK PEUL

GRANADA EXPLORATION CORPORATION	
SILVER REEF MINE CLAIM GEOCHEMICAL PLAN GOLD (ppb)	
OMINECA M.D., B.C.	NTS MAP 94E
FIGURE 8	SCALE 1:10 000
NEVIN SADLIER-BROWN GOODBRAND LTD. NOVEMBER 1981	