

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
MINISTRY OF ENERGY AND MINES
GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR: 2001/2002

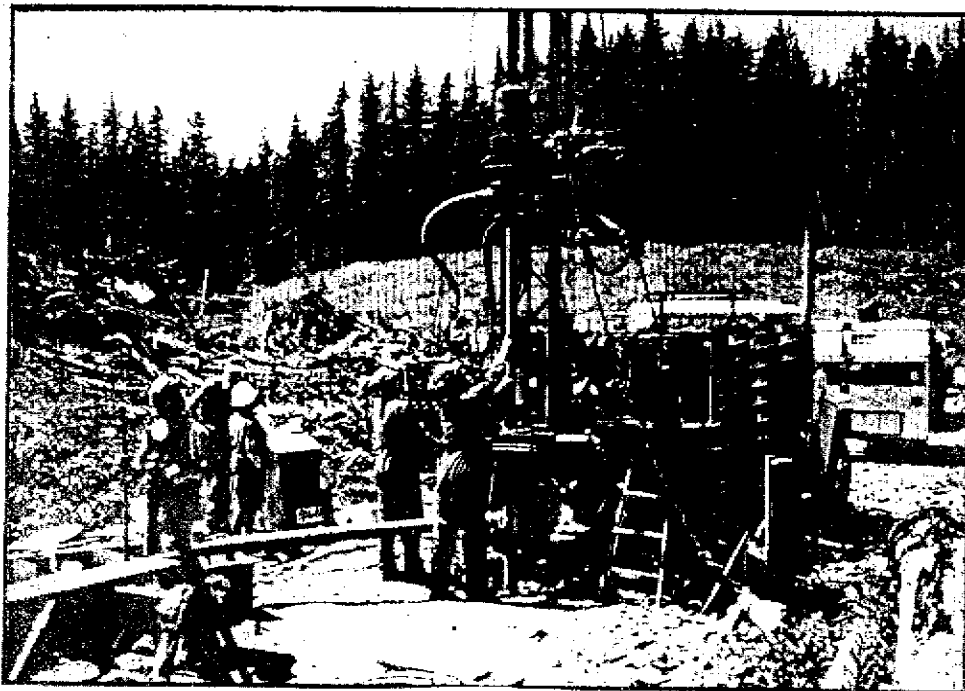
REPORT #: PAP 01-17

NAME: FRANK O'GRADY

British Columbia Prospectors Assistance Program

Final Report: FRANK O'GRADY, P.Eng.

Submitted: January 2002



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LIST OF REFERENCES

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- Wright, James L. (Geologist); *VLF Interpretation Manual*.

D. TECHNICAL REPORT



Ministry of Energy and Mines
Energy and Minerals Division

- One technical report to be completed for each project area.
- Refer to Program Regulations 15 to 17, page 6.

SUMMARY OF RESULTS

- This summary section must be filled out by all grantees, one for each project area

Information on this form is confidential for one year and is subject to the provisions of the Freedom of Information Act.

Name FRANK O'GRADY, P. ENG.

Reference Number 2001/2002 P28

LOCATION/COMMODITIES

Project Area (as listed in Part A) CHRIS claim group MINFILE No. if applicable 082G NW 088

Location of Project Area NTS 82G/13W BCGS 82G081 Lat 49° 50' 10" Long 115° 52' 30"

Description of Location and Access 7.1 kilometers north of Kimberley, follow Lost Dog logging road north 4 kilometers, then follow Lost Dog North logging road 5.2 kilometers.

Prospecting Assistants(s) - give name(s) and qualifications of assistant(s) (see Program Regulation 13, page 6)

N/A

Main Commodities Searched For barite, copper

Known Mineral Occurrences in Project Area CHRIS barite

WORK PERFORMED

1. Conventional Prospecting (area) 25 hectares
2. Geological Mapping (hectares/scale) 25 hectares 1:4000
3. Geochemical (type and no. of samples) ICP 164 samples
4. Geophysical (type and line km) VLF 9.3 km
5. Physical Work (type and amount) 12 man days - refurbish, flag & chain lines
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify)

FEEDBACK: comments and suggestions for Prospector Assistance Program

An excellent program. I appreciated the help, support and suggestions from Ministry staff.

INTRODUCTION

The CHRIS claim group is situated 23 kilometers (by road) northeast of Kimberley, BC (Illustration 1, Illustration 2, Illustration 3), and is centered at latitude 49° 50' 10" and Longitude 115° 52' 30" (Illustration 3).

The CHRIS claim group consists of six 2-post claims (Illustration 4), with record numbers:

<u>CLAIM</u>	<u>TENURE NO.</u>	<u>UNITS</u>	<u>EXPIRY DATE</u>
CHRIS 1	365482	1	SEPT. 11, 2002
CHRIS 2	365483	1	SEPT. 11, 2002
CHRIS 3	365484	1	SEPT. 11, 2002
CHRIS 4	365485	1	SEPT. 11, 2002
CHRIS 5	365486	1	SEPT. 11, 2002
CHRIS 6	365487	1	SEPT. 11, 2003

The registered owner and operator of the property is Frank O'Grady, P.Eng. of 587 Wallinger Avenue, Kimberley, BC V1A 1Z8.

Access from Kimberley is by proceeding north of Kimberley 7.1 kilometers on Highway 95A, turning left on Thomason Road and following it 0.4 kilometers. Then turn right on Claricoates Road and follow it 0.9 kilometers to the end of the pavement. From this point follow the gravel road that immediately crosses Cherry Creek Bridge a distance of 9 kilometers to a T-Junction. At the T-junction turn left and proceed 4 kilometers on the Lost Dog Logging Road to the junction with Lost Dog North logging road. Turn right and follow the Lost Dog North logging road a distance of 5.2 kilometers where there is a landing on the east side of the road. The Initial Post for Chris 1, Chris 2, Chris 3 and Chris 4 is situated on the immediate east side of this landing and is visible from the road.

The claim group is situated on the west side of the Lost Dog Creek Valley. This valley is also known as Lost Dog Canyon. The elevation on the claim group ranges from 1100 meters to 1600 meters above sea level. Forest cover consists of a mixture of immature lodgepole pine, immature to mature larch, fir and balsam, and a prolific cover of alders in the areas of lower relief and moist conditions.

The type of deposit being explored for on the claim group is either a barite deposit or a SEDEX type massive sulphide deposit with associated barite (Large, 1983).

During the 1970's a logger encountered barite on a skid trail and brought it to the attention of Gerry Mason, Geologist, and Don Jackson, Prospector, both of Kimberley, BC. Mr. Mason and Mr. Jackson staked the property as the Chris Group and did some hand trenching which resulted in exposing a narrow vein, from 10 cm to 20 cm thick in two trenches. In addition, a considerable amount of barite float was encountered in the proximal overburden in other trenches. No assessment work was recorded.

The property was examined and staked by Frank O'Grady (the author) in 1998. — During 1999 grid lines were installed by compass and hip chain. During 2000 a chain-sawed base line was installed. This work was recorded as assessment work.

The MINFILE number of the property is 082GNW088.

During 2001 a program of geological mapping, geochemical soil sampling and a geophysical survey (in the form of a VLF-EM survey) was conducted on the claim group. A total of 1 square kilometer was mapped at a scale of 1:4,000 on claims Chris 3 and Chris 4. A total of 164 soil samples were collected on claims Chris 3 and Chris 4. Plus a total of 9.3 kilometers of VLF-EM survey was conducted on claims Chris 3, Chris 4, Chris 5 and Chris 6.

GEOLOGY

Regional Geology

The Chris property is underlain by the Mesoproterozoic Purcell Supergroup, a thick succession of fine-grained terrigenous clastic, carbonate, and very minor volcanic rocks exposed in the core of the Purcell Anticlinorium in southeastern British Columbia.

The Purcell Anticlinorium is transected by a number of steep transverse and longitudinal faults. The transverse faults appear to have been syndepositional (Lis and Price, 1976 and Hoy, 1982) which suggests a possible genetic link between sedex style base metal mineralization and syndepositional faulting.

The lowermost member of the Purcell Supergroup is the 4000 meter thick Aldridge Formation, which is roughly divided into:

Lower Aldridge - composed of rusty weathering siltstone, quartzitic wacke and argillite.

Middle Aldridge - composed of grey weathering quartz wacke and siltstone.

Upper Aldridge - composed of laminated argillite.

The 1800-meter thick Creston Formation overlies the Aldridge Formation and is composed of green, grey and mauve siltstone, argillite and white green quartz arenite.

The 1,200-meter thick Kitchener Formation overlies the Creston Formation and is composed of grey-black dolomite, limestone, green argillite and siltstone.

The 200 to 400 meter thick Van Creek Formation overlies the Kitchener Formation and is composed of green and mauve siltstone, argillite and silty quartz arenite.

The Van Creek Formation is overlain by up to 500 meters of the Nicol Creek Formation and is composed of volcanoclastic siltstone and fine quartz wackies.

The Nicol Formation is overlain by the Dutch Creek Formation and is composed of green siltstones, argillite, oolitic dolomite, cryptalgal dolomite and dolomitic sandstone. The lower Dutch Creek Formation is possibly the equivalent of the Gateway Formation mapped and identified in the Hughes, Lizzard, and Galton ranges of the Rocky Mountains to the east.

The uppermost member of the Purcell Supergroup is the Mount Nelson Formation which is composed of quartzite, dolomite and siltstone.

Property Geology (Illustration 5, Illustration 6, Illustration 7)

Rocks of the Dutch Creek Formation and the Kitchener Formation underlie the Chris Property. The host of the barite showing is a dark grey to black mudstone metamorphosed to argillite; it is underlain by a dark green micaceous quartzite to the west of the showing. Both the black mudstone and the micaceous quartzite are thought to belong to the Dutch Creek Formation.

A fault is assumed to traverse the mapped area in a northeasterly direction south of the showing. The rocks to the south of the fault are from the Kitchener Formation and are light to medium grey fine grain quartzite.

Mineralization

A barite vein from 10 cm to 15 cm thick, containing minor amounts of chalcopyrite and associated malachite is exposed in two trenches 15 meters apart on the Chris Property. The wall rock hosting the barite vein is a heavily weathered and sheared argillic mudstone. Calcite flooding has taken place into the fractures immediately adjacent to the barite vein.

GEOCHEMICAL SURVEY

A total of 164 soil samples were collected.

*Summit dissects overburden
thickness - presence of fill?*

The soil samples were taken by following grid lines that were placed by compass and hip chain. The procedure was to take a sample at 25 meter intervals along the flagged lines, which are 50 meters apart and offset 25 meters at 90 degrees from each sample station for another sample resulting in samples being taken on 25 meter centers. On a small part of the eastern side of the grid the sample pattern was 50 meter centres. Each sample came from the B horizon at depths of 5 centimeters to 20 centimeters, but usually at about 15 centimeters. The samples were taken with a grubhoe.

The samples were sent to ACME ANALYTICAL LABORATORIES LTD. of Vancouver, BC for soil preparation and 32 element ICP analysis plus analysis for gold and silver. The -80 fraction was analyzed by normal geochemical techniques. The Certificate of Analysis #A101859 forms Appendix 1 of this report.

The data was plotted and contoured at the 200ppm, 300ppm and 400ppm. Areas containing values greater than 300ppm were considered anomalous.

Discussion of Results

There are 4 distinct barite geochemical anomalies within the sampled area (Illustration 8, Illustration 9):

Anomaly 1

Anomaly 1 is centered at station 0+75W on line 0. It extends from approximately station 50W on Line 50N to station 100W on line 0+75S for a total length of approximately 125 meters. The southern portion of anomaly 1 is between 75 and 100 meters wide narrowing to 25 meters wide on the northern end. This anomaly is centered on the trench area however caution was taken during sampling to ensure there was no contamination from the soil disturbed by trenching. The highest barite value contained within anomaly 1 is 459ppm barite.

Anomaly 2

Anomaly 2 extends from station 100W on Line 50N to station 200W on Line 50S. It ranges in width from 25 meters to 50 meters. The highest value is 332ppm barite situated near the north end. Anomaly 2 strikes northeasterly and is sub-parallel to anomaly 1.

Anomaly 3

Anomaly 3 is centered at station 125W on line 150N. Anomaly 3 consists of one sample of 325ppm barite. However, when contoured, anomaly 3, while small, appears to parallel the other anomalies.

Anomaly 4

Anomaly 4 is centered at station 225W on line 150N. Anomaly 4 consists of one sample of 306ppm barite. However, when contoured, anomaly 4, while small, appears to parallel the other anomalies. In addition, this anomaly is open to the north and, therefore, could be extended with further sampling.

There is an isolated value of 306ppm barite at station 225W on line 50N. This value appears to be on trend with anomaly 3 and is probably an extension of anomaly 3 with lower values between it and the main part of anomaly 3 situated to the northeast.

Anomaly 1 appears to be caused by the barite contained in the underlying bedrock that is exposed in the trenches. Therefore, there is a very high probability that the bedrock underlying Anomaly 2, Anomaly 3 and Anomaly 4 also contains barite. Furthermore, the site of the anomalous samples from all four anomalies were carefully examined. The site was excavated for several inches by grubhoe. No barite was encountered in the overburden, further indicating a bedrock source. The next logical step in the exploration program will include trenching across all four anomalies.

VLF-EM SURVEY

Instrumentation and Survey Procedure

The VLF-EM (Very Low Frequency Electromagnetic) method uses high-powered radio transmitters that are set up in different parts of the world for military communication and navigation. In radio communication terminology, VLF means very low frequency, ranging from about 15 to 25 kHz. Compared to frequencies generally used in geophysical exploration, the VLF technique, in fact, utilizes very high frequencies.

A Crone Radem VLF-EM receiver, manufactured by Crone Geophysics Ltd. of Mississauga, Ontario was used for the VLF-EM survey. The specifications of the instrument form Appendix 2 of this report. Two transmitting stations were used for the survey: Seattle, Washington (SW) transmitting at 24.8kHz at an azimuth of approximately 240°, and Cutler, Maine (CM) transmitting at 24 kHz at an azimuth of approximately 120°.

In electromagnetic prospecting surveys, a transmitter produces an alternating primary field (magnetic) from a strong alternating current that is usually passed through a coil of highly conductive (copper) wire. If a conductive body, such as a sulphide body, is within the primary field, a secondary alternating current is induced within it, which in turn induces a secondary magnetic field that distorts the primary field. The VLF-EM receiver measures the resultant field of the primary and secondary fields as the tilt or "dip angle". The Crone Radem VLF-EM receiver measures both the total field strength and the dip angle.

The VLF-EM uses a frequency range from 15 to 29 kHz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Therefore, because of its relatively high frequency, the VLF-EM can detect zones of relatively lower conductivity. This results in it being a useful tool for geologic mapping in areas of overburden but it can often result in detection of weak anomalies that are difficult to explain. Also, the VLF-EM can detect sulfide bodies that have too low a conductivity (i.e., disseminated sulphides) for other EM methods to detect.

The method of taking each reading was the operator would stand with the instrument turned on and held horizontal in front of him. He would turn until a null appeared on the field strength meter. (This occurs when the operator is facing the transmitting station.) With the receiver still facing the station it was lifted into the vertical plane and rotated slightly to the right or left until the best null appeared on the field strength meter. The angle on the inclinometer at which the null appeared was recorded. This is the dip angle that is in turn plotted on profiles for interpretation. Readings were taken at 25 meter intervals along chained and flagged lines. The separation of the lines varied from 50 meters to 150 meters.

The profiles (for the purpose of this report) were plotted on a horizontal scale of 1:4,000 and the dip angles at a scale of 1 cm equals 10° (Illustration 10).

Discussion of Results

Numerous EM anomalies (crossovers) were detected (Illustration 11).

Anomaly One

Anomaly One is centered at 3+75W on Line 400N. This distinct crossover is only present on one line (Line 400N) however, the bell shaped anomaly centered at approximately 3+25W on line 500N may be a weaker response to the same structure causing the crossover on Line 400N. This anomaly is classed as moderate to high and resembles models of a vertical or near vertical tabular conductor.

Anomaly Two

Anomaly Two consists of several very weak crossovers situated along Line 300N from the base line to 575W. This area is underlain by swampy ground of moderate relief and covered by a thick growth of alders. The cause of these anomalies is most likely conductive overburden but may be attributed to weak shear zones.

0/6

Anomaly Three

Anomaly Three consists of two weak crossovers, one of which, is situated at approximately 200W on Line 200N and extending to 250W on Line 150N. The other is situated at 325W on Line 200N and extends south to 325W on Line 150N. These two anomalies are sub-parallel to anomaly one. Geological mapping of the property indicates the rock type underlying these two anomalies is the mudstone host of the barite vein to the south. A logical interpretation is that these two conductors could be shear zones, therefore, possible hosts of barite, under a substantial thickness of overburden.

Anomaly Four

This anomaly consists of a cluster of anomalies (7 in number) situated in the central portion of the grid. This cluster is from line 100N to line 50S and extends from 25W to slightly west of 225W. The axis of the conductors of the anomalies trend slightly east of north. Five of the conductors are detected on one line only while 2 of the conductors are present on two lines spaced 50 meters apart. This anomaly is classed as weak to moderate.

The conductor axes are roughly parallel to a major set of joints mapped on the property. Therefore, this set of conductors is interpreted as a series of minor shear zones similar to the one hosting the barite vein in the trenches. It is worth noting that the narrow vein, from 5 cm to 20 cm wide, exposed in the trenches does not show up as an anomaly on the VLF-EM survey. This probably indicates that the other conductors, if caused by shear zones, are wider than the one exposed in the trench.

Anomaly Five

Anomaly Five extends from 400W on Line 150N to 350W on Line 0 with a break on Line 100N. This bell shaped anomaly, not an actual crossover anomaly, when compared to existing models appears to be conductive overburden.

Anomaly Six

Anomaly Six extends from approximately 100W on Line 50S to approximately 225W on Line 300S. Based on comparison to models this anomaly appears to be a vertical or near vertical tabular conductor. This anomaly is classed as moderate to high.

Anomaly Seven

Anomaly Seven extends from approximately 75W on Line 400S to 100W on Line 500S. Based on comparison to models this anomaly appears to be a vertical or near vertical tabular conductor. This anomaly is classed as moderate to high.

On Lines 450N, 300N, 150N, 0, 150S, and 300S the large negative readings, when compared with known models, indicate conductive overburden. During geological mapping of this area it was noted to be of much lower relief than the area to the east and no outcrop was encountered.

AUTHOR'S QUALIFICATIONS

I, Frank O'Grady, address 587 Wallinger Avenue, Kimberley, BC, Canada V1A 1Z8, hereby certify that:

1. I am a graduate of the University of British Columbia, B.Sc. Geology 1969.
2. I am a graduate of the University of Missouri -- Rolla (Missouri School of Mines), B.S. Mining Engineering 1977.
3. I am a registered Professional Engineer in the Province of British Columbia since 1978.
4. I have practiced my profession as a Geologist since 1969 and as a Geologist - Mining Engineer since 1977.



APPENDIX 1

CHRIS BARITE CLAIM GROUP

Certificate of Analysis #A101859



GEOCHEMICAL ANALYSIS CERTIFICATE

O'Grady, Frank File # A101859 Page 1
587 Wallinger Ave, Kimberley BC V1A 1Z8 Submitted by: Frank O'Grady

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm
CL 125N 3+00W	1.1	12	13	65	<.1	15	5	842	1.86	4	<.1	<.2	2	13	<.2	<.5	<.5	22	.16	.136	12	11	.39	214	.110	1	3.07	.021	.08	<.1	<.1	2.2	1	<.02	9
CL 125N 2+75W	1.0	13	17	63	<.1	19	7	315	2.36	5	<.1	<.2	4	9	<.2	<.5	<.5	24	.13	.172	16	19	.72	227	.077	1	2.97	.011	.12	<.1	<.1	2.6	<.1	<.02	9
CL 125N 2+50W	.7	12	13	45	<.1	14	6	588	1.84	3	<.1	<.2	3	11	<.2	<.5	.5	21	.14	.119	11	13	.40	201	.081	1	2.30	.016	.08	<.1	<.1	1.5	1	<.02	7
CL 125N 2+25W	.8	10	19	41	<.1	27	8	889	2.55	4	<.1	<.2	6	17	<.2	<.5	.5	24	.23	.216	20	25	.55	306	.125	1	3.84	.026	.09	<.1	<.1	5.5	<.1	<.02	6
CL 125N 2+00W	.6	9	21	80	<.1	13	5	327	1.77	4	<.1	<.2	4	9	<.2	<.5	<.5	17	.12	.072	17	12	.60	228	.041	1	2.12	.007	.12	<.1	<.1	1.5	<.1	<.02	7
CL 125N 1+75W	.6	13	13	125	<.1	11	6	630	1.44	1	<.1	<.2	2	10	<.2	<.5	<.5	15	.13	.083	14	9	.44	179	.048	<.1	1.61	.011	.11	<.1	<.1	1.5	2	<.02	6
CL 125N 1+50W	.7	11	13	70	<.1	15	6	131	2.02	7	<.1	<.2	4	9	<.2	<.5	<.5	19	.11	.042	14	13	.59	217	.060	<.1	2.46	.009	.08	<.1	<.1	1.5	<.1	<.02	8
CL 125N 1+25W	.7	7	13	103	.1	12	6	565	1.86	6	<.1	<.2	2	10	<.2	<.5	<.5	19	.12	.266	10	11	.38	325	.082	<.1	2.38	.012	.09	<.1	<.1	1.8	1	<.02	8
CL 125N 1+00W	.5	5	9	45	<.1	9	4	223	1.33	2	<.1	<.2	3	7	<.2	<.5	<.5	11	.09	.020	21	9	.64	78	.020	<.1	1.16	.003	.08	<.1	<.1	1.0	<.1	<.02	5
CL 125N 0+75W	.7	8	12	63	.1	11	5	280	1.44	3	<.1	<.2	3	13	<.2	<.5	<.5	17	.14	.041	15	8	.27	159	.085	<.1	2.15	.021	.08	<.1	<.1	2.1	<.1	<.02	7
CL 125N 0+50W	.6	7	11	74	<.1	12	5	325	1.58	6	<.1	<.2	3	10	<.2	<.5	<.5	14	.13	.130	15	9	.49	142	.052	1	1.92	.010	.10	<.1	<.1	1.2	<.1	<.02	7
CL 125N 0+25W	.8	10	12	94	.1	15	5	326	1.68	8	<.1	<.2	2	12	<.2	<.5	<.5	19	.11	.108	12	10	.36	145	.085	<.1	2.33	.017	.08	<.1	<.1	1.4	<.1	<.02	7
CL 100N 5+00W	.8	8	11	47	<.1	12	4	455	1.71	4	<.1	<.2	2	11	<.2	<.5	<.5	21	.16	.114	8	9	.24	180	.100	<.1	2.66	.019	.05	<.1	<.1	1.4	1	<.02	8
CL 100N 4+50W	1.2	9	12	70	.1	12	5	1154	1.65	5	<.1	<.2	2	11	<.2	<.5	<.5	22	.14	.079	7	8	.18	159	.116	<.1	3.07	.020	.04	<.1	<.1	1.9	<.1	<.02	9
CL 100N 4+00W	.7	10	12	80	<.1	12	6	643	1.95	5	<.1	<.2	4	8	<.2	<.5	<.5	22	.09	.120	14	11	.42	163	.072	<.1	2.36	.010	.07	<.1	<.1	1.6	1	<.02	8
CL 100N 3+50W	.8	11	15	93	<.1	15	8	444	2.36	5	<.1	<.2	5	7	<.2	<.5	<.5	20	.10	.104	20	14	.79	267	.049	<.1	2.62	.006	.10	<.1	<.1	2.3	<.1	<.02	8
CL 100N 3+00W	.7	8	11	57	<.1	11	5	847	1.47	5	<.1	<.2	2	9	<.2	<.5	<.5	19	.09	.117	9	9	.28	164	.075	<.1	2.03	.012	.07	<.1	<.1	1.2	<.1	<.02	7
RE CL 100N 3+00W	.8	8	12	63	<.1	11	5	843	1.49	5	<.1	<.2	1	9	<.2	<.5	<.5	19	.10	.118	9	9	.29	166	.077	<.1	2.07	.012	.07	<.1	<.1	1.4	3	<.02	7
CL 100N 2+75W	1.1	13	20	80	<.1	19	8	560	2.31	6	<.1	<.2	5	12	<.2	<.5	.5	28	.12	.141	13	18	.53	213	.119	1	3.62	.016	.09	<.1	<.1	3.2	1	<.02	9
CL 100N 2+50W	.6	10	13	53	<.1	15	6	268	1.87	3	<.1	<.2	3	10	<.2	<.5	<.5	18	.12	.204	14	13	.56	205	.074	<.1	2.26	.012	.08	<.1	<.1	1.7	<.1	<.02	8
CL 100N 2+25W	.6	17	12	61	<.1	35	11	195	2.73	3	<.1	<.2	4	10	<.2	<.5	<.5	40	.31	.074	21	54	1.70	192	.126	<.1	3.03	.011	.12	<.1	<.1	3.9	<.1	<.02	9
CL 100N 2+00W	.6	8	13	68	<.1	12	5	402	1.57	5	<.1	<.2	2	14	<.2	<.5	<.5	17	.16	.196	10	10	.39	223	.066	<.1	2.02	.016	.08	<.1	<.1	1.7	<.1	<.02	7
CL 100N 1+75W	.8	11	15	98	<.1	17	7	210	2.12	7	<.1	<.2	4	12	<.2	<.5	<.5	22	.15	.103	13	13	.53	247	.083	<.1	2.77	.014	.10	<.1	<.1	2.3	<.1	<.02	9
CL 100N 1+50W	.3	8	19	50	<.1	8	3	278	1.38	3	<.1	<.2	4	8	<.2	<.5	<.5	9	.23	.016	18	8	.50	127	.012	<.1	1.17	.004	.09	<.1	<.1	2.4	<.1	<.02	4
CL 100N 1+25W	.7	7	13	99	<.1	14	5	567	1.77	10	<.1	<.2	2	10	<.2	<.5	<.5	20	.11	.164	9	10	.43	195	.083	<.1	2.57	.014	.09	<.1	<.1	1.6	3	<.02	7
CL 100N 1+00W	.5	10	13	48	<.1	11	5	266	1.59	5	<.1	<.2	4	6	<.2	<.5	<.5	13	.09	.018	22	11	.87	94	.013	<.1	1.31	.001	.09	<.1	<.1	1.2	<.1	<.02	5
CL 100N 0+75W	.5	5	10	53	<.1	9	4	322	1.26	5	<.1	<.2	4	7	<.2	<.5	.5	13	.09	.022	16	8	.49	139	.031	<.1	1.34	.006	.08	<.1	<.1	1.0	<.1	<.02	5
CL 100N 0+50W	.5	8	12	84	<.1	13	5	354	1.53	6	<.1	<.2	2	11	<.2	<.5	<.5	17	.14	.077	12	8	.43	215	.071	<.1	2.15	.014	.10	<.1	<.1	1.3	<.1	<.02	7
CL 100N 0+25W	.6	6	11	127	<.1	12	6	306	1.63	7	<.1	<.2	2	9	<.2	.5	<.5	17	.09	.191	13	10	.42	197	.052	<.1	1.85	.010	.10	<.1	<.1	1.2	<.1	<.02	7
CL 75N 3+50W	.9	9	14	80	<.1	13	5	853	1.99	7	<.1	<.2	2	9	<.2	<.5	<.5	27	.15	.070	10	10	.33	228	.105	<.1	2.61	.015	.06	<.1	<.1	1.4	1	<.02	9
CL 75N 3+25W	.7	7	11	111	<.1	13	5	416	1.71	5	<.1	<.2	3	8	<.2	<.5	<.5	18	.10	.081	14	11	.47	183	.051	<.1	1.78	.010	.10	<.1	<.1	1.3	1	<.02	7
CL 75N 3+00W	.6	7	12	86	.1	10	5	438	1.49	5	<.1	<.2	1	9	<.2	<.5	<.5	19	.15	.130	11	9	.31	167	.053	<.1	1.70	.010	.06	<.1	<.1	1.1	<.1	<.02	7
CL 75N 2+75W	.8	13	15	82	<.1	19	8	218	2.62	7	<.1	<.2	5	6	<.2	<.5	.5	26	.08	.219	17	19	.76	288	.057	<.1	2.67	.005	.10	<.1	<.1	2.2	<.1	<.02	7
CL 75N 2+50W	.7	14	17	58	<.1	23	8	301	2.28	8	<.1	<.2	5	9	<.2	<.5	.5	30	.10	.206	17	25	.78	180	.060	<.1	2.45	.006	.08	<.1	<.1	2.8	<.1	<.02	7
STANDARD C3	27.3	67	34	175	6.2	35	12	780	3.36	60	24	3	22	27	25.0	15.9	23.3	81	.54	.096	18	172	.60	157	.089	18	1.84	.037	.17	15	1	4.3	<.1	.03	7
STANDARD G-2	1.8	3	2	49	<.1	7	4	553	2.10	<.1	2	<.2	4	72	<.2	<.5	<.5	43	.66	.104	7	81	.61	223	.141	<.1	.99	.076	.54	2	<.1	2.5	1	<.02	5

GROUP 10X - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 26 2001 DATE REPORT MAILED: July 6/01 SIGNED BY: C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data 1-FA



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm
CL 75N 2+25W	.6	9	14	49	<.1	13	5	309	1.93	10	<1	<2	2	13	<.2	.5	<.5	25	.17	.317	8	11	.37	186	.123	4	3.18	.023	.07	<1	<1	1.6	2<.02	9	
CL 75N 2+00W	.5	11	14	35	<.1	15	6	225	1.82	4	<1	<2	5	9	<.2	<.5	<.5	19	.20	.031	22	17	.74	178	.044	1	1.88	.010	.09	<1	<1	2.5	1<.02	6	
CL 75N 1+75W	.5	7	14	87	<.1	13	5	671	1.53	5	<1	<2	2	12	<.2	<.5	<.5	19	.16	.177	9	10	.36	220	.088	2	2.13	.018	.10	<1	<1	1.5	2<.02	7	
CL 75N 1+50W	.7	11	15	100	<.1	14	6	164	1.91	7	<1	<2	4	7	<.2	<.5	<.5	19	.10	.060	16	13	.53	210	.064	1	2.03	.009	.09	<1	<1	1.5	<1<.02	8	
CL 75N 1+25W	.3	7	17	62	<.1	10	4	217	1.40	4	<1	<2	2	10	<.2	<.5	<.5	13	.12	.026	13	9	.44	197	.034	1	1.62	.010	.08	<1	<1	1.5	<1<.02	6	
CL 75N 1+00W	.7	9	13	100	<.1	16	6	387	2.04	10	<1	<2	3	9	<.2	<.5	<.5	24	.08	.132	10	12	.48	196	.105	2	2.83	.015	.09	<1	<1	1.6	3<.02	9	
CL 75N 0+75W	.6	9	12	74	<.1	16	6	148	1.76	6	<1	<2	3	10	<.2	<.5	<.5	20	.14	.036	13	12	.79	181	.055	<1	2.20	.014	.09	<1	<1	1.6	1<.02	8	
CL 75N 0+50W	.6	8	9	64	<.1	15	4	288	1.50	7	<1	<2	3	13	<.2	<.5	<.5	19	.13	.081	8	8	.30	162	.108	2	2.35	.022	.08	<1	<1	1.5	2<.02	8	
CL 75N 0+25W	.9	8	12	71	<.1	14	5	500	1.73	10	<1	<2	2	17	<.2	<.5	<.5	23	.19	.146	6	8	.22	125	.139	4	3.35	.029	.08	<1	<1	1.8	3<.02	9	
CL 75N 0+00W	.5	7	14	80	<.1	11	6	457	1.36	8	<1	<2	2	11	<.2	<.5	<.5	15	.14	.040	13	9	.39	152	.046	<1	1.48	.011	.07	<1	<1	1.0	2<.02	6	
CL 50N 5+00W	.8	11	14	81	.1	15	6	131	1.98	6	<1	<2	4	9	<.2	<.5	<.5	21	.12	.053	13	11	.50	214	.076	<1	2.62	.014	.07	<1	<1	1.5	1<.02	9	
CL 50N 4+50W	.8	9	13	64	.1	13	6	212	2.03	5	<1	<2	2	5	<.2	<.5	<.5	19	.07	.054	14	12	.49	127	.047	<1	1.92	.007	.06	<1	<1	1.4	2<.02	7	
CL 50N 4+00W	.5	9	14	74	.1	11	6	847	1.87	5	<1	<2	3	7	<.2	<.5	<.5	21	.12	.039	19	12	.62	155	.034	1	1.79	.007	.10	<1	<1	1.6	3<.02	7	
CL 50N 3+50W	.6	10	10	95	<.1	12	5	251	1.76	6	<1	<2	2	8	<.2	<.5	<.5	19	.12	.063	17	10	.57	139	.051	1	1.89	.010	.07	<1	<1	1.2	1<.02	7	
CL 50N 3+25W	.6	11	17	77	<.1	14	6	260	2.17	7	<1	<2	5	7	<.2	<.5	<.5	23	.10	.077	18	14	.78	193	.073	<1	2.65	.010	.09	<1	<1	2.2	1<.02	9	
CL 50N 3+00W	.8	9	17	89	<.1	11	6	414	2.05	6	<1	<2	3	7	<.2	<.5	<.5	27	.07	.145	12	13	.41	184	.075	2	2.17	.010	.09	<1	<1	1.6	2<.02	9	
RE CL 50N 3+00W	.7	8	17	83	<.1	11	6	416	2.04	6	<1	<2	2	7	<.2	<.5	<.5	27	.07	.144	12	13	.41	184	.073	2	2.15	.010	.09	<1	<1	1.6	1<.02	9	
CL 50N 2+75W	.9	15	16	64	<.1	17	7	582	2.03	8	<1	<2	4	13	<.2	<.5	<.5	25	.16	.122	15	15	.49	240	.118	1	3.21	.021	.08	<1	<1	3.0	2<.02	9	
CL 50N 2+50W	.9	14	16	63	<.1	19	8	538	2.17	6	<1	<2	5	9	<.2	<.5	<.5	27	.08	.075	18	22	.81	207	.083	1	2.58	.011	.10	<1	<1	2.7	1<.02	9	
CL 50N 2+25W	.9	18	20	56	<.1	21	8	156	2.44	9	<1	<2	5	14	<.2	<.5	<.5	25	.15	.117	15	16	.62	306	.087	1	3.46	.017	.13	<1	<1	2.7	<1<.02	9	
CL 50N 2+00W	.6	8	13	46	<.1	15	6	148	1.82	6	<1	<2	4	8	<.2	<.5	<.5	19	.12	.084	15	13	.65	170	.053	2	1.99	.010	.10	<1	<1	1.3	<1<.02	8	
CL 50N 1+75W	.8	12	16	82	<.1	17	7	539	1.97	6	<1	<2	2	9	<.2	.5	<.5	25	.09	.139	13	17	.49	235	.099	2	2.51	.015	.09	<1	<1	2.3	3<.02	8	
CL 50N 1+50W	.6	13	14	56	<.1	12	6	89	1.77	5	<1	<2	4	6	<.2	<.5	<.5	15	.07	.043	22	12	.79	201	.026	<1	1.88	.004	.09	<1	<1	1.3	1<.02	6	
CL 50N 1+25W	.4	6	7	53	<.1	10	4	108	1.48	2	<1	<2	4	5	<.2	<.5	<.5	12	.09	.013	19	11	.85	91	.015	1	1.31	.005	.07	<1	<1	1.0	1<.02	5	
CL 50N 1+00W	.8	10	21	98	<.1	15	6	567	2.06	8	<1	<2	5	13	<.2	<.5	<.5	20	.17	.078	15	12	.89	332	.102	3	3.67	.021	.08	<1	<1	2.7	4<.02	10	
CL 50N 0+75W	.4	7	13	82	<.1	12	5	643	1.42	7	<1	<2	1	10	<.2	<.5	<.5	18	.13	.083	10	9	.41	191	.068	1	1.87	.015	.12	<1	<1	1.3	2<.02	8	
CL 50N 0+50W	.5	16	10	46	<.1	13	4	434	1.63	9	<1	<2	4	14	<.2	<.5	<.5	17	.12	.061	13	6	.22	232	.078	3	2.10	.021	.14	<1	<1	2.6	2<.02	6	
CL 50N 0+25W	.6	21	13	43	<.1	11	5	659	1.82	11	<1	<2	4	10	.2	<.5	.7	11	.41	.045	23	7	.43	135	.023	2	1.27	.008	.11	<1	<1	2.8	1<.02	5	
CL 50N 0+00W	.8	10	13	107	<.1	13	5	190	1.62	8	<1	<2	4	12	<.2	<.5	<.5	19	.11	.044	14	10	.46	266	.072	<1	2.11	.014	.07	<1	<1	1.6	<1<.02	8	
CL 25N 4+75W	.9	10	16	70	<.1	14	6	191	2.03	6	<1	<2	3	8	<.2	<.5	<.5	24	.09	.076	10	11	.33	183	.097	<1	3.04	.016	.06	<1	<1	1.9	1<.02	9	
CL 25N 4+25W	1.2	13	15	55	.1	14	6	299	2.38	6	<1	<2	5	10	<.2	.6	<.5	27	.18	.084	10	11	.34	219	.122	1	4.05	.020	.06	<1	<1	2.6	1 .02	10	
CL 25N 3+75W	.8	9	14	90	<.1	13	5	597	1.79	8	<1	<2	3	12	<.2	<.5	<.5	23	.14	.071	10	9	.32	164	.096	<1	2.58	.020	.09	<1	<1	1.9	2<.02	8	
CL 25N 3+50W	.8	11	12	71	.1	13	5	178	1.85	7	<1	<2	3	8	<.2	<.5	<.5	19	.11	.075	15	11	.53	155	.059	<1	2.13	.009	.07	<1	<1	1.6	1<.02	7	
CL 25N 3+25W	.8	10	14	96	<.1	15	6	668	1.95	7	<1	<2	4	8	<.2	<.5	<.5	23	.08	.202	13	13	.49	262	.078	1	2.58	.010	.08	<1	<1	1.9	3<.02	8	
STANDARD C3	25.9	64	35	172	5.9	34	11	740	3.26	59	23	2	20	27	25.7	15.0	22.8	79	.51	.088	17	169	.57	148	.093	18	1.76	.038	.17	15	1	4.1	1 .02	7	
STANDARD G-2	1.7	2	2	45	<.1	7	4	529	2.05	<1	2	<2	4	69	<.2	<.5	<.5	42	.64	.099	8	80	.59	215	.144	<1	.95	.075	.53	2	<1	2.4	3<.02	5	

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm
CL 25N 3+00W	.6	9	13	78	<.1	16	6 345	1.83	5	<1	<2	2	9	<.2	<.5	<.5	22	.11	.062	19	18	.74	186	.039	5	1.90	.010	.09	<1	<1	1.6	2<.02	7		
CL 25N 2+75W	.7	11	14	74	.1	16	6 609	1.94	5	<1	<2	2	11	<.2	<.5	<.5	24	.12	.137	16	15	.55	232	.078	5	2.54	.016	.09	<1	<1	2.4	2<.02	8		
CL 25N 2+50W	.8	11	17	89	<.1	17	7 291	2.21	8	<1	<2	3	9	<.2	<.5	<.5	21	.09	.125	18	15	.69	244	.056	5	2.50	.012	.11	<1	1	2.0	1<.02	8		
CL 25N 2+25W	.6	10	17	62	<.1	17	7 158	2.19	6	<1	<2	3	8	<.2	<.5	<.5	21	.08	.074	18	15	.76	283	.045	4	2.61	.010	.12	<1	<1	1.8	1<.02	8		
CL 25N 2+00W	.6	9	12	56	<.1	13	5 256	1.72	5	<1	<2	4	12	<.2	<.5	<.5	17	.16	.279	13	11	.47	218	.072	4	2.14	.019	.09	<1	<1	2.0	1<.02	8		
CL 25N 1+75W	.4	15	14	76	.1	33	9 360	2.22	8	<1	<2	4	15	<.2	<.5	<.5	33	.23	.241	15	33	.86	172	.118	4	2.80	.022	.15	<1	<1	3.3	1<.02	9		
CL 25N 1+50W	.5	10	12	142	<.1	15	5 537	1.46	5	<1	<2	1	14	<.2	<.5	<.5	19	.15	.139	8	10	.29	256	.095	2	2.26	.025	.09	<1	<1	1.7	2<.02	8		
CL 25N 1+25W	.6	14	15	115	<.1	17	6 272	2.08	13	<1	<2	3	12	.2	1.1	<.5	25	.10	.332	8	12	.38	241	.118	5	3.40	.022	.09	<1	1	2.0	1<.02	11		
CL 25N 1+00W	.4	6	10	89	<.1	13	5 197	1.50	5	<1	<2	3	8	<.2	<.5	<.5	17	.08	.030	17	11	.68	183	.038	3	2.03	.012	.11	<1	1	1.5	2<.02	8		
CL 25N 0+75W	.5	8	10	55	<.1	14	6 111	1.58	5	<1	<2	3	9	<.2	<.5	<.5	15	.12	.041	15	11	.69	175	.047	3	2.22	.013	.13	<1	<1	1.6	2<.02	8		
CL 25N 0+50W	.5	9	9	62	<.1	14	5 297	1.53	8	<1	<2	2	11	<.2	<.5	<.5	17	.14	.071	13	10	.65	223	.053	4	1.90	.013	.10	<1	<1	1.3	2<.02	8		
CL 25N 0+25W	.7	7	11	88	<.1	15	4 292	1.69	11	<1	<2	3	13	<.2	<.5	<.5	21	.15	.122	7	8	.23	181	.112	2	2.84	.025	.09	<1	<1	1.7	3<.02	8		
CL 25N 0+00W	.4	8	12	76	<.1	12	5 396	1.56	8	<1	<2	3	9	<.2	<.5	<.5	16	.10	.081	15	9	.52	154	.052	4	1.88	.009	.09	<1	<1	1.2	2<.02	6		
CL 0 4+75W	.8	10	11	60	.1	15	6 943	1.92	9	<1	<2	2	13	<.2	<.5	<.5	23	.17	.242	7	10	.26	225	.107	1	3.14	.018	.05	<1	<1	1.8	3<.02	10		
CL 0 4+25W	.7	12	14	69	.1	12	6 358	1.97	8	<1	<2	3	8	<.2	.5	<.5	23	.08	.114	13	10	.40	202	.085	3	2.92	.014	.07	<1	<1	2.5	2<.02	9		
CL 0 3+75W	.9	10	13	89	.1	15	6 574	1.93	7	<1	<2	2	11	<.2	<.5	<.5	25	.15	.170	7	9	.27	150	.116	3	2.94	.017	.07	<1	<1	1.8	2<.02	9		
CL 0 3+50W	.6	9	19	128	<.1	15	6 333	1.81	7	<1	<2	2	9	.2	<.5	<.5	18	.16	.090	16	12	.66	194	.049	3	2.17	.011	.11	<1	<1	1.6	<1<.02	7		
CL 0 3+25W	.9	10	11	37	<.1	8	5 438	1.59	7	<1	<2	1	11	<.2	1.0	<.5	23	.13	.257	4	6	.10	81	.144	<1	3.75	.027	.03	<1	1	2.3	3<.02	10		
CL 0 3+00W	.5	15	20	93	<.1	15	7 338	2.15	5	<1	<2	4	14	<.2	<.5	<.5	18	.37	.092	25	15	.88	232	.055	5	2.39	.012	.10	<1	<1	4.7	1<.02	7		
CL 0 2+75W	.5	7	12	62	.1	13	6 353	1.75	4	<1	<2	3	6	<.2	<.5	<.5	18	.06	.064	20	15	.83	146	.033	1	1.89	.005	.10	<1	1	1.6	<1<.02	8		
CL 0 2+50W	.5	11	15	74	<.1	16	6 208	2.22	9	<1	<2	3	6	<.2	<.5	<.5	23	.06	.176	16	15	.71	225	.064	1	2.60	.009	.10	<1	<1	2.2	2<.02	8		
CL 0 2+25W	.5	9	14	50	<.1	15	5 161	1.81	6	<1	<2	2	13	<.2	<.5	<.5	18	.12	.052	16	12	.67	194	.051	1	2.14	.011	.10	<1	<1	1.7	<1<.02	8		
CL 0 2+00W	.5	12	18	54	<.1	16	6 203	2.02	9	<1	<2	6	11	<.2	<.5	<.5	22	.10	.156	14	14	.68	208	.077	1	3.01	.016	.11	<1	<1	2.6	1<.02	9		
RE CL 0 2+00W	.5	12	18	49	<.1	17	6 201	2.02	8	<1	<2	6	11	<.2	<.5	<.5	23	.10	.157	14	14	.68	209	.078	3	3.01	.017	.11	<1	<1	2.6	2<.02	10		
CL 0 1+75W	.5	5	17	42	<.1	17	6 614	1.90	4	<1	<2	3	17	<.2	<.5	<.5	20	.40	.075	12	16	.50	228	.114	5	3.08	.028	.13	<1	<1	2.6	2<.02	6		
CL 0 1+50W	.6	11	17	148	<.1	16	6 474	1.80	9	<1	<2	2	14	.2	<.5	<.5	23	.15	.170	11	13	.55	300	.079	2	2.66	.018	.11	<1	<1	1.8	1<.02	9		
CL 0 1+25W	.7	12	11	56	<.1	10	4 380	1.51	13	<1	<2	4	14	<.2	<.5	<.5	20	.16	.186	9	7	.18	145	.131	4	3.19	.029	.06	<1	<1	3.0	1<.02	9		
CL 0 1+00W	.4	7	10	80	<.1	11	4 285	1.31	5	<1	<2	1	11	<.2	<.5	<.5	15	.14	.054	11	9	.42	200	.060	2	1.76	.015	.10	<1	<1	1.5	1<.02	6		
CL 0 0+75W	.3	7	7	39	<.1	10	4 74	1.40	4	<1	<2	3	5	<.2	<.5	<.5	11	.06	.011	18	10	.90	141	.023	1	1.62	.005	.11	<1	<1	1.5	2<.02	6		
CL 0 0+50W	.8	19	18	55	<.1	21	8 159	2.47	10	<1	<2	6	10	<.2	.6	<.5	24	.12	.070	13	14	.70	459	.072	2	3.29	.012	.19	1	1	2.5	<1<.02	10		
CL 0 0+25W	.4	7	11	78	<.1	10	4 152	1.37	7	<1	<2	2	7	<.2	<.5	<.5	12	.08	.059	16	9	.52	132	.030	3	1.25	.007	.09	<1	<1	1.1	<1<.02	5		
CL 0 0+00W	.5	8	18	93	.1	9	4 875	1.16	7	<1	<2	3	13	.2	<.5	<.5	12	.21	.078	12	7	.36	185	.048	1	1.44	.012	.09	<1	<1	1.4	2<.02	5		
CL 25S 3+75W	.9	16	20	87	.1	17	7 264	2.46	12	<1	<2	4	10	<.2	.8	<.5	29	.13	.199	10	13	.45	263	.116	3	3.60	.012	.08	<1	1	2.4	2<.02	11		
CL 25S 3+50W	.7	6	11	71	.1	11	4 855	1.44	5	<1	<2	3	11	<.2	<.5	<.5	20	.15	.161	7	8	.20	237	.097	1	2.31	.019	.06	<1	<1	1.5	2<.02	7		
STANDARD C3	26.4	65	34	167	6.0	35	12 727	3.22	59	23	<2	20	27	25.5	15.6	21.9	77	.47	.088	17	169	.56	147	.084	20	1.75	.040	.17	16	1	4.1	2	.03	9	
STANDARD G-2	1.7	2	2	46	<.1	8	4 529	2.06	<1	2	<2	4	79	<.2	<.5	<.5	43	.60	.101	7	80	.59	231	.133	<1	1.06	.121	.59	2	<1	2.4	3<.02	6		

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



ACME ANALYTICAL

O'Grady, Frank FILE # A101859

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ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm
CL 25S 3+25W	.5	10	13	92	.2	11	5	921	1.66	8	<1	<2	3	14	<2	<.5	<.5	23	.19	.186	9	10	.26	283	.090	3	2.37	.019	.07	<1	<1	1.9	4<.02	8	
CL 25S 3+00W	.4	6	10	80	<.1	12	5	168	1.67	4	<1	<2	6	6	<2	<.5	<.5	17	.09	.043	24	15	.81	149	.022	2	1.52	.003	.08	<1	<1	1.4	2<.02	7	
CL 25S 2+75W	.8	13	19	57	<.1	18	6	653	2.37	9	<1	<2	6	10	<2	.5	<.5	25	.08	.141	15	14	.58	273	.104	1	3.34	.013	.09	<1	<1	2.7	3<.02	10	
CL 25S 2+50W	.9	14	17	58	<.1	15	6	725	2.17	10	<1	<2	5	10	<2	1.1	<.5	27	.10	.212	11	12	.43	223	.120	1	3.81	.016	.08	<1	<1	2.4	2<.02	10	
CL 25S 2+25W	.6	10	26	62	<.1	15	7	970	2.10	8	<1	<2	7	12	<2	<.5	<.5	22	.16	.081	17	14	.75	244	.069	2	2.59	.011	.14	<1	<1	2.3	2<.02	8	
CL 25S 2+00W	.5	11	14	52	.1	17	5	234	1.86	9	<1	<2	5	17	<2	<.5	<.5	21	.17	.203	12	11	.48	197	.104	3	2.98	.021	.12	<1	<1	2.3	3<.02	9	
CL 25S 1+75W	.3	7	14	43	<.1	12	5	658	1.95	5	<1	<2	4	21	<2	<.5	<.5	17	.52	.090	11	11	.32	206	.157	3	4.08	.039	.07	<1	1	3.9	<1<.02	6	
CL 25S 1+50W	.2	6	11	44	<.1	10	4	154	1.39	4	<1	<2	4	6	<2	<.5	<.5	11	.08	.019	23	10	.74	111	.015	<1	1.35	.002	.14	<1	<1	1.2	1<.02	6	
CL 25S 1+25W	.3	14	10	51	<.1	23	8	127	2.03	5	<1	<2	7	7	<2	<.5	<.5	23	.08	.026	27	30	1.51	63	.040	<1	1.65	.001	.11	<1	<1	2.2	1<.02	6	
CL 25S 1+00W	.6	11	14	91	<.1	18	6	364	1.91	8	<1	<2	5	10	<2	<.5	<.5	20	.11	.063	15	15	.59	260	.076	4	2.60	.014	.13	<1	<1	1.8	2<.02	8	
CL 25S 0+75W	.5	10	15	52	<.1	11	5	612	1.49	6	<1	<2	4	13	<2	<.5	<.5	14	.20	.051	16	10	.50	232	.050	1	1.78	.011	.11	<1	<1	1.9	2<.02	7	
CL 25S 0+50W	.5	7	13	113	.1	14	4	248	1.55	6	<1	<2	4	10	<2	<.5	<.5	18	.10	.045	12	10	.40	246	.071	1	2.18	.014	.11	<1	<1	1.6	2<.02	8	
CL 25S 0+25W	.2	5	15	163	.1	8	3	725	1.06	5	<1	<2	1	11	<2	<.5	<.5	13	.11	.062	9	8	.28	205	.051	<1	1.53	.017	.10	<1	<1	1.2	3<.02	6	
CL 25S 0+00W	.4	10	13	83	<.1	13	5	117	1.60	9	<1	<2	3	11	<2	<.5	<.5	14	.12	.025	19	10	.62	157	.035	2	1.77	.007	.09	<1	<1	1.4	<1<.02	7	
RE CL 25S 0+00W	.5	10	13	83	<.1	13	5	117	1.63	9	<1	<2	4	11	<2	<.5	<.5	14	.13	.025	19	9	.63	158	.035	<1	1.81	.006	.09	<1	<1	1.4	2<.02	7	
CL 50S 4+75W	.6	10	13	81	<.1	15	6	249	2.11	9	<1	<2	4	10	<2	<.5	<.5	20	.12	.103	18	12	.57	205	.048	1	2.46	.008	.09	<1	<1	1.7	<1<.02	9	
CL 50S 4+25W	.5	7	13	96	<.1	9	5	1638	1.60	7	<1	<2	3	8	<2	<.5	<.5	20	.17	.165	12	9	.35	170	.066	1	1.90	.011	.08	<1	<1	1.5	5<.02	8	
CL 50S 3+75W	.5	6	12	75	<.1	9	4	1005	1.37	5	<1	<2	3	10	<2	<.5	<.5	18	.11	.068	12	9	.34	204	.053	<1	1.46	.010	.09	<1	<1	1.2	2<.02	7	
CL 50S 3+50W	.6	8	15	84	.1	12	5	458	1.72	5	<1	<2	3	11	<2	<.5	<.5	23	.21	.056	11	10	.36	196	.074	<1	2.15	.014	.07	<1	<1	1.6	1<.02	9	
CL 50S 3+25W	.7	6	14	115	.1	10	5	815	1.71	6	<1	<2	2	8	<2	<.5	<.5	24	.10	.163	9	11	.30	141	.078	1	1.92	.012	.06	<1	<1	1.5	4<.02	9	
CL 50S 3+00W	.9	13	18	115	<.1	16	7	299	2.19	8	<1	<2	4	10	.2	<.5	<.5	26	.14	.166	12	14	.57	204	.109	1	3.43	.014	.08	<1	<1	2.4	3<.02	10	
CL 50S 2+75W	.8	13	18	59	<.1	16	7	168	2.23	6	<1	<2	5	9	<2	<.5	<.5	23	.12	.076	20	15	.82	254	.053	1	2.61	.006	.11	<1	<1	2.0	<1<.02	9	
CL 50S 2+50W	.5	9	15	86	<.1	15	5	371	1.82	6	<1	<2	3	9	<2	<.5	<.5	19	.08	.202	11	11	.45	287	.075	<1	2.66	.013	.09	<1	<1	2.0	2<.02	9	
CL 50S 2+25W	.4	17	20	51	<.1	14	7	106	2.14	6	<1	<2	6	7	<2	<.5	<.5	19	.07	.030	26	15	1.13	173	.024	<1	2.30	.002	.12	<1	1	2.7	<1<.02	7	
CL 50S 2+00W	.5	10	14	61	<.1	16	5	398	1.78	8	<1	<2	4	13	<2	<.5	<.5	20	.11	.165	13	12	.43	216	.093	4	2.72	.020	.10	<1	<1	2.6	2<.02	8	
CL 50S 1+75W	.7	7	10	50	<.1	14	4	482	1.54	11	<1	<2	3	15	<2	<.5	<.5	20	.24	.320	8	11	.36	145	.090	<1	2.33	.019	.08	<1	<1	1.7	2<.02	8	
CL 50S 1+50W	.3	10	10	40	<.1	12	4	125	1.51	5	<1	<2	6	4	<2	<.5	<.5	12	.11	.016	21	12	.81	96	.015	<1	1.28	<.001	.11	<1	<1	1.9	<1<.02	5	
CL 50S 1+25W	.5	13	19	76	<.1	16	7	648	1.88	6	<1	<2	4	11	<2	<.5	<.5	20	.16	.079	19	16	.78	299	.047	<1	2.21	.006	.10	<1	<1	2.0	1<.02	7	
CL 50S 1+00W	.6	12	17	92	<.1	18	7	335	2.01	8	<1	<2	5	12	<2	<.5	<.5	22	.14	.052	18	15	.66	313	.071	2	2.73	.012	.12	<1	<1	2.8	2<.02	9	
CL 50S 0+75W	.3	5	13	67	<.1	12	4	666	1.46	7	<1	<2	1	10	<2	<.5	<.5	16	.17	.110	13	10	.46	283	.046	<1	1.79	.009	.11	<1	<1	1.4	1<.02	7	
CL 50S 0+50W	.6	8	20	73	<.1	14	4	264	1.52	9	<1	<2	3	13	<2	<.5	<.5	17	.19	.082	11	9	.38	166	.083	1	2.23	.017	.11	<1	<1	1.6	<1<.02	8	
CL 50S 0+25W	.4	7	13	74	.1	13	4	414	1.33	12	<1	<2	2	13	<2	<.5	<.5	16	.13	.098	8	7	.23	171	.085	1	2.13	.022	.08	<1	<1	1.3	2<.02	7	
CL 50S 0+00W	.6	9	12	81	<.1	15	5	380	1.72	15	<1	<2	2	14	<2	<.5	<.5	23	.12	.139	8	9	.30	172	.113	<1	2.83	.019	.08	<1	1	1.5	2<.02	9	
CL 100S 5+00W	.9	9	20	68	<.1	13	6	250	2.33	9	<1	<2	5	13	.2	<.5	<.5	26	.15	.156	10	11	.34	183	.112	1	3.59	.015	.07	<1	1	1.8	1 .02	11	
STANDARD C3	27.0	65	34	167	6.1	35	12	752	3.26	60	24	2	21	27	26.7	15.6	22.3	81	.50	.093	18	173	.58	155	.087	23	1.80	.042	.18	16	1	4.3	4 .03	8	
STANDARD G-2	1.6	2	2	48	<.1	7	4	543	2.12	1	2	<2	6	78	<.2	<.5	<.5	43	.61	.098	7	81	.60	231	.139	<1	1.06	.108	.59	2	<1	2.5	3<.02	6	

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data L FA



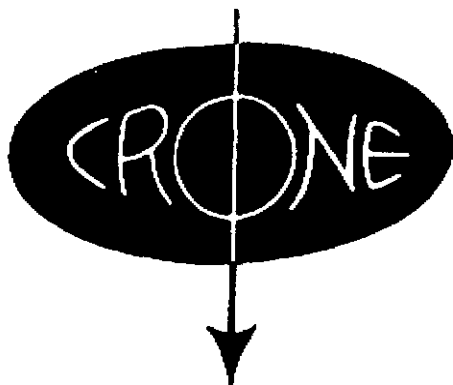
SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm
CL 100S 4+50W	.7	8	15	93	.1	11	5	605	1.61	6	<1	<2	2	8	<2	<5	<5	19	.10	.066	12	9	.36	147	.064	3	1.84	.011	.07	<1	<1	1.2	2<.02	7	
CL 100S 4+00W	.7	9	16	89	<.1	14	6	530	2.28	10	<1	<2	2	9	<2	<5	<5	26	.13	.196	11	13	.43	198	.079	3	3.25	.012	.08	<1	<1	2.0	2<.02	8	
CL 100S 3+50W	.6	12	15	75	.1	14	5	532	1.93	7	<1	<2	3	12	<2	<5	<5	25	.12	.128	11	10	.35	194	.107	3	3.18	.015	.07	<1	<1	2.5	4<.02	8	
CL 100S 3+25W	.5	7	13	83	<.1	14	5	1141	1.63	7	<1	<2	2	10	<2	<5	<5	20	.12	.089	11	11	.49	207	.073	2	2.52	.014	.08	<1	<1	1.7	4<.02	7	
CL 100S 3+00W	.9	9	14	95	<.1	14	5	742	1.89	10	<1	<2	3	12	<2	<5	<5	25	.13	.167	7	9	.31	182	.130	1	3.64	.019	.07	<1	<1	2.0	3<.02	8	
CL 100S 2+75W	.4	7	15	68	<.1	11	5	689	1.59	5	<1	<2	3	9	<2	<5	<5	19	.09	.057	15	10	.53	174	.060	3	1.92	.010	.09	<1	<1	1.7	2<.02	6	
CL 100S 2+50W	.5	13	17	66	<.1	17	6	301	2.20	8	<1	<2	5	9	<2	<5	<5	23	.06	.117	16	13	.74	200	.075	1	2.93	.008	.10	<1	1	2.2	1<.02	8	
CL 100S 2+25W	.4	15	22	73	<.1	17	7	225	2.25	8	<1	<2	6	9	<2	<5	<5	21	.10	.106	21	16	.94	190	.055	2	2.62	.006	.12	<1	<1	2.9	2<.02	7	
CL 100S 2+00W	.5	8	13	61	<.1	13	4	480	1.48	6	<1	<2	1	12	<2	<5	<5	17	.10	.128	11	11	.37	184	.068	<1	2.02	.011	.08	<1	<1	1.7	2<.02	7	
CL 100S 1+75W	.7	9	12	34	<.1	14	5	365	1.73	10	<1	<2	4	12	<2	<5	<5	21	.10	.135	7	9	.31	154	.129	1	3.43	.021	.06	<1	1	2.2	3<.02	9	
CL 100S 1+50W	.6	9	14	70	<.1	16	5	524	1.77	11	<1	<2	3	10	<2	<5	<5	21	.10	.099	8	10	.35	199	.110	2	2.83	.016	.08	<1	<1	1.8	2<.02	8	
CL 100S 1+25W	.4	8	17	76	<.1	14	5	193	1.78	7	<1	<2	2	9	<2	<5	<5	18	.09	.054	15	12	.77	282	.046	<1	2.39	.006	.09	<1	<1	1.6	1<.02	7	
CL 100S 1+00W	.4	8	10	53	<.1	12	5	169	1.60	6	<1	<2	4	7	<2	<5	<5	13	.11	.029	21	12	.73	160	.017	1	1.49	<.001	.09	<1	<1	1.4	1<.02	5	
RE CL 100S 1+00W	.4	8	10	54	<.1	12	5	174	1.62	6	<1	<2	3	6	<2	<5	<5	13	.12	.030	22	12	.75	161	.017	<1	1.52	<.001	.09	<1	1	1.4	2<.02	5	
CL 100S 0+75W	.4	8	14	41	<.1	10	3	104	1.36	6	<1	<2	3	4	<2	<5	<5	10	.07	.010	24	10	.64	123	.011	<1	1.16	<.001	.09	<1	<1	1.1	<1<.02	4	
CL 100S 0+50W	.6	9	17	69	.1	14	4	161	1.57	9	<1	<2	4	11	<2	<5	<5	16	.12	.047	14	8	.44	184	.091	<1	2.37	.013	.08	<1	<1	1.7	1<.02	8	
CL 100S 0+25W	.4	6	13	105	.1	10	4	323	1.31	8	<1	<2	3	11	<2	<5	<5	18	.11	.075	9	8	.26	172	.074	<1	1.87	.011	.07	<1	<1	1.3	1<.02	7	
CL 100S 0+00W	.4	7	14	132	.1	13	4	386	1.39	11	<1	<2	2	16	<2	<5	<5	18	.15	.130	9	8	.32	192	.081	4	2.17	.013	.07	<1	<1	1.3	1<.02	7	
CL 125S 3+50W	.7	11	16	62	.1	14	5	493	1.96	11	<1	<2	4	12	<2	<5	.6	27	.12	.249	6	9	.27	135	.139	3	4.11	.014	.05	<1	1	2.0	2<.02	10	
CL 125S 3+25W	1.4	12	5	94	<.1	8	4	861	2.11	2	1	<2	4	10	<2	<5	<5	27	.10	.034	10	6	.37	88	.120	2	3.75	.012	.07	<1	<1	2.2	1<.02	1	
CL 125S 3+00W	.5	5	10	90	<.1	4	2	805	1.33	3	<1	<2	3	7	<2	<5	<5	14	.11	.022	18	4	.64	50	.036	<1	1.39	.002	.09	<1	<1	1.2	2<.02	1	
CL 125S 2+75W	.8	11	18	69	<.1	19	7	257	2.29	10	<1	<2	4	9	<2	<5	<5	26	.13	.067	15	14	.68	229	.077	4	3.09	.004	.11	<1	<1	2.0	2<.02	9	
CL 125S 2+50W	.5	12	18	61	<.1	17	6	427	2.00	7	<1	<2	5	9	<2	<5	<5	23	.07	.110	13	13	.57	190	.089	2	2.96	.007	.10	<1	<1	2.6	4<.02	8	
CL 125S 2+25W	.4	12	18	77	<.1	18	7	910	1.93	6	<1	<2	4	13	<2	<5	<5	22	.19	.066	18	18	.82	199	.053	3	2.05	.002	.11	<1	<1	1.9	3<.02	6	
CL 125S 2+00W	.4	8	14	64	<.1	12	5	420	1.66	7	<1	<2	3	7	<2	<5	<5	16	.06	.145	17	11	.61	139	.044	1	1.68	.002	.09	<1	<1	1.4	3<.02	6	
CL 125S 1+75W	.4	6	13	52	<.1	14	6	285	1.61	9	<1	<2	3	12	<2	<5	<5	21	.14	.043	8	10	.31	141	.104	4	2.54	.015	.10	<1	1	1.6	2<.02	8	
CL 125S 1+50W	.7	11	14	48	<.1	17	5	694	1.57	11	<1	<2	4	13	<2	<5	<5	21	.12	.122	9	10	.38	187	.104	2	2.80	.016	.09	<1	<1	1.8	4<.02	8	
CL 125S 1+25W	.4	13	15	55	<.1	14	6	168	1.87	6	<1	<2	5	8	<2	<5	<5	18	.12	.028	22	14	.98	198	.026	<1	2.14	<.001	.10	<1	<1	1.8	2<.02	6	
CL 125S 1+00W	.5	9	28	91	.1	13	6	340	1.58	6	<1	<2	3	10	<2	<5	<5	16	.17	.029	15	11	.61	277	.037	1	2.18	.003	.12	<1	<1	1.7	2<.02	7	
CL 125S 0+75W	.3	7	17	59	<.1	12	4	269	1.23	8	<1	<2	3	10	<2	<5	<5	14	.11	.072	11	8	.32	244	.066	2	1.88	.012	.09	<1	<1	1.5	1<.02	6	
CL 125S 0+50W	.3	9	12	54	<.1	11	4	113	1.40	7	<1	<2	4	7	<2	<5	<5	11	.09	.018	22	10	.68	94	.019	<1	1.30	<.001	.10	<1	<1	1.3	2<.02	4	
CL 125S 0+25W	.8	8	14	113	<.1	16	5	267	1.93	16	<1	<2	4	10	<2	.6	<5	23	.11	.130	7	9	.28	170	.120	2	3.11	.010	.06	<1	<1	1.8	3<.02	8	
CL 125S 0+00W	.5	7	17	143	.1	13	5	271	1.54	10	<1	<2	4	10	<2	<5	<5	17	.10	.033	13	9	.43	198	.063	1	2.11	.007	.08	<1	<1	1.6	2<.02	7	
STANDARD C3	26.1	65	35	162	6.1	34	11	742	3.17	60	23	<2	21	28	25.1	14.7	22.1	76	.48	.089	17	167	.57	149	.088	21	1.82	.034	.17	13	1	4.3	2.02	7	
STANDARD G-2	1.5	2	2	45	<.1	7	4	533	1.98	2	2	<2	3	70	<2	<5	<5	39	.56	.093	6	75	.56	213	.130	1	.99	.090	.53	2	<1	2.4	2<.02	5	

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

APPENDIX 2

CHRIS BARITE CLAIM GROUP

Radem VLF-EM Receiver Specifications



RADEM VLF EM RECEIVER



An EM receiver measuring the FIELD STRENGTH, DIP ANGLE and QUADRATURE components of the VLF communications stations.

This is a rugged, simple to operate, ONE MAN EM unit. It can be used without line cutting and is thus ideally suited for GROUND LOCATION OF AIRBORNE CONDUCTORS and RECONNAISSANCE SURVEYS of MINERAL SHOWINGS. This instrument utilizes higher than normal EM frequencies and is capable of detecting poorly conductive sulphide deposits and fault zones. It accurately isolates BANDED CONDUCTORS and operates through areas of HIGH POWERLINE NOISE. The method is capable of deep penetration but due to the high frequency used its penetration is limited in areas of clay and conductive overburden.

The DIP ANGLE measurement detects a conductor from a considerable distance and is used primarily for locating conductors. The FIELD STRENGTH measurement is used to define the shape and attitude of the conductor.

- Instrument Sales, Rental and Repair Services
- Contract Survey Services
- Consulting Services
- Computer Plotting and Processing Services

CRONE GEOPHYSICS LIMITED

3607 WOLFEDALE ROAD, MISSISSAUGA, ONTARIO, CANADA L5C 1V8
 TEL: (416) 670-0000 FAX: (416) 670-0000

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Illustration 1	PROVINCIAL LOCATION	
Illustration 2	PROVINCIAL GRID LOCATION	
Illustration 3	REGIONAL LOCATION	1:250,000
Illustration 4	MINERAL TITLES MAP	BCGS 82G081 1:20,000
Illustration 5	GEOLOGICAL MAP	1:4000
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Illustration 7	GEOLOGICAL CROSS SECTION	1:4000
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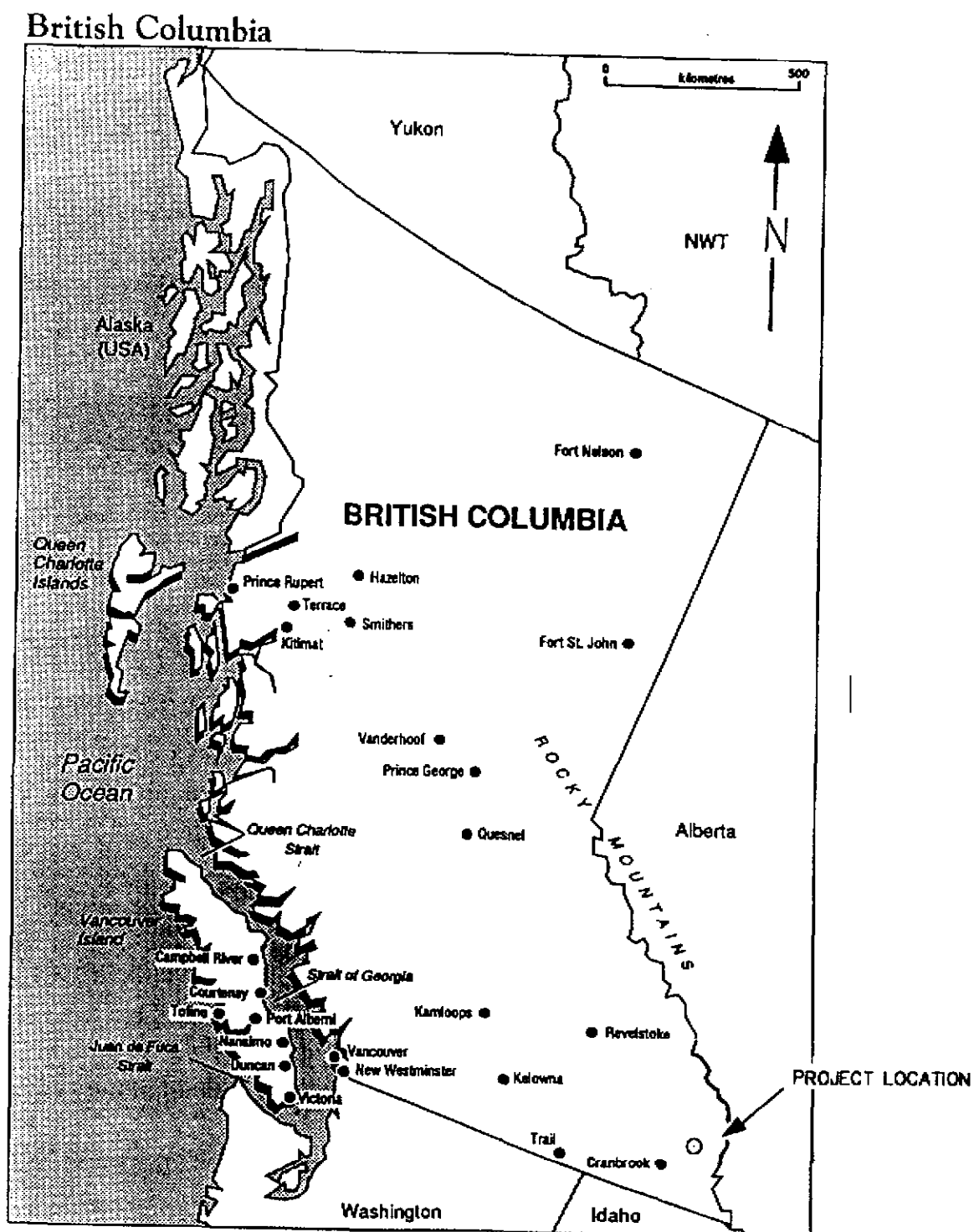


ILLUSTRATION 1

PROVINCIAL LOCATION

PROSPECTORS GRANT 01/02 P28

CHRIS BARITE (Cu) CLAIMS

BCGS MAP 82G081

MINFILE NO. 082CNW086

F.O'GRADY P.Eng.

DECEMBER 2001

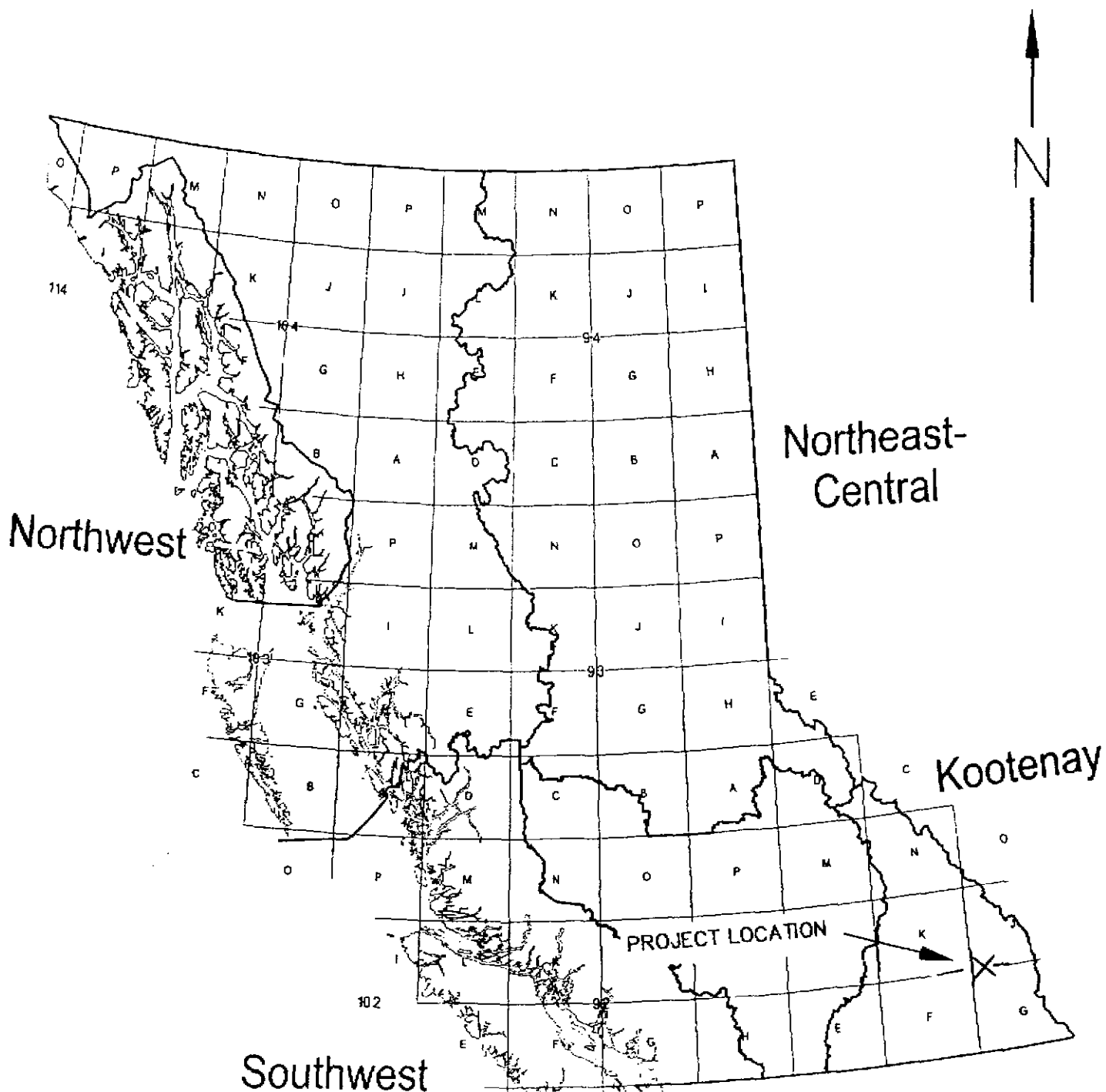


ILLUSTRATION 2

PROVINCIAL GRID LOCATION

PROSPECTORS GRANT 01/02 P26

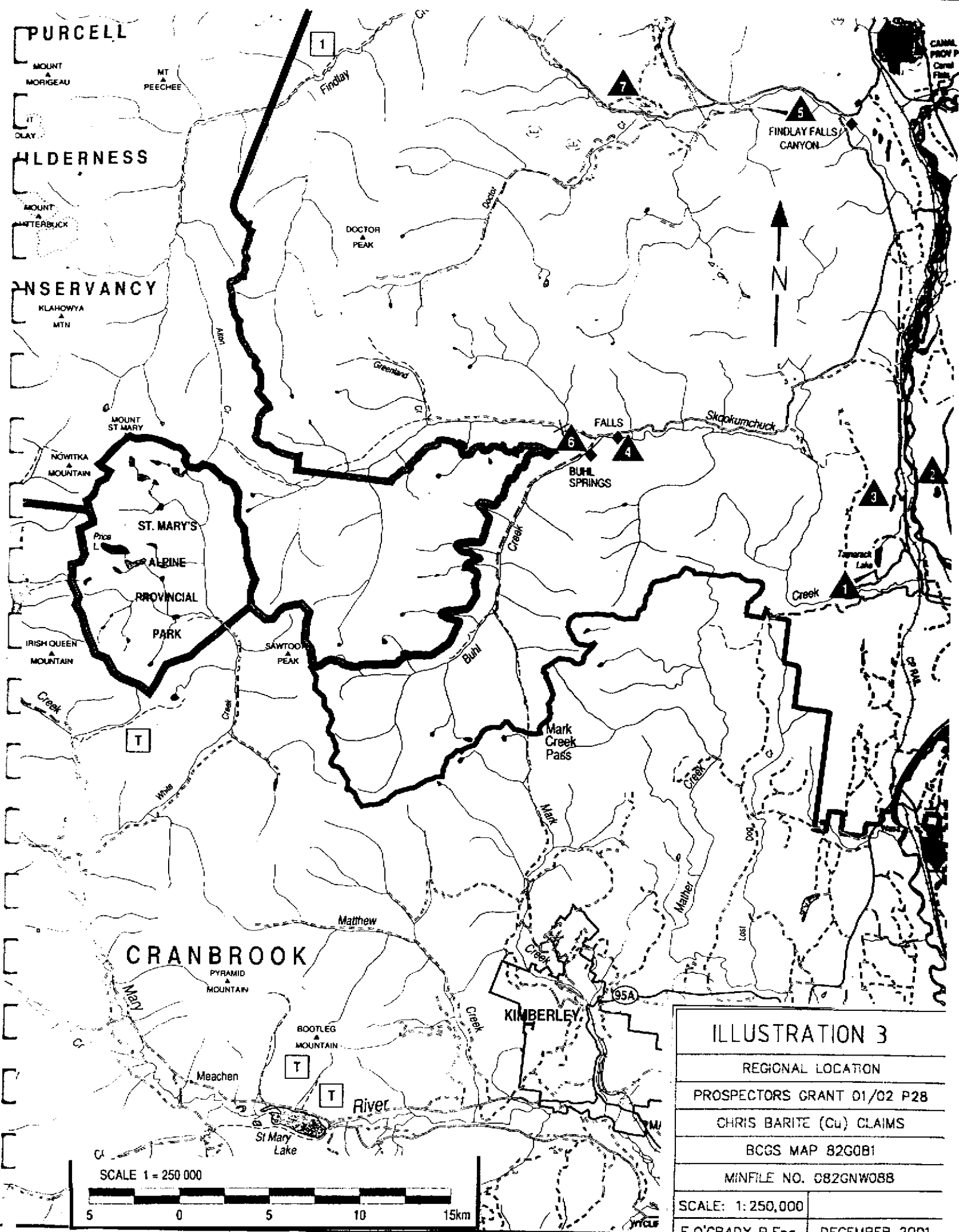
CHRIS BARITE (CU) CLAIMS

BCGS MAP 82G081

MINFILE NO. 082GNW088

F.O'GRADY P.Eng.

DECEMBER 2001



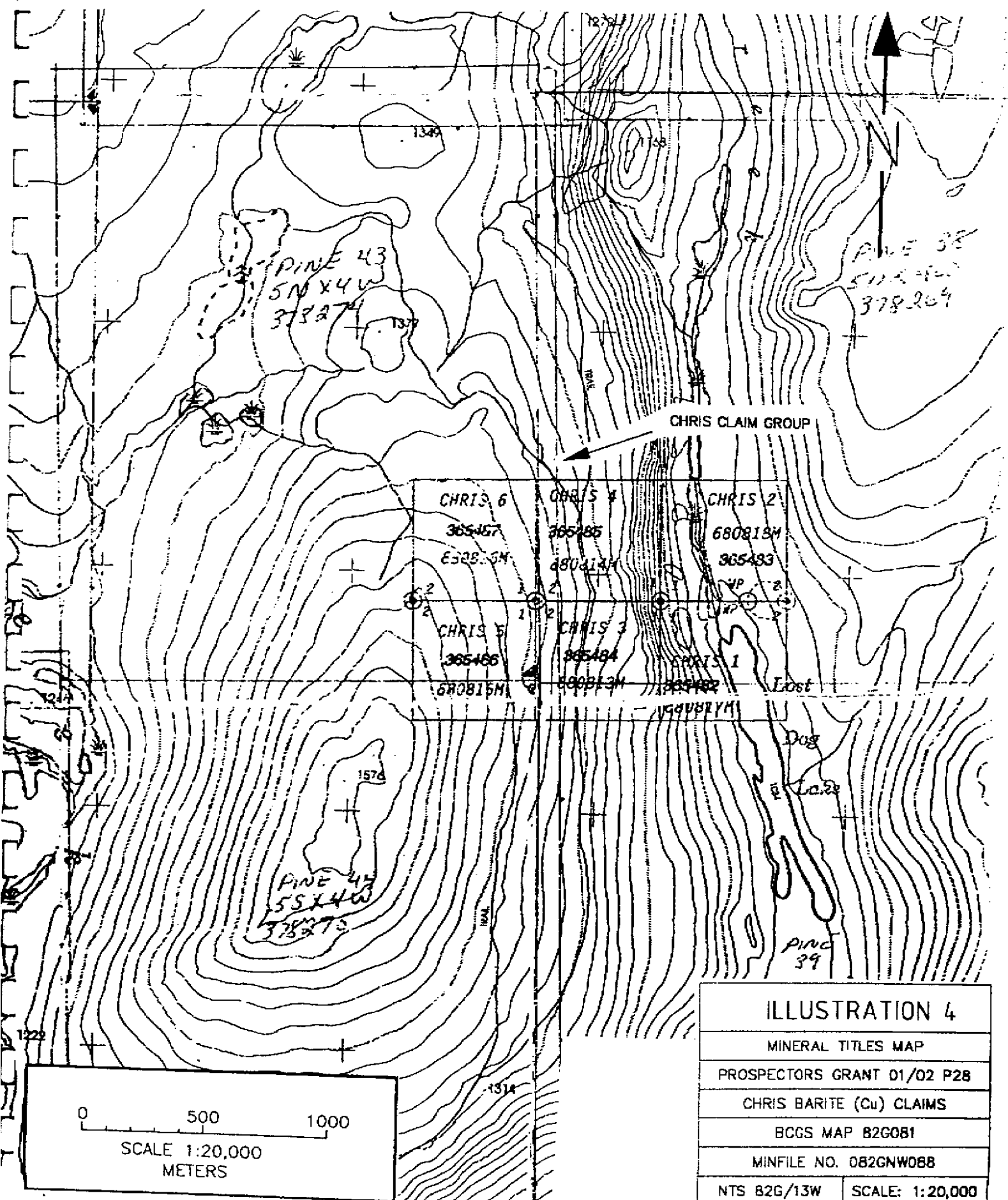


ILLUSTRATION 4

MINERAL TITLES MAP

PROSPECTORS GRANT 01/02 P28

CHRIS BARITE (Cu) CLAIMS

BCGS MAP 82G081

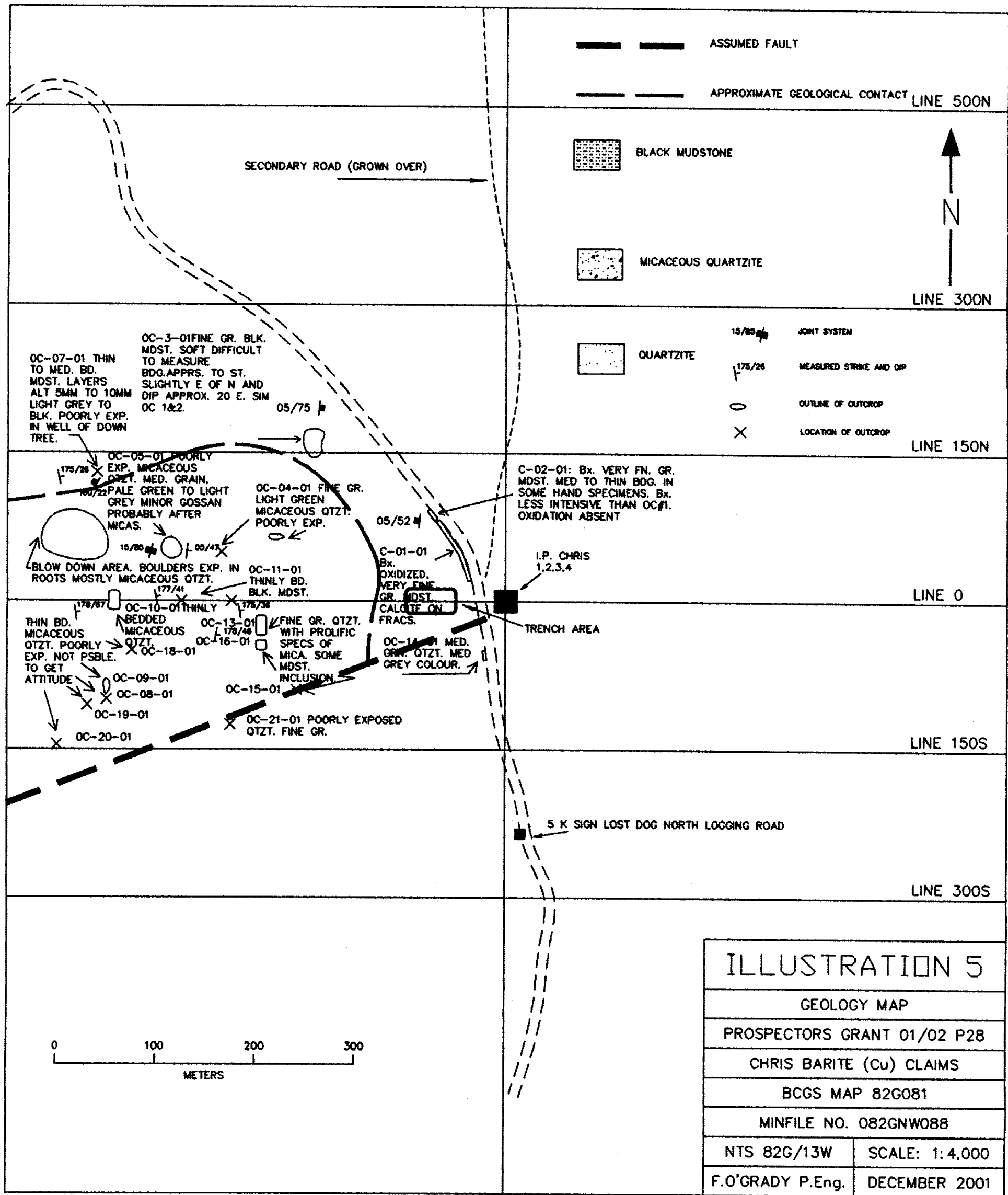
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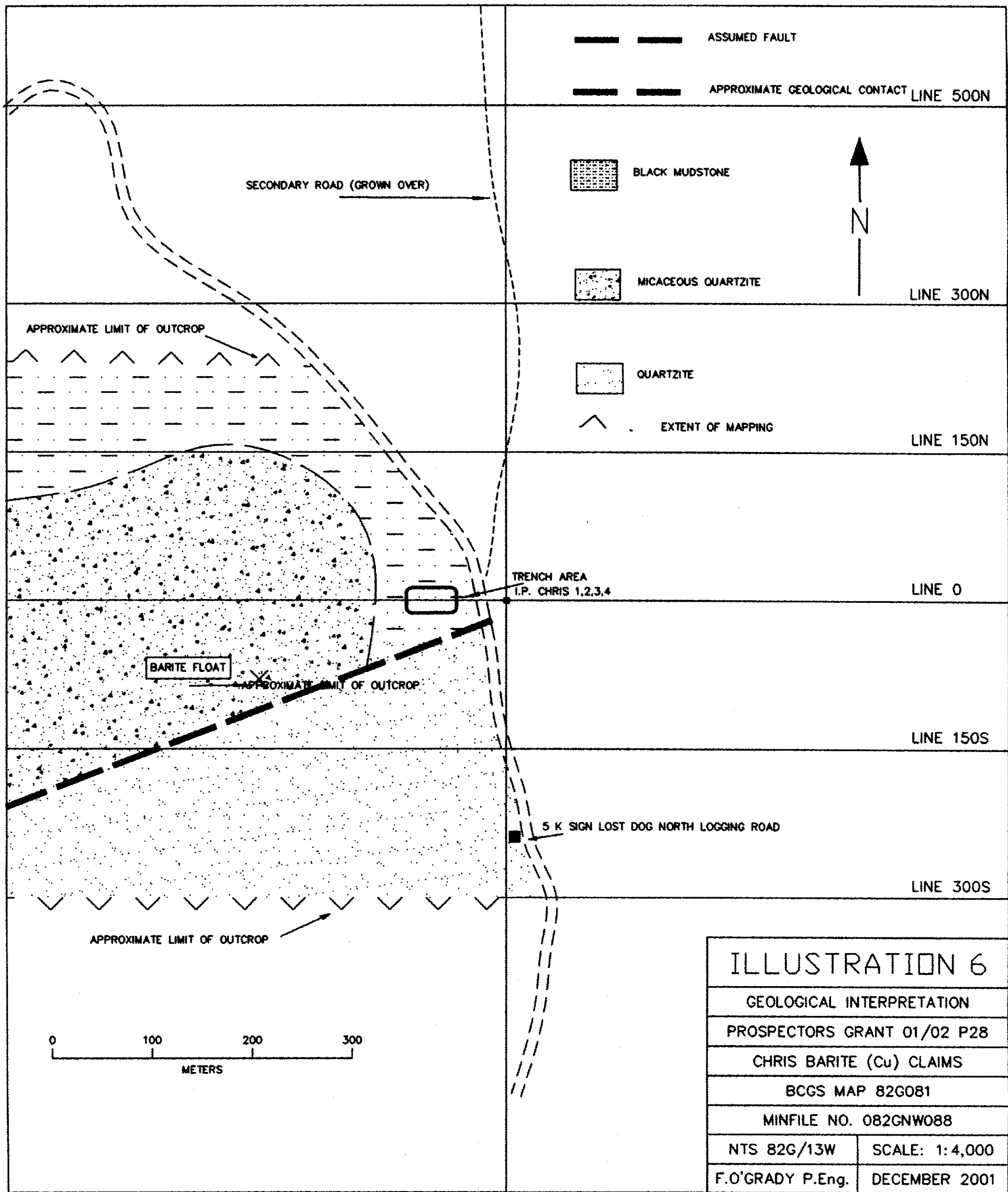
NTS 82G/13W

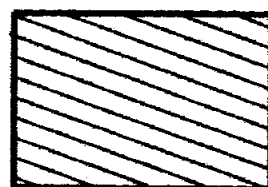
SCALE: 1:20,000

F.O'GRADY P.Eng.

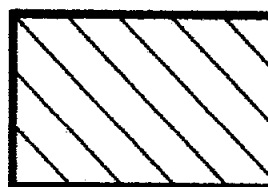
DECEMBER 2001







BLACK MUDSTONE



MICACEOUS QUARTZITE

--- ASSUMED GEOLOGICAL CONTACT

INITIAL POST
CHRIS 1,
CHRIS 2,
CHRIS 3,
CHRIS 4.

VERY FINE GRAIN
BLACK MUDSTONE.
MED. TO THIN BEDDED.
DIFFICULT TO MEASURE
ATTITUDE.

TRENCH AREA

MICACEOUS, QUARTZITE.
MED. GRAIN. LIGHT
GREEN TO LIGHT GREY

LOST DOG CREEK

NORTH - SOUTH BASE LINE

0 100 200 300
METERS

ILLUSTRATION 7

GEOLOGICAL CROSS SECTION LINE 0

PROSPECTORS GRANT 01/02 P28

CHRIS BARITE (Cu) CLAIMS

BCGS MAP 82G081

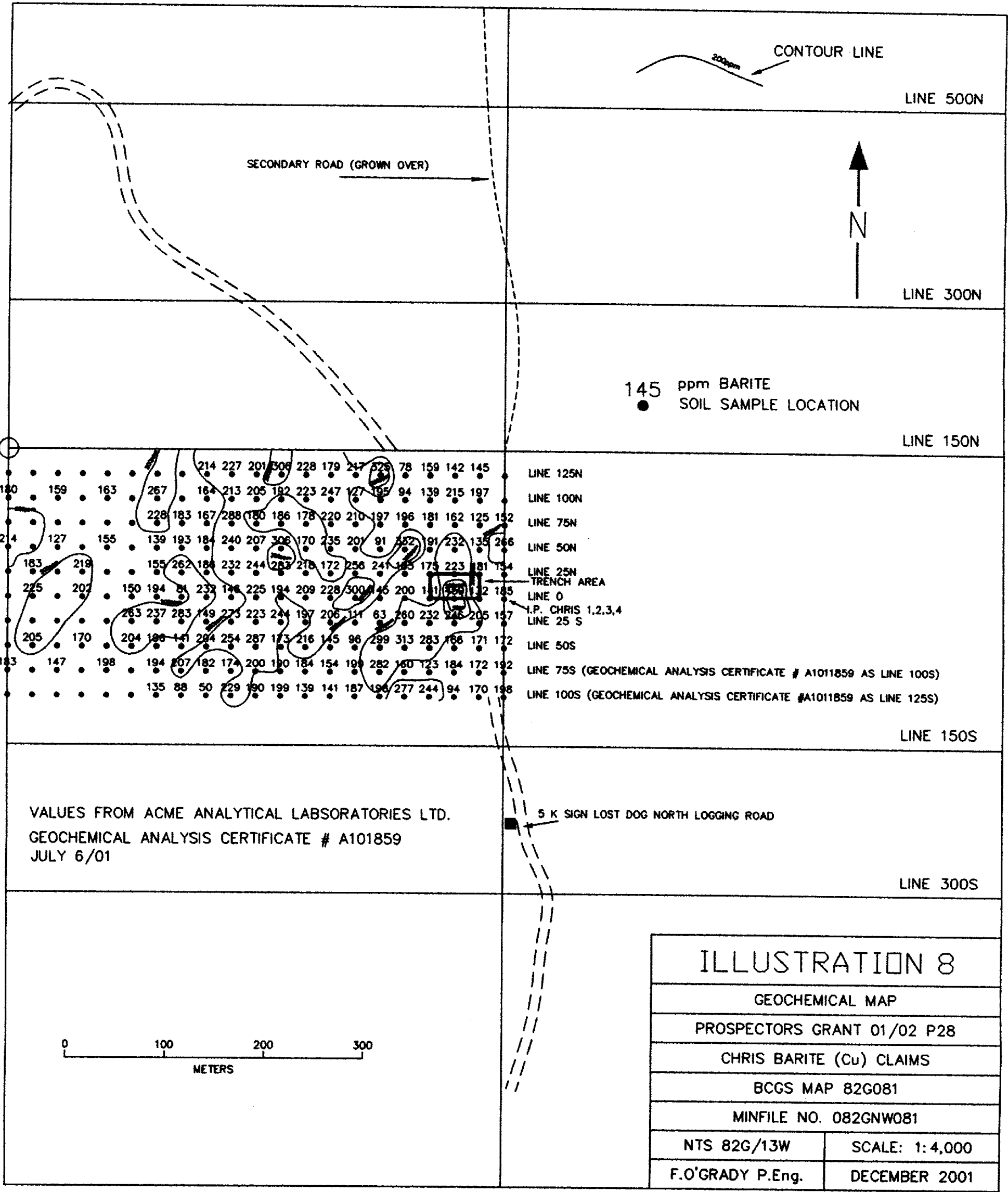
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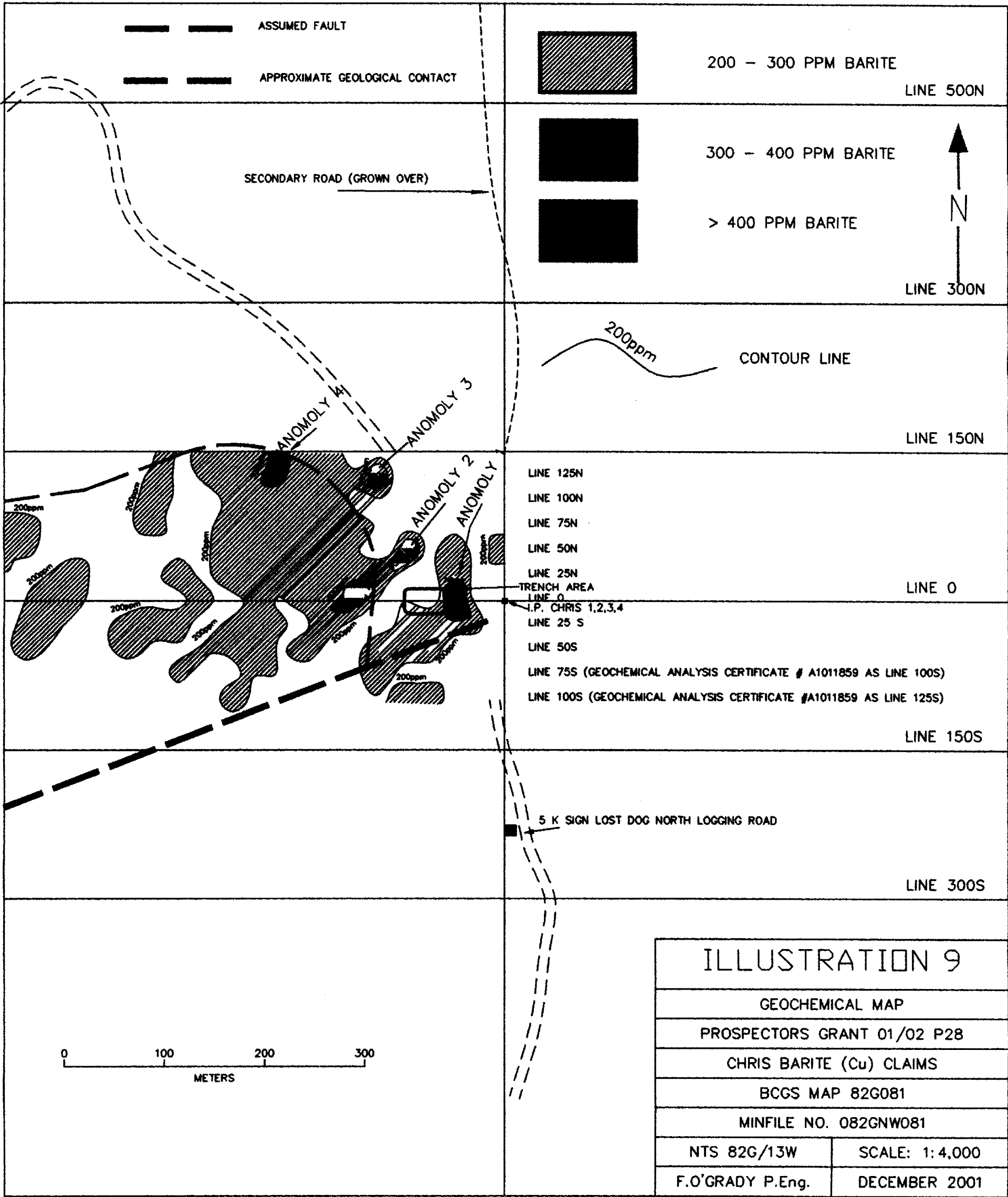
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SCALE: 1:4,000

F.O'GRADY, P.Eng.

DECEMBER 2001

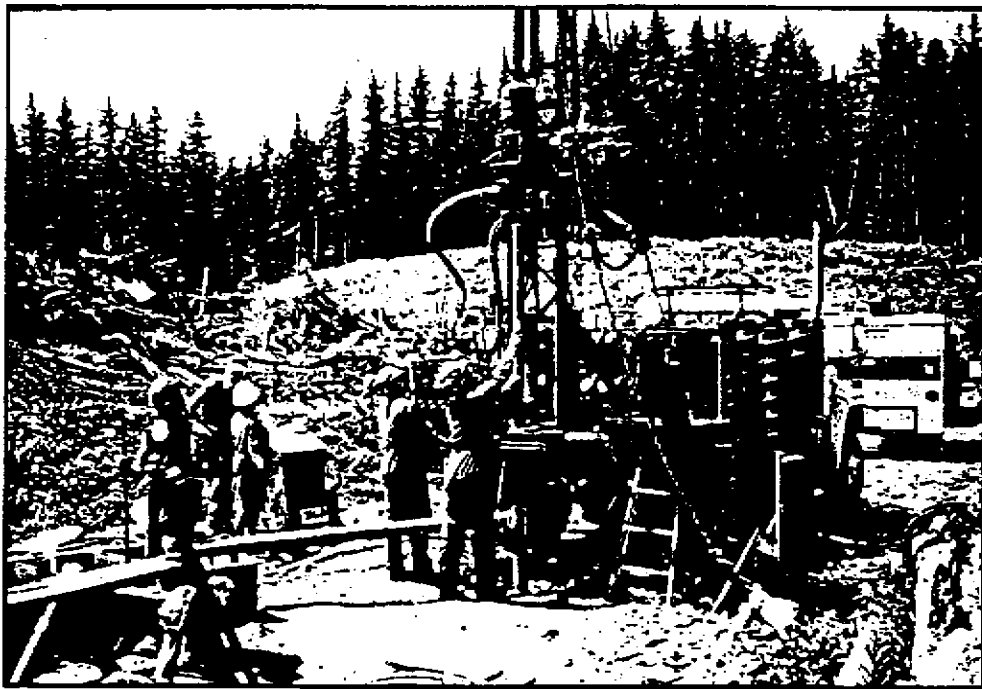




British Columbia Prospectors Assistance Program

Application: FRANK O'GRADY, P.Eng.

Submitted: April 2001



*A program to promote prospecting for
new mineral deposits in British Columbia*

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Illustration 5	MINFILE MAP (showing location of CHRIS Barite Property and BBX Barite Property)
Illustration 6	OPEN FILE MAP 1987-8, Geology of the Skookumchuck Area by Carter and Hoy (with CHRIS Barite Property plotted)
Illustration 7	PRIOR PHYSICAL WORK, CHRIS Barite Property

LIST OF REFERENCES

Carter & Hoy, Open File Map 1987-8, Geology of the Skookumchuck Area, Southeastern B.C.

D.F. Sangster (Editor); *Short Course in Sediment-Hosted Stratiform Deposits*,
 MINERALOGICAL ASSOCIATION OF CANADA,
 Including Chapter 1: *Sediment-Hosted Massive Sulphide Lead-Zinc Deposits: An Empirical Model* by Duncan E. Large.

Several Papers, Maps & Assessment Reports by Various Authors on the Purcell Supergroup.

1998/99 PROSPECTORS ASSISTANCE PROGRAM *Prospecting Report* Reference No. P49
 by Frank O'Grady, P.Eng.

PROGRAM PROPOSAL

Project 2001 – CHRIS Barite Claim Group (see Illustration 1)

a) PROJECT LOCATION

- i) The project is situated west of Lost Dog Lake and is traversed by the Lost Dog logging road.
- ii) Project location on attached Application Map (Illustration 2).
- iii) NTS 82G/13W (BCGS 82G081)
Centered at Latitude $49^{\circ} 50' 10''$ and Longitude $115^{\circ} 52' 30''$
- iv) See Illustration 3, NTS 82G/13 Topographic Map 1:50,000
- v) All work will be conducted on the CHRIS Claim Group. A current Mineral Titles Map forms Illustration 4 (BCGS 82G081).

b) WORK HISTORY

- i) The original owners of the property, Gerald Mason, Geologist, and Don Jackson, prospector, both of Kimberley, BC did some hand trenching on the property during the 1970's but no work was recorded.

A logger who encountered Barite on a skid trail had brought the property to the attention of Mr. Mason and Mr. Jackson.

The CHRIS Barite Property was examined and subsequently staked by the author on September 11, 1998. Physical work in the form of grid installation was completed and recorded in 1999. (See Illustration 7) Physical work in the form of installation of base line by chain saw was completed and recorded in 2000.

Also, during 2000 the author opened up two of the sloughed hand trenches and extended them. In both trenches a narrow vein of Barite, from 10 cm to 20 cm thick, was exposed. The vein appears to be parallel to the bedding of the enclosing sediments. In addition, prospector, Ron Beamish of Cranbrook, while prospecting with the author during 2000, found a piece of Barite float 200 meters west of the trenches.

There is no record of any other previous work in the area.

- ii) MINFILE #082GNW088

Incidentally, the BBX and BRENDA (BONNIE ,McINTOSH) are incorrectly plotted on MINFILE MAP 82GNW as occurrence 52 and 65 respectively. The MINFILE MAP places the BBX and BRENDA adjacent to the CHRIS Barite property (latitude $49^{\circ} 49' 20''$ longitude $115^{\circ} 52' 40''$). The BBX should be plotted at latitude $49^{\circ} 59' 30''$ longitude $115^{\circ} 59' 31''$ and the BRENDA immediately west of it. This location is taken from assessment report #6886 authored by Gerald Mason, Geologist in 1978. The BBX and BRENDA are therefore 20 kilometers north and slightly west of the CHRIS Group. The author has been on the ground at both locations.

c) ACCESS

Access to the claim group is by proceeding 7.1 kilometers north of Kimberley on Highway 95A and following Thomason Road to the Cherry Creek bridge and then following logging roads 13 kilometers to the claim group.

d) PROSPECTING TARGET

i) Commodity, Minerals

Barite and Copper will be the prospecting targets.

Copper, if present, is expected to occur as chalcopyrite (CuFeS_2), bornite (Cu_5FeS_4) or chalcocite (Cu_2S).

ii) Deposit Type

The deposit could be strato-bound bedded deposits or vein-type deposits.

iii) Geology (Illustration 3)

Proterozoic rocks of the Gateway Formation and the Kitchener Formation in faulted contact underlie the claim group. The rocks outside the claim group, for the most part, belong to the Kitchener Formation.

e) PHYSICAL WORK

There is no major physical work proposed at this time. However, the objective of the program is to define, by using prospecting, geology, geophysics and geochemistry, a suitable target for a future drilling/trenching program.

f) NUMBER OF PROSPECTING DAYS IN THE FIELD

The proposed program on the CHRIS Claim Group will take 23 days.

g) MINERAL CLAIM OWNERSHIP as follows:

<u>claim name</u>	<u># units</u>	<u>tenure #</u>	<u>owner</u>
CHRIS 1	1	365482	F. O'Grady
CHRIS 2	1	365483	F. O'Grady
CHRIS 3	1	365484	F. O'Grady
CHRIS 4	1	365485	F. O'Grady
CHRIS 5	1	365486	F. O'Grady
CHRIS 6	1	365487	F. O'Grady

PROSPECTING PROGRAM

The proposed exploration program on the CHRIS Claim Group includes geological mapping, geophysical surveying by VLF (very low frequency) and magnetometer, plus a geochemical survey. The exploration program would utilize grid lines established by the author during 1999 and 2000 for this purpose (Illustration 7).

GEOLOGICAL MAPPING

The proposed geological mapping program includes mapping the entire claim group at a scale of 1:5,000. This part of the program will lead to an understanding of the underlying bedrock, and structural controls of any mineralization encountered during mapping or future drilling/trenching on the property. In addition, a geological base map of the property would be a valuable tool in interpreting geochemical and geophysical anomalies encountered in other parts of the exploration program.

GEOCHEMICAL SURVEY

During researching the application of geochemistry in exploring for Barite deposits the author interviewed Ken Brite, a Geochemist with CHEMEX LABS. Mr. Brite gave valuable advice on the correct sampling and analytical procedure to utilize in a program for Barite exploration.

Mr. Brite advised that the element Barium (Ba) is not a very mobile element. In fact, Barium is less mobile than Copper (Cu), Lead (Pb) and Zinc (Zn). Therefore, the detection of Barite requires a closely spaced soil-sampling program.

Therefore, the geochemical program proposed involves soil sampling on a 25 meter by 25 meter grid over an area centered on the CHRIS Barite showing. This coverage will require approximately 200 soil samples.

Furthermore, according to Mr. Brite the use of 32 element ICP analysis is not totally accurate in detecting amounts of Barium over 3000 ppm, however, the method will detect an anomaly. For example, a sample reporting 3000 ppm Barite could be as high as 8000 ppm. Therefore, any results in the 2000 to 3000 ppm range will be treated as highly anomalous.

If the geochemical program results in anomalous zones of Barium, it would be a valuable tool in designing the next stage of the program involving drilling/trenching.

GEOPHYSICAL PROGRAM

1. VLF-EM 16 SURVEY.

According to Open File Map 1987-8, Geology of the Skookumchuck Area by Carter and Hoy as many as three faults traverse the claim group.

A VLF survey will often detect faulting, particularly if there are secondary clay minerals in the fault gouge zone. Clay minerals often form during contact metamorphism. Therefore, a VLF-EM16 survey is proposed for the CHRIS Claim Group.

Knowing the location of any faults on the property would be a valuable tool in interpreting control of mineral deposits and for planning a drilling or trenching program.

2. MAGNETOMETER SURVEY

A magnetometer survey is proposed for the CHRIS Claim Group. According to Open File Map 1987-8, Geology of the Skookumchuck Area by Carter and Hoy, a portion of the claim group is possibly underlain by the Nicol Creek Formation. This formation contains basic volcanic beds that will probably cause a magnetic high. Therefore, a magnetometer survey would probably outline the extent of this type of rock unit. Knowing the extent of these beds would be a valuable tool for interpreting the structure and bedrock geology of the claim group and assist in designing a subsequent drilling/trenching program.

It is interesting to note that a magnetometer survey over the BBX group situated 20 kilometers to the north of the CHRIS group, the results of which are in Assessment Report 8794 filed with the Ministry of Mines, showed the vein over a magnetic low with a high shoulder on each side over the Barite vein.

SUMMARY

The objective of the proposed program is, with the combined application of geology, geochemistry and geophysics, to detect one or more targets for continued exploration in the form of diamond drilling or trenching. The ultimate objective is, of course, to discover an exploitable mineral deposit.

The CHRIS Barite showing is situated approximately 20 kilometers northeast of the Sullivan Mine. Although the CHRIS is not within the same formation (Aldridge), it is within the same sedimentary basin (appears to be in the Kitchener).

There is a market for Barite mined in the East Kootenay because of the proximity of the oil patch in Alberta; Barite is used in the manufacture of drilling mud and for other industrial purposes. It is assumed increased drilling activity in the oil patch will increase the demand for barite. In addition to the potential for the industrial use of the mineral, "barite is commonly associated with sediment hosted massive sulphide lead zinc deposits." (Duncan Large, *An Empirical Model*, Chapter 1 from this Application Reference 2). Furthermore, "several sediment-hosted massive deposits contain a significant component of barite, and in others barite is often either peripheral to or stratigraphically above the sulphides." (Duncan Large, *An Empirical Model*, Chapter 1 from this Application Reference 2). On the CHRIS showing Copper is present within the Barite as minor blebs of chalcopyrite surrounded by a halo of malachite. Analysis of the Barite, as one would expect, is geochemically anomalous in Cu (Appendix 1). This could indicate the proximity of higher-grade sulphide material associated with the CHRIS showing.

In addition the CHRIS showing is situated adjacent to a good forestry road 26 kilometers from Kimberley. This results in easy access and would facilitate moving in drills or excavators if future exploration programs warrant it.

Therefore, with the proximity of the Sullivan Mine, the association of Barite with massive sulphides, the market for Barite as an industrial mineral, and the excellent access to the property the author considers the CHRIS property a good exploration target. In addition there has been virtually no exploration conducted in the area surrounding the Chris showing. Finally, there is a skilled, trained and available work force in near-by Kimberley.

APPENDIX 1

CHRIS BARITE CLAIM GROUP

Certificate of Analysis A0018598



ALS Chemex

Aurora Laboratory Services Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: O'GRADY, FRANK

587 WALLINGER AVE.
KIMBERLY, BC
V1A 1Z8

Project:
Comments: FRANK O'GRADY

Page Number : 1-A
Total Pages : 1
Certificate Date: 18-MAY-00
Invoice No. : 10018508
P.O. Number :
Account : QFP

CERTIFICATE OF ANALYSIS

A0018598

SAMPLE	PREP CODE	Ag ppm	Al t	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca t	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe t	Ga ppm	Hg ppm	K t	La ppm	Mg t	Mn ppm
CHRIS ORNT-1	201 202	< 0.2	1.97	24	< 10	3230	< 0.5	< 2	0.86	0.5	11	14	199	3.40	< 10	< 1	0.26	40	1.55	1120

CERTIFICATION: _____



ALS Chemex

Aurora Laboratory Services Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: O'GRADY, FRANK

587 WALLINGER AVE.
KIMBERLY, BC
V1A 1Z8

Project:

Comments: FRANK O'GRADY

Page Number : 1-B
Total Pages : 1
Certificate Date: 18-MAY-00
Invoice No. : 10018598
P.O. Number :
Account : QFP

CERTIFICATE OF ANALYSIS

A0018598

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
CHRIS ORNT-1	201	202	4	< 0.01	16	300	20	0.08	< 2	6	26	< 0.01	< 10	< 10	12	< 10	18

CERTIFICATION: _____

ILLUSTRATIONS

Illustration 1	PROVINCE OF BRITISH COLUMBIA
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Illustration 7	PRIOR PHYSICAL WORK, CHRIS Barite Property

British Columbia

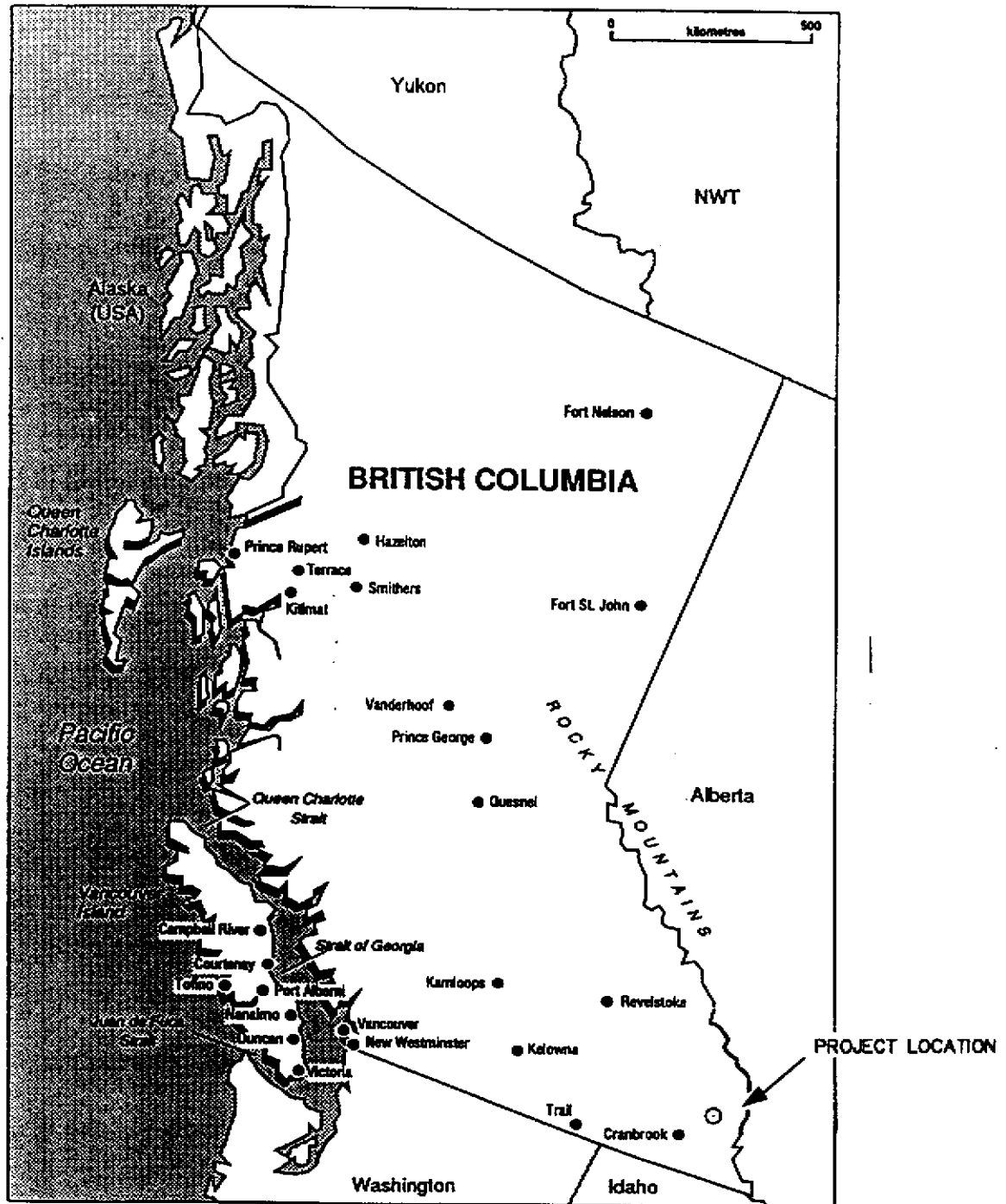


ILLUSTRATION 1

PROSPECTORS ASSISTANCE PROGRAM

PROVINCE OF BRITISH COLUMBIA

F. O'GRADY P. Eng.

APRIL 2001

PROGRAM PROPOSAL - PART B

Location of Proposed Project(s)

Indicate on this map (using an "X") the general location of each of the projects covered by this proposal.

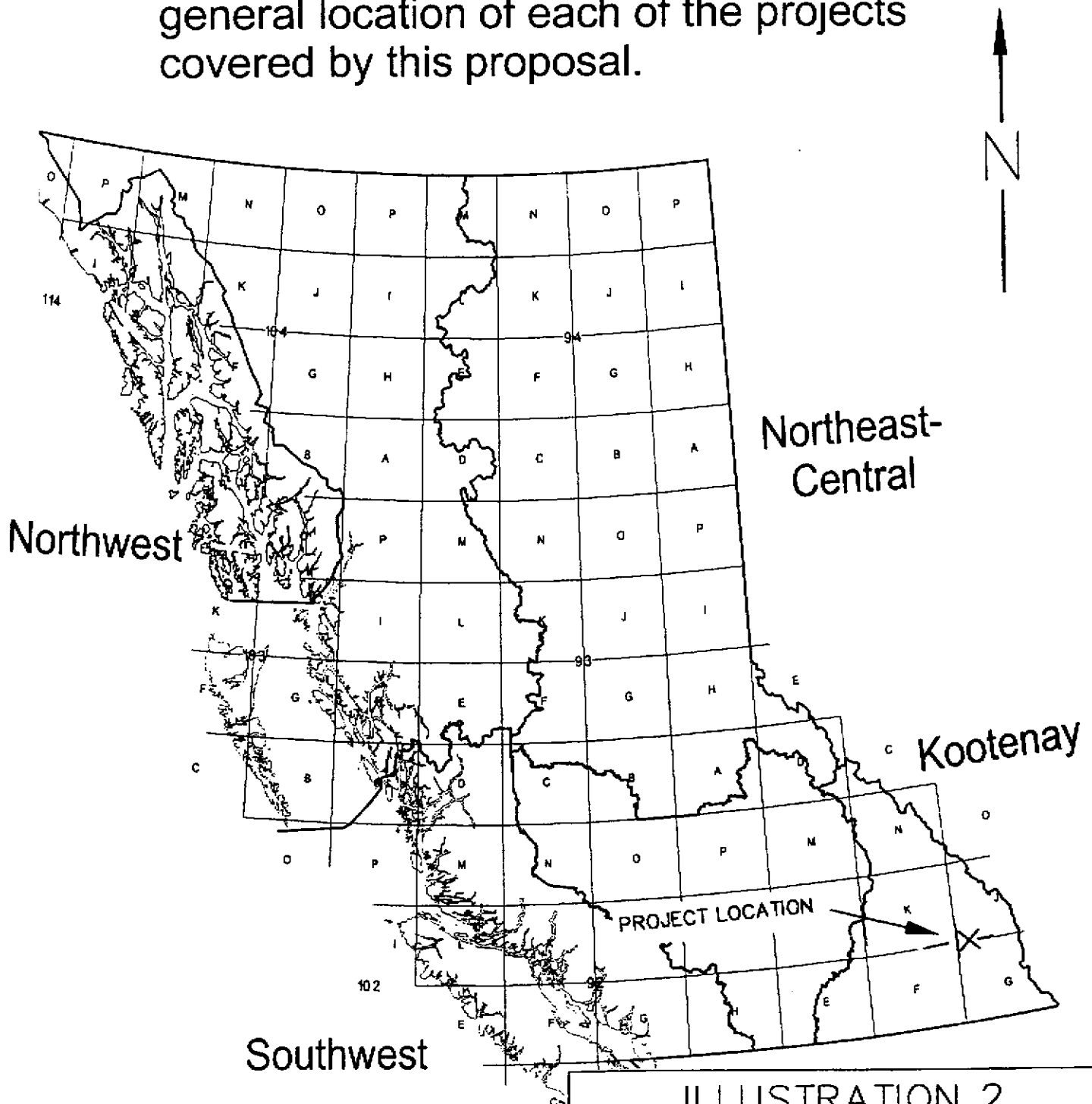


ILLUSTRATION 2

PROSPECTORS ASSISTANCE PROGRAM

LOCATION OF PROPOSED PROJECT

F. O'GRADY, P.Eng.

APRIL 2001

M O U N T A I N S

(C O L U M B I A M O U N T A I N S)

CHRIS BARITE CLAIM GROUP

MINFILE 082GNW088

SULLIVAN (COMINCO) PROPERTY



22°
21
20
19
18
17

0 1K 2K 3K
SCALE 1:50,000 KILOMETERS

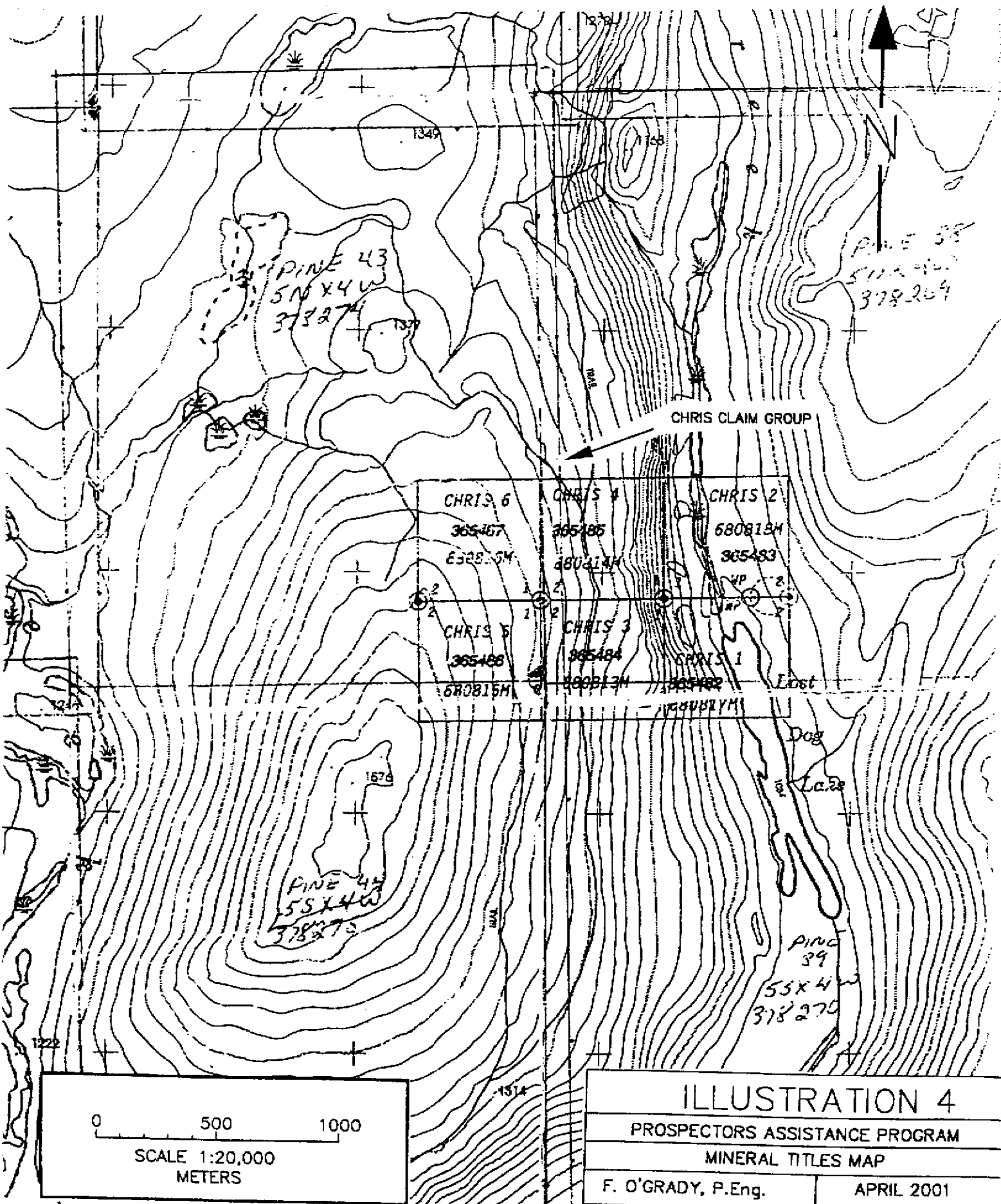
ILLUSTRATION 3

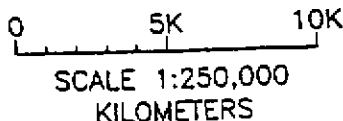
PROPSECTORS ASSISTANCE PROGRAM

LOCATION OF PROPOSED PROJECT AREA

F. O'GRADY, P.Eng.

APRIL 2001







Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

QUATERNARY



PLEISTOCENE AND RECENT: Till gravel, sand and alluvial deposits

CRETACEOUS WHITE CREEK BATHOLITH



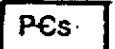
Quartz monzonite, granodiorite

HADRYNIAN



TOBY FORMATION: Conglomerate, shale

HELIKIAN — PURCELL SUPERGROUP



SILL: Gabbro or diorite



MOUNT NELSON FORMATION: Quartzite, dolomite, siltstone



DUTCH CREEK FORMATION: Green siltstone, argillite; stromatolitic dolomite, quartz wacke



UPPER DUTCH CREEK: Green siltstone, argillite, oolitic dolomite, cryptalgal dolomite, dolomitic siltstone



Carbonate marker, cream massive dolomite and argillaceous dolomite



LOWER DUTCH CREEK: Coarse quartz wacke; stromatolitic, oolitic dolomite; green siltstone-argillite couplets



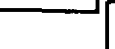
NICOL CREEK FORMATION: Interlayered siltstone argillite and basaltic-andesitic lava, tuff



Volcaniclastic siltstone, fine quartz wacke



VAN CREEK FORMATION: Green and mauve siltstone, argillite; silty quartz arenite



KITCHENER FORMATION: Grey-black dolomite, limestone; green argillite, siltstone



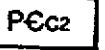
UPPER KITCHENER: Grey-black dolomite, limestone, molar tooth structures; siltstone, quartz arenite



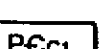
LOWER KITCHENER: Green-beige siltstone, argillite; dolomitic siltstone



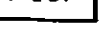
CRESTON FORMATION: Green, grey, mauve siltstone, argillite; white, green quartz arenite



UPPER CRESTON: Quartz siltstone, quartz arenite siltstone; argillite



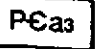
MIDDLE CRESTON: White and green quartz arenite mauve and green quartz arenite and siltstone



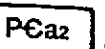
LOWER CRESTON: Grey-black argillite, siltstone and siliceous argillite; green siltstone



ALDRIDGE FORMATION: Quartzite, quartz wacke, siltstone, argillite



UPPER ALDRIDGE: Rusty weathering argillite and siltstone



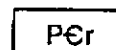
MIDDLE ALDRIDGE: Grey quartzite, quartz wacke; siltstone argillite near top

OPEN FILE MAP NO. 1987-8

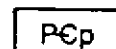
GEOLOGY OF SKOOKUMCHUCK MAP AREA (W $\frac{1}{2}$ SOUTHEASTERN BRITISH COLUMBIA (NTS 82G/13W)

BY GINETTE CARTER AND TRYGVE HØY

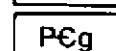
EASTERN FACIES C



ROOSVILLE FORMATION: Green and dark brown oolitic dolomite; quartz



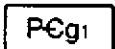
PHILLIPS FORMATION: Maroon to



GATEWAY FORMATION: Dolomite



UPPER GATEWAY:



LOWER GATEWAY: oolitic dolomite

ILLUSTRATION 6 (2 of 2)

OPEN FILE MAP 1987-88

GEOLOGY OF THE SKOOKUMCHUCK AREA

PROSPECTORS ASSISTANCE PROGRAM

LOCATION OF CHRIS BARITE

F. O'GRADY P. Eng.

APRIL 2001

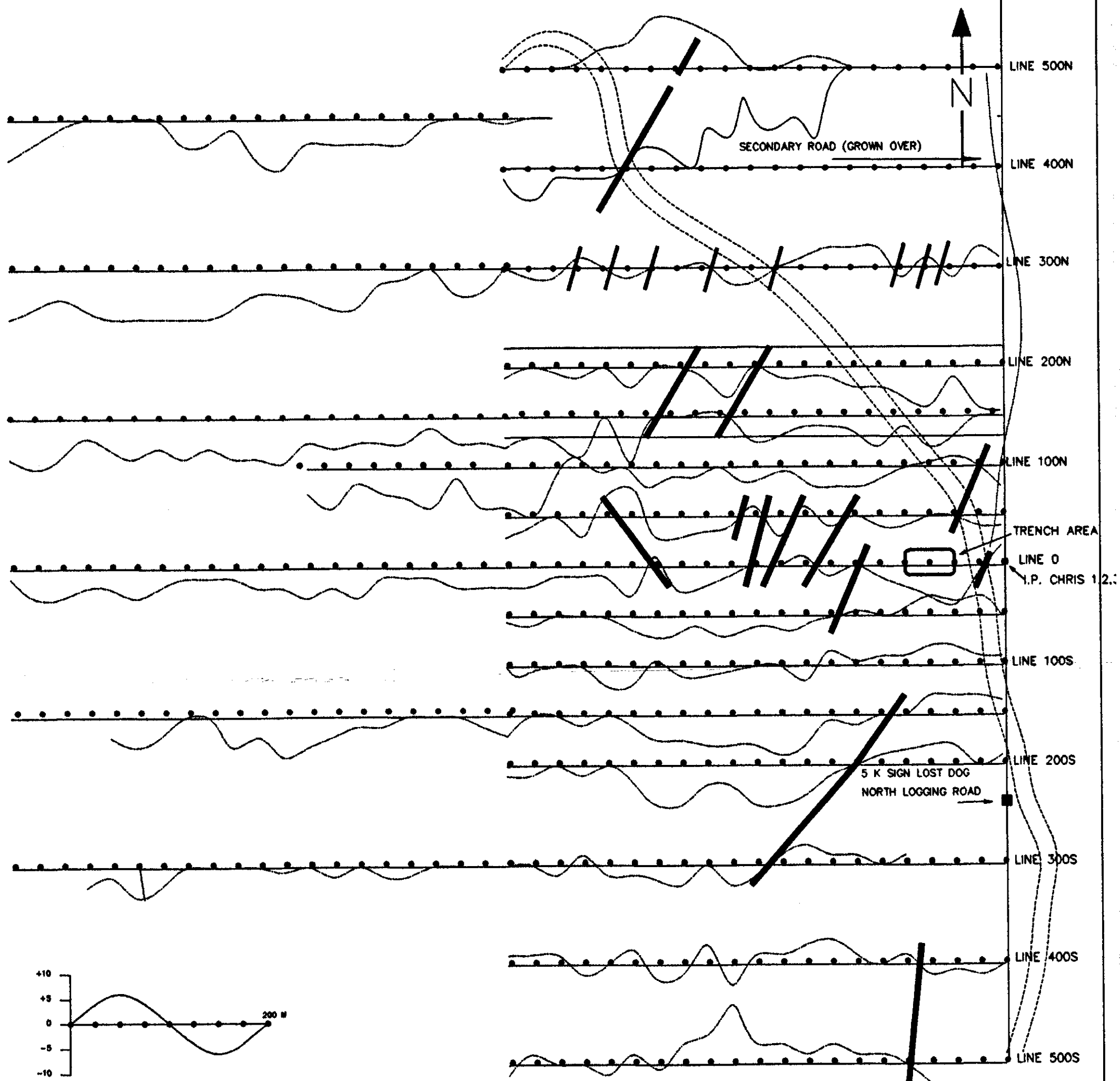


ILLUSTRATION 10

VLF EM PROFILES

PROSPECTORS GRANT 01/02 P28

CHRIS BARITE (Cu) CLAIMS

BCGS MAP 82G081

MINFILE NO. 082GNW081

NTS 82G/13W

SCALE: 1:4,000

F.O'GRADY P.Eng.

DECEMBER 2001

01-17 (1)

