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& exploration ltd.
GEOLOGY · GEOPHYSICS
MINING ENGINEERING
4570 HOSKINS ROAD, NORTH VANCOUVER, B.C.
TELEPHONE (604) 985-7921 V7K 2R1

GEOLOGICAL AND GEOCHEMICAL REPORT

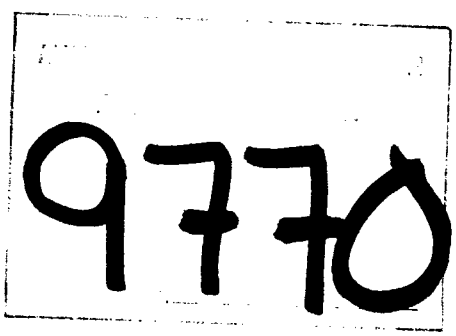
on the

SUNSETS CREEK PROPERTY

Omineca Mining Division

Lat. 54° 29' Long. 127° 10'

NTS 93L/6



for

REDFERN RESOURCES LTD.

by

D. G. Allen, P. Eng.

November, 1981 North Vancouver, B.C.

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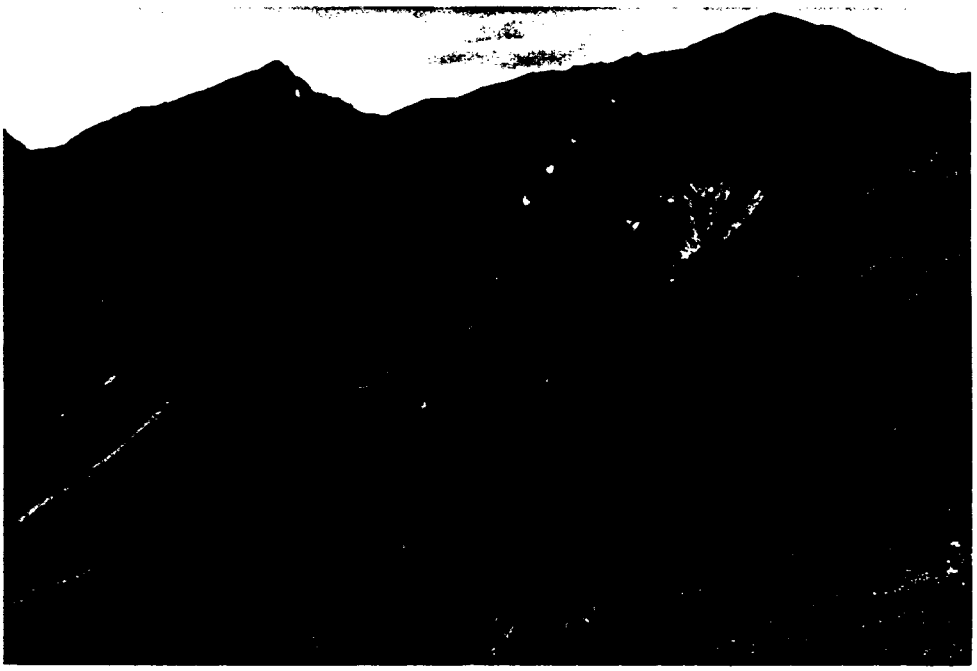


Plate 1. Gossan on the north side of Sunsets Creek headwaters.

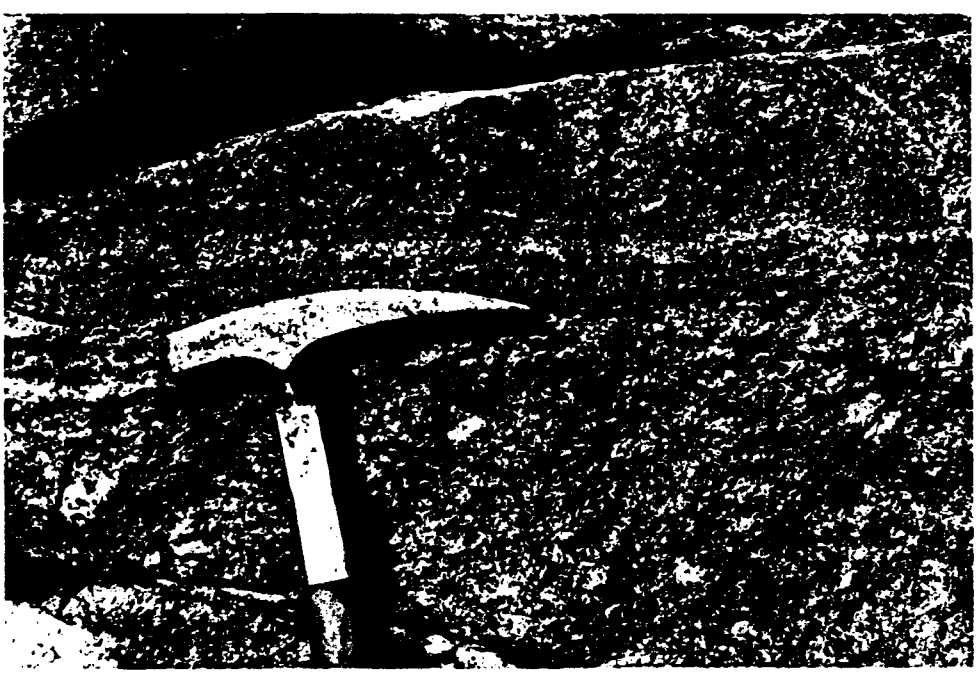


Plate 2. Chill zone of unit 2b (top) cutting unit 2a.

SUMMARY

Redfern Resources Ltd. hold two claims (30 units), Webster 1 and 2, in the Sunsets Creek area of Central British Columbia. The claims cover porphyry-type molybdenum-copper mineralization in the Telkwa Range, 32 km south of Smithers. The prospect was staked originally by Noranda Mines Ltd. and subsequently held by Whitesail Mines Ltd. Previous work included geological mapping, geochemical and geophysical surveys and diamond drilling. Redfern Resources Ltd. acquired the property by staking in 1979 and carried out a preliminary examination in 1980. Further geological mapping and geochemical sampling was carried out by A & M Exploration Ltd. for Redfern during the period August 23 to August 30, 1981 to re-evaluate the potential of the prospect. Results of this work constitute the basis of the report.

Molybdenum and copper mineralization in the Sunsets Creek area is related to a porphyritic quartz monzonite stock about 2 by 3 km in dimension. It is one of a number of Late Cretaceous stocks in Central British Columbia classified as the Bulkley intrusions. Important porphyry copper and molybdenum deposits associated with such intrusions include Glacier Gulch, Huckleberry and Ox Lake. The Sunsets stock intrudes a well-stratified sequence of intermediate flows and pyroclastics of the Hazelton Group.

A northwest-trending system of quartz and quartz-pyrite veins containing minor amounts of molybdenite and chalcopyrite

occupies about 50% of the stock and its contact area. Vein abundance in general is sparse but a zone in the southwest about 300 by 1000 metres contains between 10 and 25 veins per metre. Pyrite occurs as disseminations in the quartz monzonite as well as fracture coatings and veinlets in amounts up to 7%. The main alteration feature is sericite, developed in zones up to 1.5 cm wide adjacent to many of the quartz veins and pyrite-coated fractures.

Results of surface sampling and diamond drilling indicate a range of molybdenum values in rock from 1 to 124 ppm and copper values from 58 to 1580 ppm. Anomalous molybdenum and copper values are found in soil in areas underlain by the Sunsets stock.

CONCLUSION

The Sunsets Creek pluton is a barely unroofed epizonal pluton consisting of at least 2 mappable phases. Chalcopyrite and molybdenite occur in what might be considered a widespaced quartz-pyrite stockwork. The best stockwork development (10 to 25 veins and pyrite-coated fractures per metre) occurs in the southwest part of the stock.

It is possible that the quartz and pyrite veins with their sericitized envelopes represent an outer phyllic alteration zone typically found in porphyry deposits of Central B.C. However, the great areal extent of these veins make it difficult to select a drill target.

Previous sampling indicated widespread molybdenum and copper values in rock and soil. Results of this work confirmed but did not fully define the entire anomalous area. Anomalous copper and molybdenum values occur throughout a large part of the area underlain by the stock especially in the quartz and pyrite vein zone. Molybdenum and copper values in soil appear to be enhanced relative to those in rock - a possible result of the preferential weathering along sulfide-coated fractures and drusy quartz veins. However, a large part of the anomalous area is covered with talus and outcrops are sparse. In addition weathering in places appears to have removed much of the sulfide.

In spite of the low grades of molybdenum and copper encountered in surface and in drill core, the property has some intrigue. The area of best potential would appear to be the eastern soil geochemical anomaly obtained by Whitesail Mines for the following reasons:

1) copper values of up to 1900 ppm and molybdenum values of up to 125 ppm occur in soil;
2) the few outcrops in the area are weathered but contain minor amounts of malachite and a trace of molybdenite - it is possible that a supergene enrichment zone may be present at depth;
3) geophysical surveys by Noranda Mines indicated locally a complex conductor pattern;
4) the area lies along the contact of two phases of quartz monzonite.

RECOMMENDATION

Induced polarization surveys should be carried out in the grid area, especially the eastern part, to cover the best part of the soil geochemical anomaly as well as the contact area between units 2a and 2b. Should results be favorable, then drilling would be warranted. The prospect would be amenable to percussion drilling.

REDFERN RESOURCES LTD.

SUNSETS CREEK PROPERTY

LOCATION MAP

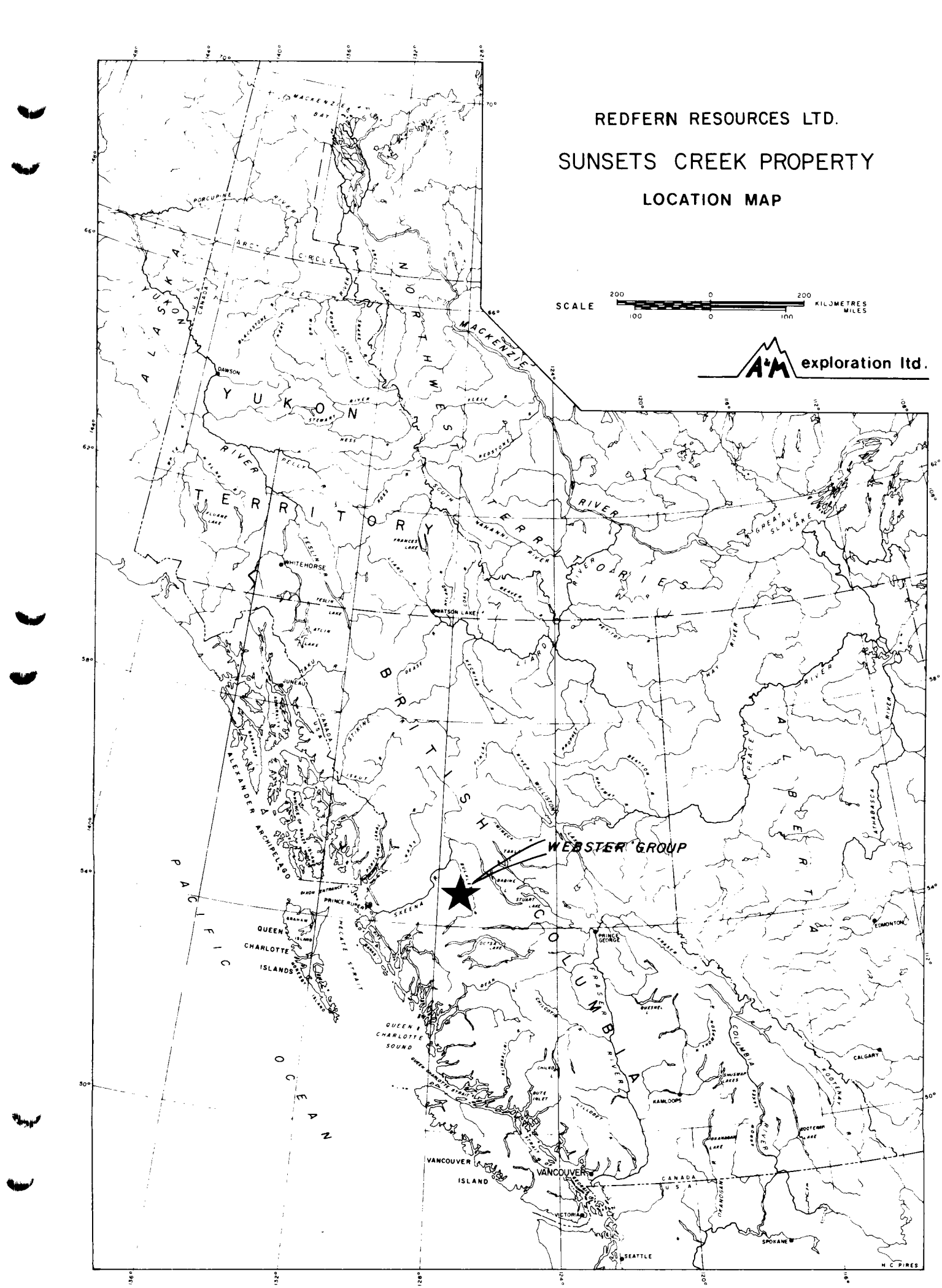


FIGURE – 1

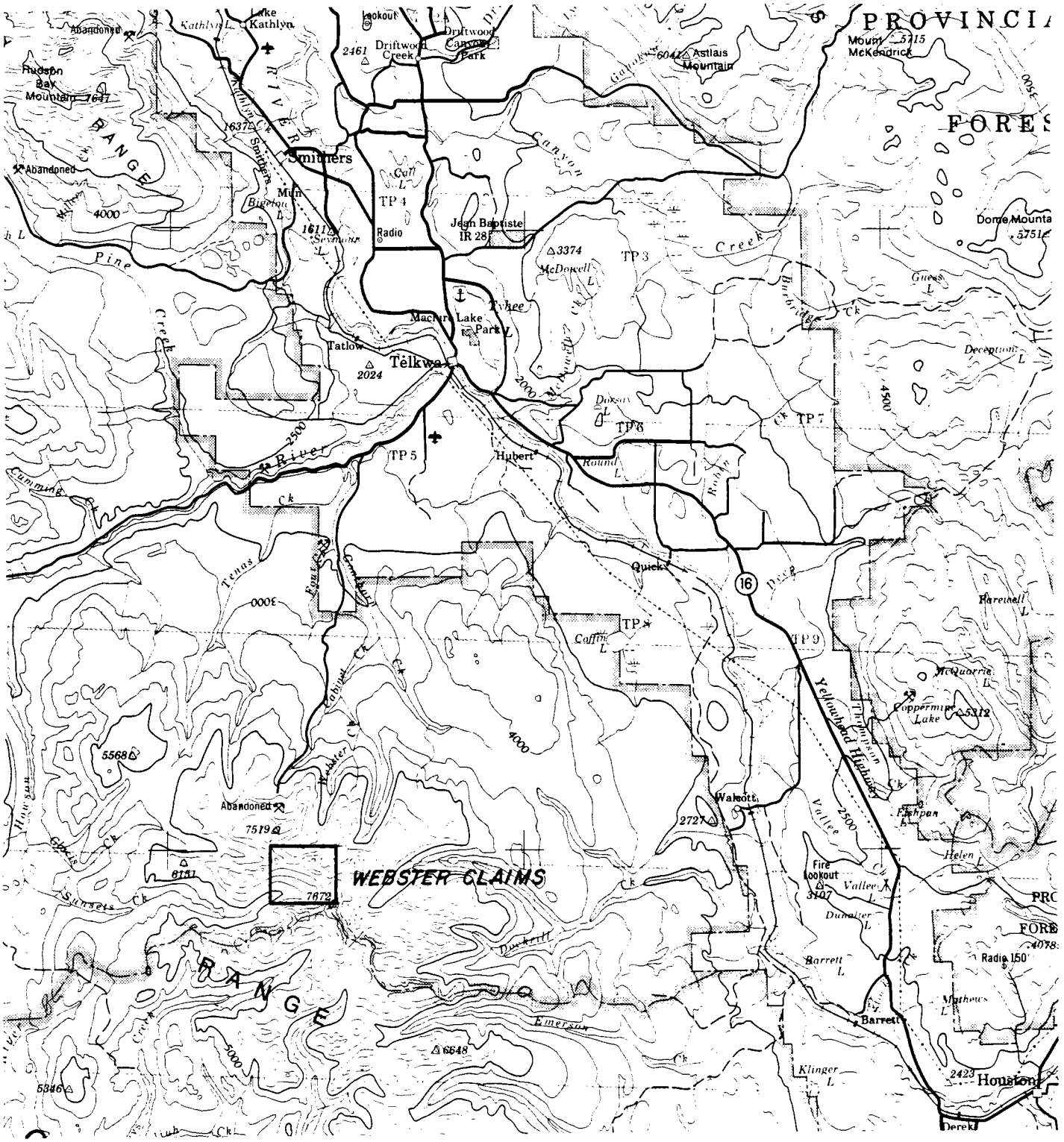
INTRODUCTION

The Webster claims cover a porphyritic quartz monzonite stock containing widespread quartz and pyrite veining with low grade molybdenum and copper. The purpose of this study was to re-evaluate a known porphyry molybdenum-copper prospect to determine its exploration potential. The property was mapped and drill core examined and sampled by D.G. Allen. Geochemical sampling was carried out in selected areas by S. Travis and J. Cuvelier. Data was plotted on a 1:4800 scale topographic map supplied by Noranda Mines Ltd. Field work was carried out during the period August 22 to 30, 1981 for Redfern Resources Ltd.

LOCATION, ACCESS, PHYSIOGRAPHY

The Sunsets Creek property is situated in Central British Columbia (figure 1) 32 km south of Smithers and 35 km west northwest of Houston. The property lies at the headwaters of Sunsets and Webster Creeks, both of which are tributaries of the Telkwa River (figure 2). Logging roads extend to within 5 km of the property. Access is by helicopter, based in Smithers or Houston.

The property lies in the Telkwa Range of the Hazelton Mountains. Elevations in the claim area range from 1520 to 2200 metres (5000 to 7100 feet). The claims cover the head of 4 drainages each of which is a broad cirque basin with a



N.T.S. 93 L/6

REDFERN RESOURCES LTD.

SUNSETS CREEK PROPERTY

WEBSTER CLAIMS

OMINECA MINING DIVISION BRITISH COLUMBIA

LOCATION MAP

SCALE 4 0 4 KILOMETRES
4 0 4 MILES

1 : 250,000

A·M exploration ltd.

FIGURE 2

flat bottom and talus covered slopes. Ridges vary from rounded shoulders to rugged aretes. Most of the claim area is above treeline. Small icefields occupy some of the north and east-facing slopes.

HISTORY

The Sunsets Creek molybdenum copper prospect was staked originally by Noranda Mines Ltd. in 1966 (Fog and Fly groups) as a result of regional geochemical reconnaissance. Work by Noranda included preparation of a topographic base, electromagnetic surveys, geochemical sampling, trenching and pack-sack drilling. The property was subsequently dropped and then acquired by Whitesail Mines Ltd. (Fog, SL, and Sherry groups) who carried out grid preparation, further geochemical sampling, electromagnetic surveys (Assessment Report 1922), and 478 metres of diamond drilling in three holes. The SL 6 and SL 15 claims remain in good standing and are registered in the name of Lacana Mines Ltd. The Webster claims were staked in 1979 by Redfern Resources Ltd.

CLAIMS

The property is covered by 2 claims:

Claim Name	No. of Units	Record No.	Anniversary Date
Webster 1	15	2307	November 23
Webster 2	15	2308	November 23

Both are wholly owned by Redfern Resources Ltd. They surround two 2-post claims, SL 6 and SL 15, held by Lacana Mines Ltd.

REGIONAL GEOLOGY

Regional geology of the Smithers area (93 L) is summarized by Richards and Tipper (1974). The Telkwa Range is underlain by volcanic rocks of the middle to late Jurassic Hazelton Group. These rocks are intruded by granodiorite and quartz monzonite stocks of the Bulkley intrusions of which the Sunsets stock , described below, is one. Radiometric age determinations (Carter, 1974) indicate that the intrusions were emplaced over a span of ages between 65 and 84 million years (Sunsets stock - 70 m.y.) and were localized in part by north to north-westerly striking faults. Important porphyry copper and molybdenum deposits such as Glacier Gulch, Ox Lake and Huckleberry are associated with these intrusions.

LOCAL GEOLOGY

Rock Types

Geology of the Sunsets Creek area is documented by Sutherland Brown (1967) and summarized by Woolverton (1963). Results of the 1981 fieldwork differ from Sutherland Brown mainly in that two distinct phases of the Sunsets pluton have been recognized and mapped. Geology is summarized on a 1:4800 base map obtained from Noranda Mines Ltd. (figure 3).

The volcanic rocks (unit 1, figure 3) in and around the claim area are a well-stratified sequence of pyroclastic rocks of the Telkwa Formation, one of the upper divisions of the Hazelton Group. Dips are gentle, ranging from flat to 34 degrees, and appear to indicate that the volcanic rocks are domed about the Sunsets stock. The sequence consists of greenish-grey to maroon tuffs, volcanic breccias and flows. Dominant rock types are andesite, dacite and rhyolite. Augite or feldspar phenocrysts are common in the flow units. Pyroclastic units range from laminated tuff to coarse breccias. Near their contact with the Sunsets pluton, the volcanic rocks contain pyrite and magnetite as disseminations and fracture fillings and locally contain irregular masses of epidote and minor amounts of garnet.

The Sunsets stock outcrops over an area of 2 by 3 km. A contact on the south side of the stock was noted to dip about 20 degrees to the south, conformable with bedding in the volcaniclastics. Volcanic rocks outcrop on three peaks within the pluton indicating a possible flat top between elevations 6900 and 7300 feet.

The most abundant phase of the stock is a grey quartz monzonite porphyry (unit 2a) containing abundant euhedral plagioclase phenocrysts 0.2 to 3 cm in length, subhedral partly resorbed quartz eyes 1 - 4 mm in diameter, euhedral biotite books 0.2 - 2 mm in diameter and scattered hornblende needles up to 4 mm in length, all crowded in a fine-grained groundmass rich in potash feldspar. This unit forms the

entire northern half of the stock and the margin of the southern half of the stock.

A coarser grained phase of porphyritic quartz monzonite (unit 2b) contains scattered ovoid poikilitic plagioclase phenocrysts up to 4 cm in length in an inequigranular groundmass of quartz, plagioclase, orthoclase, feldspar, biotite and minor amounts of hornblende. Unit 2b might be a chill phase considering its aphanitic groundmass, however a cross cutting relationship (unit 2b intruding 2a) was noted in one locality.

A possible third phase occurs in the vicinity of drill holes 1 to 3 in which plagioclase phenocrysts and scattered quartz eyes occur in a sugary textured aplitic groundmass.

Dikes are common but not abundant around the stock. Dikes and sills of quartz monzonite and diorite of variable texture (unit 3) were mapped south of the claim group. Dikes of light grey felsite up to 2 metres wide (unit 4) occur on the east side of the stock. Small amounts of quartz porphyry containing barren quartz veinlets were noted in talus north of the Webster claims. Sutherland Brown (1967) reports a group of dikes and sills of pyroxene andesite to diabase on the ridge northwest of the stock.

Structure

The most prominent structural feature is a widespread system of quartz veins and pyrite veinlets in the Sunsets stock. Drusy quartz veins up to 2 cm wide contain blebs and crystals of pyrite and local chalcopyrite or molybdenite.

Their abundance ranges from 1 per 3 metres to 5 per metre. Fracture coatings and veinlets of pyrite up to 7 mm wide range in abundance from 1 to 25 per metre. Quartz and pyrite veins appear to be concentrated in a northeast-trending belt through the centre of the stock and locally along the stock margin. A north-trending zone of more intense veining occurs over an area of 300 by 1000 metres in the southwest part of this belt. Selected vein attitudes are plotted on the geological plan (figure 3) and a contour diagram of vein attitudes also shown. Main trends are northeasterly (050°/ 70° SE, $050^{\circ}/25^{\circ}$ SE, and $060^{\circ}/53^{\circ}$ SE) with a weaker south dipping set. The northeast trend with variable dips suggests that the fractures developed as a result of uplift or warping along the main trend of the belt.

Faults are locally abundant. The intensely fractured zones in the vicinity of the SL 6 and SL 15 claims (quartz pyrite-sericite alteration zones of Sutherland Brown, 1967) appear to be a result of more abundant faulting combined with weathering to form an extremely crumbled and limonite-stained quartz monzonite. A strong conductor obtained in electromagnetic surveys by Noranda near the SL 6 claim is probably the reflection of the fault zone (Dirom and Walker, 1967).

Mineralization

A spectacular gossan at Sunsets Creek is a result of up to 7% pyrite. In addition to being fracture controlled as described above, pyrite occurs disseminated throughout

the quartz monzonite and the hornfels zone.

Chalcopyrite occurs in quartz veins and in pyrite veinlets. Disseminated chalcopyrite was noted in quartz monzonite in the area of intense fracturing near the SL 6 claim.

Molybdenite occurs as fracture coatings and as flakes and blebs in quartz veinlets and pyrite seams.

Magnetite occurs as disseminated grains and scattered veinlets in the hornfels zone surrounding the Sunsets stock.

Specular hematite occurs with chalcopyrite in some epidote-rich lenses in the host volcanic rocks.

Alteration

The most prominent alteration type is phyllic (quartz-sericite-pyrite). The wallrock adjacent to many of the quartz veins and pyrite-coated fracture has been sericitized within 1.5 cm. Locally, biotite in the quartz monzonite has been converted to sericite.

Argillization is mainly a near surface weathering feature, especially in areas of intense fracturing. Minor argillization has also occurred adjacent to a few quartz-pyrite veinlets.

A hornfels zone up to 300 metres wide surrounds the Sunsets stock. Within this zone (outlined by the gossan boundary on figure 3) both pyrite and magnetite are common as fracture fillings and disseminations. Locally, epidote-rich pods in the basic volcanic rocks appear to have been partly converted to garnet and may contain minor amounts of specular hematite and chalcopyrite.

Drill Hole Data

Drill core for holes 1 to 3 are stored on the property. Drill sites were located but bearings and dips could not be established. The core was split and apparently assayed by Whitesail Mines Ltd. but results were not available to the writer.

The holes were drilled in an area of extremely crumbled and limonite-stained quartz monzonite. Fractures and shears on surface are as abundant as 25 per metre and are perhaps more abundant than elsewhere on the property. Examination of the core indicated that the quartz-monzonite is fractured and weathered to a depth of 40 to 75 metres. Quartz and quartz-pyrite veins are sparse (1 to 7 per 30 metres) but pyrite coated fractures are as abundant as 25 per metre. Random samples of core were taken every two feet and analyzed at 100 foot intervals. Molybdenum values range from 11 to 42 ppm and copper values 66 to 452 ppm (table I).

GEOCHEMISTRY By grubhoe from B. horizon or talus fines

Rock chip and soil sampling was undertaken in and around the claim group. Parts of the grid area prepared by Whitesail Mines were resampled to check results of previous surveys and to provide additional element analyses. Rock samples consisted of 0.5 to 2 kg of rock chips usually taken over several square metres of outcrop, talus of felsenmeer. Almost all soil samples consisted of talus fines taken at

Table I Summary Logs and Geochemical Results

DDH 1 - 3

DDH 1 FOOTAGE	DESCRIPTION	SAMPLE NO.	ppm Mo	ppm Cu
0-30	No core.			
30-100	Rusty crumbled porphyritic biotite quartz monzonite. Rock weathered and argillized but biotite appears fresh. Limonite coated fractures, some with sericitized haloes, up to 8/foot.	1RA194	12	66
100-250	100-127 As above. 127-200 fresh porphyritic biotite quartz monzonite - some local weak argillization. 2-3% dissem pyrite. Pyrite also as fracture coatings and seams up to 7 mm wide. Up to 10/foot.	1RA195	12	184
200-300	Fresh porphyritic biotite quartz monzonite - 6 vuggy pyrite - qtz veinlets. Up to 7 pyritic coated fractures/foot. 206-208 Fault. 290 Py-qtz vein with clots white Kaolinite and 1 clot tetrahedrite.	1RA196	14	196
300-400	As above. 7 pyrite-quartz ± chalcopyrite veins up to 1 cm wide Chlorite common on fractures, in pyrite veinlets and in some py-qtz veins. Sericitized and silicified halo along some py-qtz veins. Up to 8 pyrite coated fractures/foot. Local argillization related to narrow shear zones.	1RA197	15	452
400-500	As above. Finer grained phases appear as dikes or possible xenoliths? 5 py-qtz veins, 7 pyrite coated fractures/foot. Chlorite on a few py coated fractures. Tr MoS_2.	1RA198	10	426
500-600	As above. 60% xenoliths. 6 vuggy py-qtz-calcite veinlets. MoS_2 on scattered fractures and in a few veinlets. Sericitized haloes on some veinlets.	1RA199	35	236
600-700	As above. 673-675 Mylonite zone @ 85° to C.A. 685-687 Several slip planes @ 45° to C.A. Two qtz and qtz-py veins. 5 to 7 pyrite coated fractures/foot, some with chlorite minor qtz, Tr. epidote. Tr. MoS_2 on fractures and in qtz-MoS_2 veinlets.	1RA200	13	258
700-765	As above. 3 qtz-py veins. 765 End of hole.	1RA201	26	320
DDH 2				
0-60	No core.			
60-200	Rusty crumbled biotite quartz monzonite. Poor recovery.	1RA202	18	192
200-300	Porphyritic biotite quartz monzonite. Weathered and rusty to 250'. 2 py-qtz veins, 1 with cpy. 3 py-coated fractures/foot; some with sericitized halo.	1RA203	11	204
300-400	As above. 2 py-qtz veins; 4-5 py seams and py coated fractures/foot.	1RA204	42	306
400-510	As above. Minor MoS_2 as fracture coatings @ 45° 465-468. Intensely sericitized zone with abund dissem py and scattered clots MoS_2 in irregular qtz veinlets. 461-462 Fault gouge. 510 End of hole.	1RA205	11	366
DDH 3				
0-40	No core.			
40-100	Rusty crumbled quartz monzonite. Poor recovery. Biotite is fresh but feldspars are intensely argillized (weathered). 1 vuggy qtz vein.			
100-200	As above. Rock becomes more competent @ 165' although rock is weathered.			
200-291.5	Porphyritic biotite quartz monzonite. Rusty fractures persist to bottom of hole. Some pyrite and chlorite coated fractures. 291.5 End of hole.			

depths of 2 to 20 cm. Samples were shipped to Rossbacher Laboratories for geochemical analyses of up to 10 elements. Geochemical results are included in Appendix I. Molybdenum and copper values, and anomalous silver, lead, zinc and gold values are plotted on figure 4. Also plotted on figure 4 is the boundary outlining >400 ppm copper in soil after Woolverton (1968).

Anomalous molybdenum (>4ppm) and copper (>120 ppm) values were obtained over a large area - essentially that underlain by the Sunsets stock. In general molybdenum and copper values appear to be higher in soils than in rocks. This enhancement in soil may be a result of the observed tendency of the quartz monzonite to break and weather along fractures and vuggy quartz veins, preferentially releasing any sulfides.

Anomalous lead (>30 ppm) and zinc (>200 ppm) values in soil occur in the west and central parts of the grid area. Lead and zinc distribution indicates a pattern possibly related to the north and west contact of the inequigranular phase or a possible zonal pattern related to the main copper-molybdenum anomaly.

Fluorine analysis was undertaken in an attempt to define a possible central hydrothermally altered zone rich in volatile elements. However, all fluorine values are low to weakly anomalous.

Scattered anomalous gold (>30 ppb) and silver (>2 ppm) values appear to have no definable distribution.

Respectfully submitted,

Donald G. Allen

D. G. Allen
P. Eng. (B.C.)

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Woolverton, R.W. (1968). A Geological, Geophysical and Geochemical Report on the Fog, S.L. and Sherry Groups. B.C. Dept. Mines Assess. Rept. 1922.

CERTIFICATE

I, Donald G. Allen certify that:

1. I am a Professional Geological Engineer, resident at 4570 Hoskins Road, North Vancouver, B.C.

2. I am a graduate of the University of British Columbia with degrees in Geological Engineering. (B.A.Sc., 1964; M.A.Sc., 1966)

3. I have been practising my profession for the last fifteen years.

4. I am a member in good standing of the Association of Professional Engineers of British Columbia.

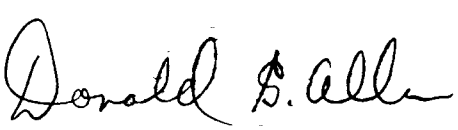
5. This report is based on field work carried out during the period August 23 - 30, 1981.

6. I hold no interest, nor do I expect to receive any, in the Webster Claims or in Redfern Resources Ltd.

7. I consent to the use of this report in a Statement of Material Facts or in a Prospectus by Redfern Resources Ltd.

North Vancouver, B.C.
November 5, 1981

Donald G. Allen
P. Eng. (B.C.)



APPENDIX I

GEOCHEMICAL RESULTS

AND

ANALYTICAL PROCEDURE

Rossbacher Laboratory Ltd.
GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

Jan. 1980.

ANALYTICAL METHODS CURRENTLY IN USE AT
ROSSBACHER LABORATORY LTD.

A. SAMPLE PREPARATION.

1. Geochem. Soil and Silt: Samples are dried, and sifted to minus ~~100~~ 80 Mesh, through stainless steel, or nylon screens.

2. Geochem. Rock : Samples are dried, crushed to minus $\frac{1}{4}$ inch, split, and pulverized to minus 100 mesh.

B. METHOD OF ANALYSIS.

1. Multi element. (Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb.): 0.5 Gram sample is digested for four hours with a 15:85 mixture of Nitric-Perchloric acid.
The resulting extract is analyzed by Atomic Absorption spectroscopy, using Background Correction where appropriate.

2. Tungsten: 1.0 Gram sample is sintered with a carbonate flux, and dissolved.
The resulting extract is analyzed colorimetrically, after reduction with Stannous Chloride, by use of Potassium Thiocyanate.

3. Tin: 0.5 Gram sample is sublimated by fusion with Ammonium Iodide, and dissolved.
The resulting solution is analyzed colorimetrically by use of Gallein.

4. Fluorine: 0.5 Gram sample is fused with a Carbonate Flux, and dissolved.
The resulting solution is analyzed for Fluorine by use of an Ion Selective Electrode.

5. Gold: 10.0 Gram sample is dissolved in Aqua Regia.
The resulting solution is subjected to a Methylisobutyl Ketone extraction, which extract is analyzed for Gold using Atomic Absorption Spectroscopy.

6. pH: An aqueous suspension of soil, or silt is prepared, and its pH is measured by use of a pH meter.

7. Arsenic: 0.25 Gram sample is digested with Nitric-Percloric acid.
Arsenic from the solution is converted to arsine, which in turn reacts with silver D.D.C. The resulting solution is analyzed by colorimetry.

8. Antimony: 0.50 Gram sample is fused with Ammonium Chloride and dissoved.
The resulting solution is analyzed colorimetrically by use of brilliant green.

9. Barium: 0.50 Gram sample is repeatedly digested with $HClO_4$-HNO_3 and HF.
The solution is analyzed by Atomic Absorption Spectroscopy.

10. Mercury: 1.00 Gram sample is digested with HNO_3.
The solution is analyzed by Atomic Absorption Spectroscopy, using a cold vapor generation technique.

11. Rapid Silicate Analysis: 0.10 Gram sample is fused with Lithium Metaborate, and dissolved in HNO_3.
The solution is analyzed by Atomic Absorbtion for SiO_2, Al_2O_3, Fe_2O_3, MgO, CaO, Na_2O, K_2O, TiO_2 P_2O_5, and MnO.

12. Partial Extraction and Fe/Mn oxides: 0.5 Gram sample is extracted using one of the following: Hot or cold 0.5 N. HCL, 2.5% E.D.T.A, Ammonium Citrate, or other selected organic acids.
The solution is analyzed by use of Atomic Absorption Spectroscopy.

13. Biogeochemical: Samples are dried, and ashed at 550°C. and the resulting ash analyzed as in #1, multielement analysis.

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81359-1

INVOICE NO.

DATE ANALYSED SEPT. 20/81

PROJECT

TO: **A & M EXPLORATION LTD.**
4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

No.	Sample	pH	Mo	Cu	Ni	Co	Fe	Ag	Zn	Pb	F			No.
01	81 RJS 1		14	128	14	6	4.1	0.6	40	< 2	280			01
02	2		16	148	14	6	4.1	0.4	42	16	320			02
03	3		10	152	16	8	4.2	1.4	52	30	260			03
04	4		8	200	14	6	4.3	0.8	84	58	260			04
05	5		7	126	12	4	2.4	0.6	70	36	210			05
06	6		4	74	14	4	2.4	0.4	76	38	190			06
07	7		4	150	22	18	4.6	0.8	330	100	350			07
08	8		3	60	14	8	1.6	0.6	314	34	150			08
09	9		1	120	42	34	5.8	1.4	640	116	370			09
10	81 RJS 10		1	126	46	36	5.6	1.6	700	82	380			10
11	11		2	150	24	22	5.7	0.4	390	42	460			11
12	13		1	96	30	24	5.6	0.4	238	68	400			12
13	15		1	68	30	26	6.0	0.6	300	48	340			13
14	16		1	84	16	12	3.7	0.6	196	36	280			14
15	17		68	850	22	26	7.3	1.0	236	72	360			15
16	18		68	850	20	26	7.0	1.0	232	70	480			16
17	19		70	416	18	12	7.3	2.8	78	248	440			17
18	20		28	238	16	10	5.8	0.8	66	44	400			18
19	81 RJS 21		14	520	18	10	6.2	2.2	108	124	420			19
20	STD A		8	24	14	8	2.7	0.2	32	18	1050			20
21	81 RJS 22		12	440	20	14	8.4	1.0	118	310	400			21
22	23		11	496	20	12	6.2	1.2	90	64	380			22
23	24		9	352	20	10	7.4	1.0	104	68	420			23
24	25		14	182	16	8	4.3	1.0	54	26	210			24
25	26		16	386	18	10	5.2	1.0	56	34	320			25
26	27		26	294	16	10	4.0	1.0	50	18	360			26
27	28		20	270	14	10	4.4	0.4	50	24	330			27
28	29		19	236	16	10	5.2	1.0	66	68	380			28
29	30		17	416	18	12	5.6	1.0	74	58	350			29
30	31		14	316	16	14	5.7	0.8	88	72	370			30
31	32		18	346	18	16	5.0	0.8	108	80	380			31
32	33		36	352	20	16	5.5	0.6	76	24	550			32
33	34		25	580	20	22	4.9	0.6	108	90	450			33
34	35		MISSING											34
35	36		20	416	18	22	5.0	1.2	78	30	335			35
36	37		9	22	6	2	1.9	0.2	12	4	180			36
37	38		16	154	10	6	3.6	0.4	32	14	250			37
38	39		6	156	12	6	3.7	1.0	64	44	235			38
39	81 RJS 40		7	254	14	10	3.7	0.8	108	50	255			39
40	STD A		6	22	14	8	2.4	0.2	30	18				40

VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by J. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81359-2

INVOICE NO.

DATE ANALYSED SEPT. 20/8.

PROJECT

TO: A & M EXPLORATION LTD.
4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

No.	Sample	pH	Mo	Cu	Ni	Co	Fe	Ag	Zn	Pb	F			No.
01	81RJS 41		24	128	14	6	4.1	1.6	36	18	280			01
02	42		15	202	18	6	4.2	0.6	42	26	400			02
03	43		156	620	22	14	6.2	2.4	58	30	980			03
04	44		12	128	14	6	3.5	1.6	44	30	320			04
05	45		11	330	14	10	3.7	1.2	120	224	440			05
06	81RJS 46		10	178	14	6	3.8	0.4	52	28	400			06
07	STD A		7	24	14	6	2.5	0.2	32	20	-			07
08														08
09														09
10														10
11														11
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by J. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81359-3

INVOICE NO.

DATE ANALYSED SEPT 20/81

PROJECT

TO: A & M EXPLORATION LTD.
4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

No.	Sample	pH	Mo	Cu	Ni	Co	Fe	Ag	Zn	Pb	F	PPB Au		No.
01	81RAT173		1	76	34	14	5.5	0.2	74	14	350	160		01
02	T174		1	106	36	22	6.2	0.2	64	20	400	10		02
03	S175		1	258	30	24	7.8	0.4	114	38	480	-		03
04	T176		1	164	70	28	6.7	0.4	60	12	350	10		04
05	T177		1	360	34	22	5.4	0.4	48	20	520	50		05
06	S178		34	1200	24	52	9.8	7.4	620	730	570	-		06
07	T179		2	148	26	8	3.8	0.4	82	4	420	10		07
08	180		2	116	34	20	5.6	0.4	170	12	560	50		08
09	T181		13	40	22	8	3.6	0.2	44	2	440	10		09
10	81RAS182		124	386	18	30	7.8	1.2	48	12	610	-		10
11	T183		8	1590	20	8	20	2.2	38	2	540	10		11
12	184		4	526	74	52	8.6	0.4	92	14	350	180		12
13	T185		3	56	22	10	2.8	0.4	46	14	360	20		13
14	S186		2	56	18	6	2.6	0.2	38	4	520	-		14
15	187		20	316	20	14	4.5	1.2	78	28	400	-		15
16	188		14	266	28	24	5.4	1.0	88	26	420	-		16
17	189A		14	240	10	16	5.0	1.2	80	40	430	-		17
18	190		16	240	10	24	4.4	0.6	80	24	410	-		18
19	81RAS191		11	202	10	18	4.4	0.4	76	14	450	-		19
20	STD A		8	22	10	6	2.4	0.2	32	16	2350	40		20
21	S192		9	276	16	50	4.7	0.4	90	24	480	-		21
22	T193		3	132	14	10	2.7	0.2	46	6	440	40		22
23	194		12	66	8	6	2.7	0.2	28	4	410	10		23
24	195		12	184	14	10	2.6	0.2	38	8	440	10		24
25	196		14	196	18	10	3.0	1.0	66	16	520	40		25
26	197		15	452	18	16	3.1	0.8	62	14	470	40		26
27	198		10	426	16	14	3.5	0.4	44	4	470	10		27
28	199		35	256	14	12	3.4	0.4	46	8	480	30		28
29	200		13	258	12	14	3.5	1.0	40	26	510	30		29
30	81RAT201		26	320	16	14	3.7	0.4	46	4	460	10		30
31	203		18	192	14	10	3.3	0.4	34	2	460	10		31
32	203		11	204	18	10	2.9	0.2	44	4	500	10		32
33	204		42	306	20	12	3.3	0.2	40	2	510	10		33
34	205		11	366	20	12	3.4	0.4	42	8	520	10		34
35	81RAT206		6	190	18	10	3.6	0.2	38	2	440	10		35
36	STD A		6	22	10	6	2.4	0.2	30	16	2350	##		36
37	81AAT183A		3	570	120	130	10.0	1.4	116	24	520	10		37
38														38
39														39
40														40

VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by J. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81359-4

INVOICE NO.

DATE ANALYSED SEPT 20/81

PROJECT

TO: A & M EXPLORATION LTD.
4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

No.	Sample	pH	Mo	Cu	Ni	Co	Fe	Ag	Zn	Pb	F	PPB Au		No.
01	81RSS 21		15	52	14	10	4.8	1.0	46	14	280	-		01
02	22		18	280	14	8	4.6	1.0	58	50	480	-		02
03	23		44	74	10	4	3.5	1.0	36	14	270	-		03
04	S24		21	58	12	6	3.4	0.8	46	14	360	-		04
05	T25		3	308	22	10	3.4	0.4	50	8	420	10		05
06	S26		36	154	14	10	2.9	0.2	50	8	280	-		06
07	T27		3	56	20	10	2.8	0.2	44	4	210	10		07
08	L28		28	760	12	12	2.0	0.6	60	22	330	-		08
09	81RS T29		14	278	22	12	3.5	0.4	44	4	350	10		09
10	S30		39	460	12	8	2.8	0.4	86	28	480	-		10
11	T31		4	780	22	12	3.4	4.0	92	12	340	10		11
12	32		3	58	26	12	3.4	0.2	112	6	310	10		12
13	33		1	120	96	34	5.6	0.4	114	150	420	10		13
14	34		1	88	88	34	3.8	0.2	54	4	210	10		14
15	35		1	150	28	14	3.9	0.2	72	6	360	10		15
16	36		1	380	38	16	5.6	0.6	32	2	220	10		16
17	37		2	110	42	18	9.8	0.2	36	8	180	10		17
18	38		1	86	80	30	5.9	0.2	56	10	160	10		18
19	T39		78	254	20	8	3.3	1.4	48	2	290	10		19
20	81RSS 40		54	264	10	6	3.4	0.8	36	4	360	-		20
21	41		34	200	12	6	3.6	0.2	38	14	330	-		21
22	42		56	80	12	6	3.6	0.4	40	16	410	-		22
23	S43		16	46	10	4	2.7	0.6	32	12	260	-		23
24	T44		5400	214	22	8	3.8	1.0	40	12	210	10		24
25	45		34	140	22	14	3.8	0.2	36	12	370	10		25
26	46		128	258	20	10	3.6	0.4	48	4	380	10		26
27	47		23	174	34	70	6.0	0.4	32	4	310	10		27
28	49		2	630	14	8	2.0	0.6	34	2	460	10		28
29	50		1	810	20	10	2.0	1.7	82	10	390	10		29
30	51		1	352	18	20	2.4	0.6	54	2	300	10		30
31	T52		1	38	44	34	2.4	0.2	60	6	190	10		31
32	S53		12	760	44	18	9.0	3.0	330	104	700	-		32
33	T54		4	46	18	8	3.0	0.2	38	2	370	10		33
34	56		3	72	22	8	3.3	0.8	44	6	360	10		34
35	57		40	158	22	16	3.5	0.4	52	8	320	10		35
36	58		5	200	28	14	4.7	1.0	62	22	350	10		36
37	60		9	152	22	12	7.2	2.0	264	620	340	10		37
38	61		6	1060	22	26	4.5	0.4	98	20	270	10		38
39	81RS T64		3	424	24	10	3.5	0.8	198	124	390	10		39
40	G4		16	216	16	4	1.0	0.4	360	310	2000			40

VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by F. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81359-5

INVOICE NO.

DATE ANALYSED SEPT. 20/81

PROJECT

TO: **A & M EXPLORATION LTD.**
4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

No.	Sample	pH	Mo	Cu	Ni	Co	Fe	Ag	Zn	Pb	F	Au		No.
01	81RST 65		5	80	24	10	48	0.4	94	12	230	10		01
02														02
03														03
04														04
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by _____

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81363-1

INVOICE NO.

DATE ANALYSED SEPT 20/81

PROJECT

TO: **A & M EXPLORATION LTD.**
4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

No.	Sample	pH	Mo	Cu	Ni	Co	Fe %	Ag	Zn	Pb	F	PPB Au		No.
01	81RAS207		7	830	54	58	4.6	4.0	330	120	580	-		01
02	81RAS208		10	364	18	16	2.1	2.2	96	140	590	-		02
03	81RAT209		2	106	16	8	2.2	0.6	42	4	250	10		03
04	81RAT210		2	122	18	12	2.5	0.2	38	2	470	10		04
05														05
06														06
07														07
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by L. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE NO. 81363-2

INVOICE NO.

DATE ANALYSED SEPT 20/81

PROJECT

CERTIFICATE OF ANALYSIS

TO: **A & M EXPLORATION LTD.**
4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

No.	Sample	pH	Mo	Cu	Ni	Co	Fe	Ag	Zn	Pb	F	Au		No.
01	81RST66		2	24	44	14	1.8	0.4	36	4	310	50		01
02	67		3	136	20	20	46	1.0	62	24	290	10		02
03	T68		6	308	16	10	1.9	0.6	36	2	430	10		03
04	L69		18	266	8	8	4.3	0.8	54	34	380	-		04
05	T70		4	152	18	10	2.6	0.8	48	16	330	40		05
06	T71		3	76	18	8	2.2	0.2	30	6	350	10		06
07	672		20	184	10	8	4.2	1.4	58	50	290	-		07
08	T73		5	130	14	6	2.5	0.2	62	6	290	10		08
09	S74		6	366	12	10	4.1	0.8	156	46	360	-		09
10	81RST75		4	170	28	12	4.5	0.8	212	36	350	10		10
11	76		3	222	12	10	2.8	0.8	94	4	375	10		11
12	77		1	186	18	12	2.5	0.4	42	2	420	10		12
13	78		7	160	22	36	2.1	0.2	54	6	380	20		13
14	79		1	46	20	12	1.4	0.2	34	4	400	10		14
15	T80		2	188	20	26	3.6	1.0	52	12	300	10		15
16	S81		5	620	22	14	3.8	1.4	488	78		-		16
17	81RS582		8	298	12	14	4.5	1.8	120	54	280	-		17
18	99		16	210	12	4	1.0	0.5	410	360				18
19														19
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by J. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81359-1A
INVOICE NO. 2004
DATE ANALYSED OCT. 25/81
PROJECT SUNSETS CREEK

TO: **A & M EXPLORATION LTD.**
4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

No.	Sample	pH	Mo	Cu	Mn	% Fe	Ag	Zn	Pb	Ni	Co			No.
01	81 RJS 16		2	82	580	2.9	0.6	184	36	16	14			01
02	81 RJS 17		69	740	440	6.4	1.0	234	64	20	24			02
03	81 RJS 18		40	890	200	5.7	3.6	132	116	18	16			03
04	81 RJS 19		75	314	200	5.9	3.2	78	230	16	14			04
05														05
06														06
07										NOT REQUESTED				07
08														08
09														09
10														10
11	(*) REANALYSIS OF SAMPLES RE CERT. # 81359-1													11
12														12
13	SAMPLE # 81 RJS 17 WAS WEIGHED TWICE,													13
14	ONCE INSTEAD OF # 81 RJS 18.													14
15														15
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17														17
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by R. Rossbacher

APPENDIX II

AFFIDAVIT OF EXPENSES

AFFIDAVIT OF EXPENSES

This will certify that geological mapping and geochemical sampling were carried out from August 23 to 30, 1981 on the WEBSTER 1 and 2 CLAIMS, Omineca Mining Division, Sunsets Creek area, British Columbia, to the value of the following:

Field Work	
Salaries D.G. Allen, S. Travis, 8 days @ $450/day	$ 3,600.00
Mobilization 1 day @ $450/day	450.00
Travel, vehicle rental	797.43
Equipment rental and supplies	580.79
Room and board	599.83
Telephone	46.23
Shipping expense	65.95
Helicopter support	1,560.90
Geochemical analysis	1,509.50
Report Preparation	
Salaries 3 days @ $450/day	1,350.00
Draughting and printing services	481.70
Typing and photocopying	180.80
	$11,223.13

Respectfully submitted,

Donald G. Allen.

Donald G. Allen,
P. Eng. (B.C.)

WEBSTER 2

WEBSTER 1

SL 15

SL 6

ICE

SNOW

DDH 1

DDH 2,3

DDH 4

Baseline

18 N

14 N

10 N

6 N

4 S

8 S

12 S

CREEK

LAKE

SUNSETS

LEGEND

BULKLEY INTRUSIONS

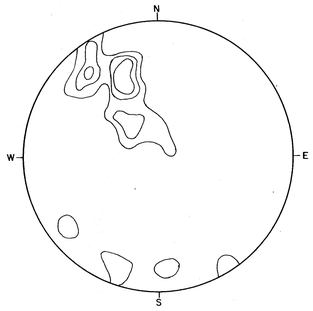
- 4 — Felsite, Porphyritic rhyolite
- 3 — Fine grained quartz monzonite, quartz diorite
- 2 — Porphyritic quartz monzonite Undifferentiated
  - 2b — Inequigranular phase
  - 2a — Quartz eye porphyry phase

HAZELTON GROUP, VOLCANIC ROCKS

- 1 — Andesite to latite flows & pyroclastics

SYMBOLS

- Outcrop boundary
- X — Float, talus
- Geological contact
- Vein zone boundary
- Gosson boundary
- Vein attitude (68)
- Bedding attitude (50)
- Fault
- D.D.H. ● — Diamond drill hole site



Contour diagram of 99 poles to quartz veins and pyrite-coated fractures in Sunsets stock.
Contour interval: 2, 4, 6 %, plotted on lower hemisphere.

9770

1:4800

96 48 0 96 192
Meters

400 200 0 400 800
Feet

N.T.S. 93L/6

REDFERN RESOURCES LTD.
SUNSETS CREEK PROPERTY
OMINECA MINING DIVISION – BRITISH COLUMBIA

GEOLOGICAL MAP

A&M exploration ltd.

Donald G. Allen

DRAWN BY: T.M.	JOB NO.	FIG. NO.
CHK. BY: A.M.	81-119	3
DATE: OCT. 1981		

WEBSTER 2

WEBSTER 1

SL 15

SL 6

LCP LCP

N

Baseline

CREEK

LAKE

22 N
18 N
14 N
10 N
6 N
4 S
8 S
12 S

IRA 207 Ag5.0,Zn330,Pb120
IRS 52 1,38
IRS 51 1,352
IRA 176 1,184
IRA 174 1,106
IRA 175 1,258
IRS 53 12,700 Pb164
IRA 177 1,360
IRS 45 34,140
IRS 47 23,174
IRS 49 2,630
IRS 50 1,610
IRA 188 14,266
IRA 178 34,2100 Ag7.4,Zn620,Pb730
IRA 179 2,148
IRA 208 10,364 Ag 2.2,Pb340
IRA 191 11,202
IRA 183A Ag2.2
IRA 193 3,132 Au40
IRA 209 2,106 Au50
IRS 66 2,24
IRJ 24 9,352 Pb68
IRJ 17 68,850 Zn2350,Pb72
IRA 192 9,276
IRA 202-206
IRS 67 3,136
IRJ 25
IRA 194-201
IRJ 36 20,416 Pb30
IRA 184 4,526 Au180
IRA 187 20,316
IRS 68 6,508
IRS 71 3,72
IRA 186 2,56
IRA 185 3,56
IRA 206 6,190
IRS 76 3,222
IRS 72 20,184 Pb50
IRJ 45 11,330 Zn1210,Pb224
IRJ 42 156,620 Ag2.4,Pb30
IRJ 46 10,178
IRS 77 1,186
IRS 82 8,298 Ag18,Pb54
IRJ 41 2,122
IRS 54 4,46
IRS 55
IRS 65 5,80
IRS 64 3,424 Pb124
IRS 62 6,1060 Ag9.4
IRS 56 3,72
IRA 182 124,386
IRA 183 8,1580
IRA 181 1,40
IRJ 40 7,254 Pb98
IRJ 37 9,22
IRS 40 54,264
IRS 43 16,46
IRJ 16 1,68 Zn300,Pb43
IRS 38 1,86
IRS 39 78,254
IRA 180 2,16 Au50
IRS 44 5400,214
IRJ 1 14,28
IRS 21 15,52
IRS 28 26,760
IRA 173 1,76 Au60

LEGEND

Soil — Sample site; sample number; ppm Mo, Cu.
Silt — Results also shown where Ag ≥ 2 ppm, Zn ≥ 200 ppm, Pb ≥ 30 ppm, Au ≥ 30 ppb
Rock chip

Boundary of Cu > 400 ppm zone (after Assessment Report 1922)

9770

1:4800

96 48 0 96 192 Meters

400 200 0 400 800 Feet

Donald S. Allen
A&M exploration ltd.

REDFERN RESOURCES LTD.
SUNSETS CREEK PROPERTY
OMINECA MINING DIVISION – BRITISH COLUMBIA

GEOCHEMICAL MAP

DRAWN BY: T.M.	JOB NO.	FIG. NO.
CHK. BY:	81-119	4
DATE: OCT. 1981		