

680947

SLIDE MOUNTAIN PROPERTY

SLIDE 1-11 CLAIMS

CARIBOO MINING DIVISION

SUMMARY REVIEW OF DATA AND EXPLORATION PROPOSAL

for

LABRADOR MINING AND EXPLORATION CO. LTD.

by

I.M. WATSON & ASSOCIATES LTD.

Vancouver, B.C.

May 1982.

I.M. Watson P. Eng.

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INTRODUCTION

This report is a summary review of data pertaining to the Slide Claims, near Slide Mountain on the Quesnel River, B.C. The report includes a proposal and budget for exploration of the property.

The property is situated immediately west of the Dome QR claims which contain a significant gold deposit of the porphyry gold-copper type, presently being explored by Fox Geological Consultants Ltd., on behalf of Dome Mines Ltd.

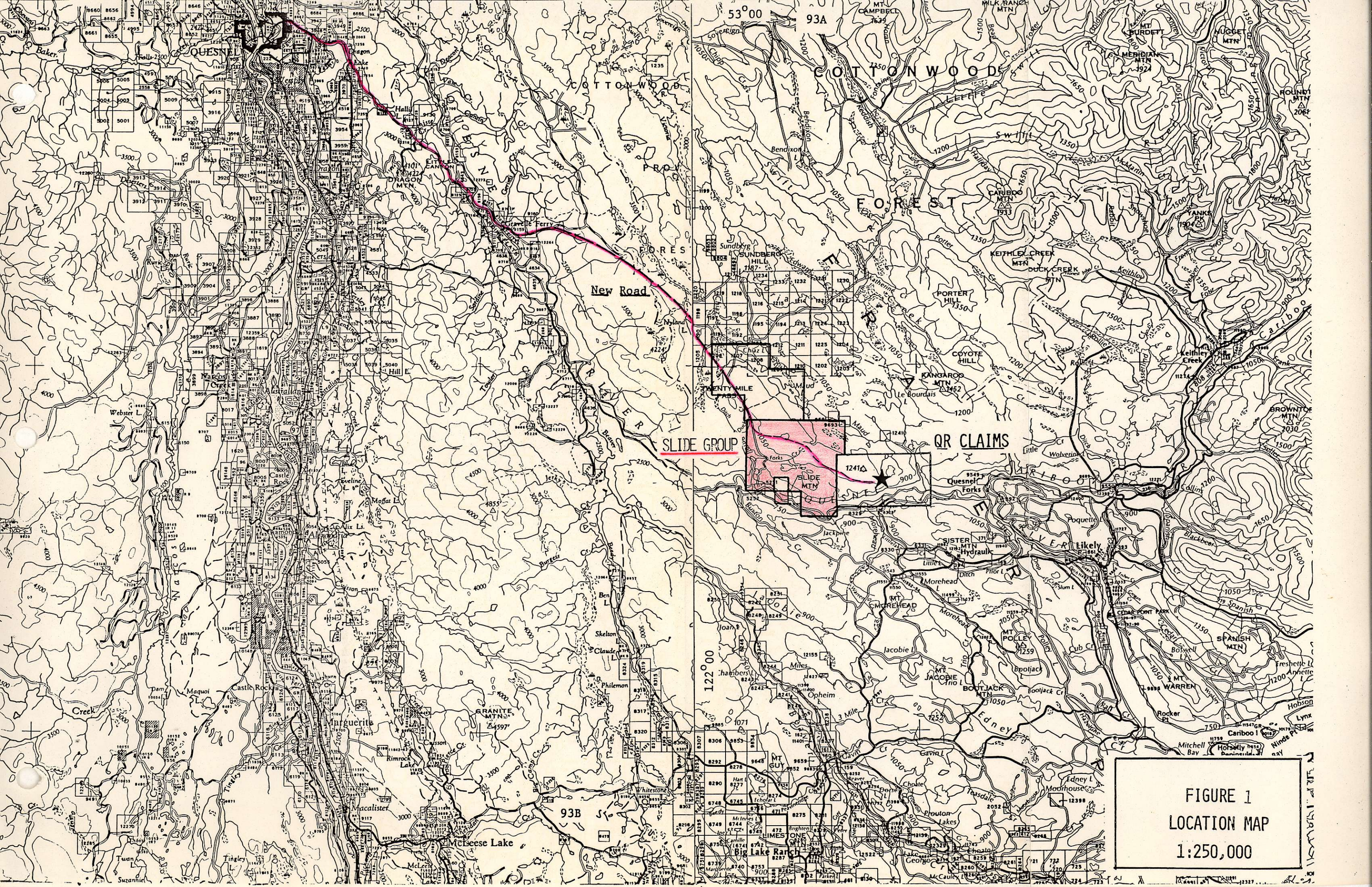
Interest in the Slide Claims arises from the proximity of the Dome gold prospect, and the possibility that the favourable host rock lithology extends into or is repeated within the Slide property.

DATA SOURCES

Information contained in this review has been derived from reports and reviews provided by Labrador, and from B.C. Ministry of Mines annual reports and assessment reports. (See References and the appendix to this report).

LOCATION (Figure 1)

- Approximately 70 kms. north-east of Williams Lake, at Slide Mountain on the north bank of Quesnel River, in the Cariboo Mining Division.
- Latitude $52^{\circ} 40'$
- Longitude $121^{\circ} 48'$
- NTS Ref. 93A/12W



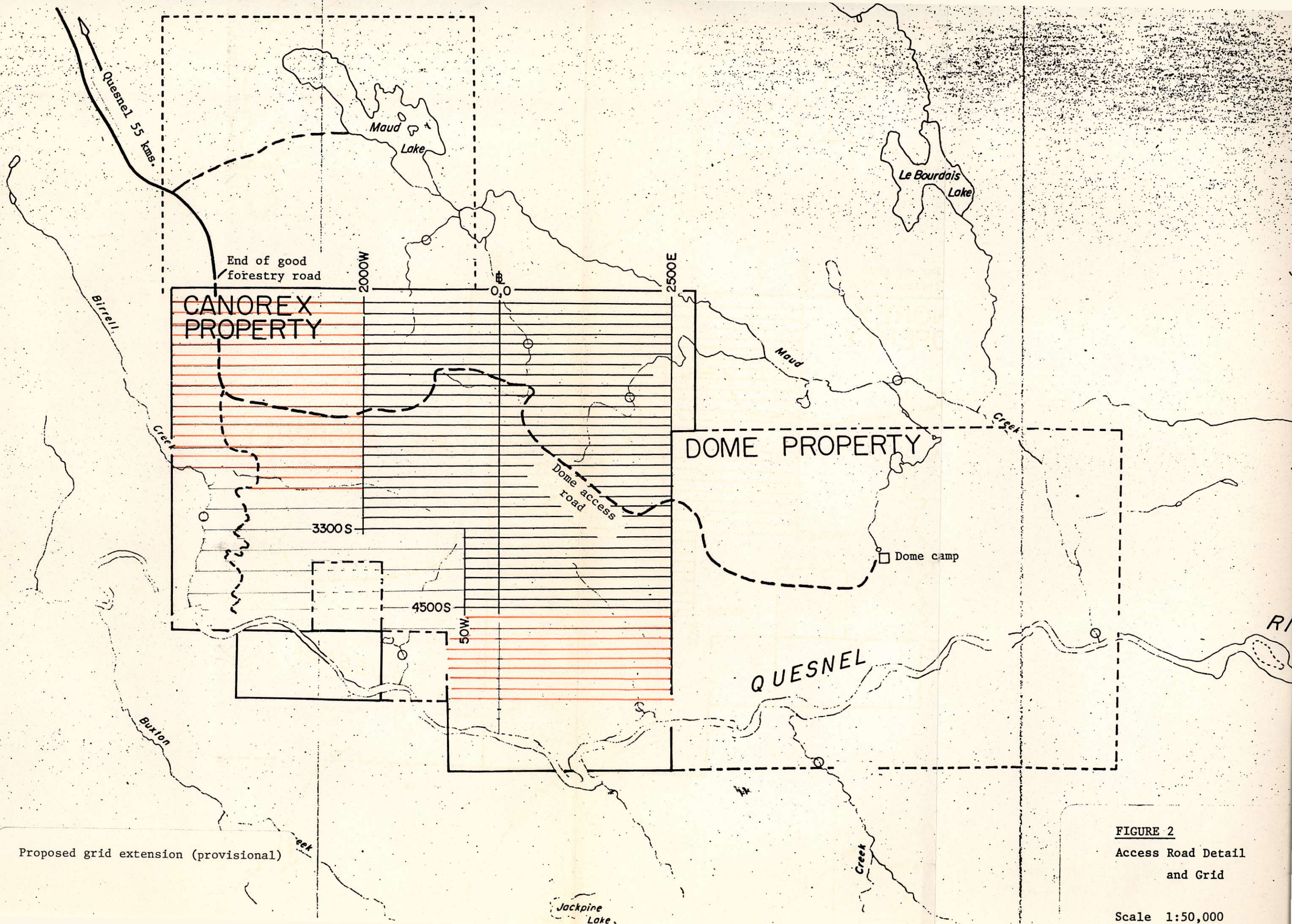
New Road

SLIDE GROUP

QR CLAIMS

1241

FIGURE 1
LOCATION MAP
1:250,000



Proposed grid extension (provisional)

FIGURE 2
Access Road Detail
and Grid

Scale 1:50,000

ACCESS (Figure 2)

Best and shortest road access to the property is by the Quesnel River/Dragon Mountain road from Quesnel to Gravelle Ferry and thence by a new, good, forestry road to Ducks Creek, at the north-eastern corner of the Slide Property. The road continues south-east across the Slide claims to the Dome camp on the QR property.

The distance from the Quesnel to the Slide claims is approximately 65 kms., a one and a half hours drive.

CLAIMS (Figure 3)

The 11 claims, 186 unit property was staked by Canorex in March 1981. The claims are listed by McInnis (1982) as follows:

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Slide 1	20	3361	April 8, 1982.
Slide 2	20	3351	April 8, 1982.
Slide 3	20	3352	April 8, 1982.
Slide 4	15	3353	April 8, 1982.
Slide 5	15	3354	April 8, 1982.
Slide 6	20	3355	April 8, 1982.
Slide 7	20	3356	April 8, 1982.
Slide 8	20	3357	April 8, 1982.
Slide 9	8	3358	April 8, 1982.
Slide 10	16	3359	April 8, 1982.
Slide 11	12	3360	April 8, 1982.

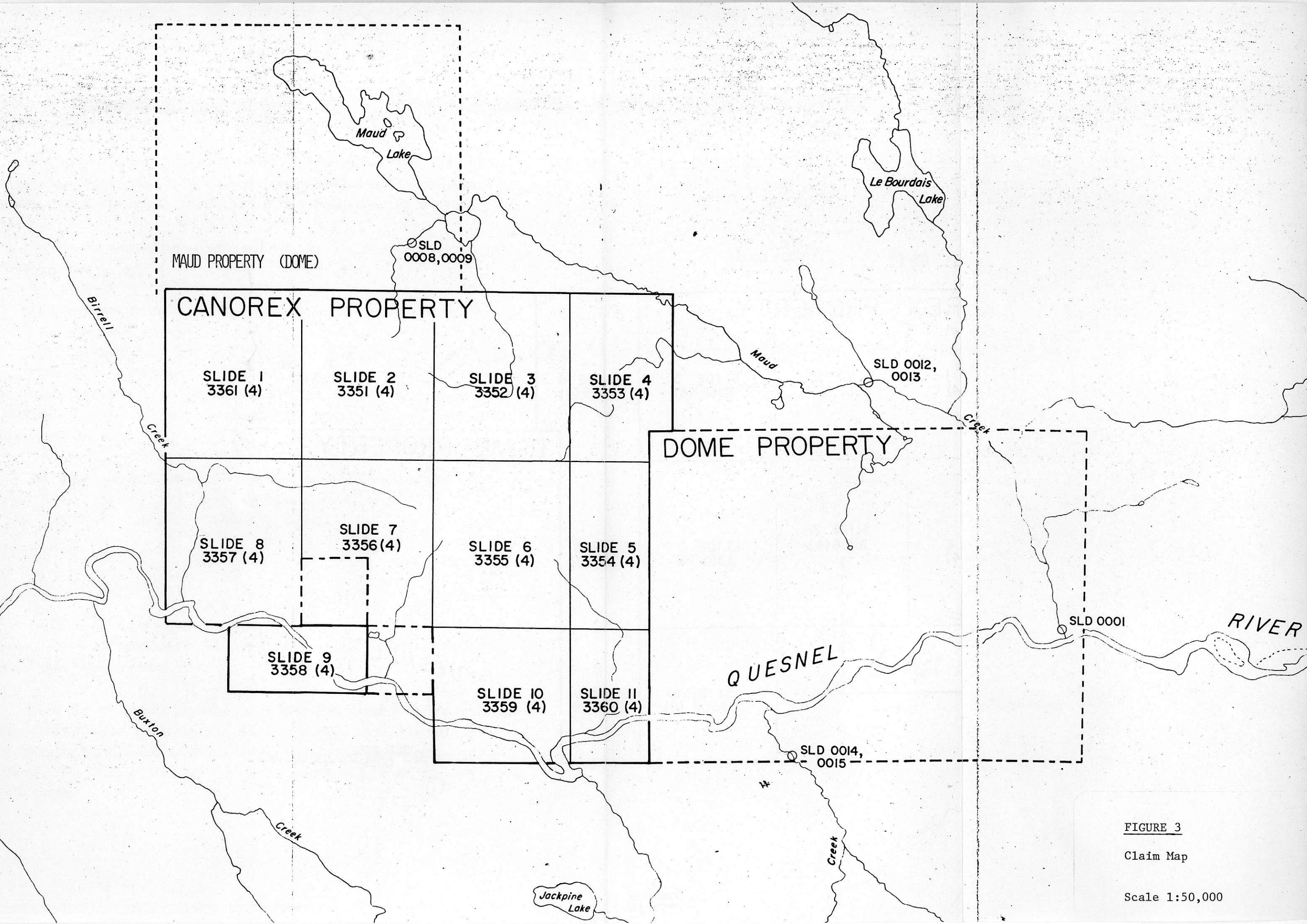


FIGURE 3

Claim Map

Scale 1:50,000

PREVIOUS WORK (Figures 4-7)

Figures 4-7 depict, in cartoon form, the extent, nature, and results of previous work in the Slide Mountain area, as recorded in assessment reports and in the annual reports of the B.C. Department of Mines.

Figure 4 shows the areas surveyed and the type of survey carried out by each company.

Figures 6 and 7 portray the geophysical and geochemical anomalies resulting from these surveys.

Figure 5 is a geological compilation of work by Nippon, Shell, and Dome, and includes information derived from definitive mapping by Bailey (1976) in the Morehead Lake area immediately south of the Slide and Dome QR properties.

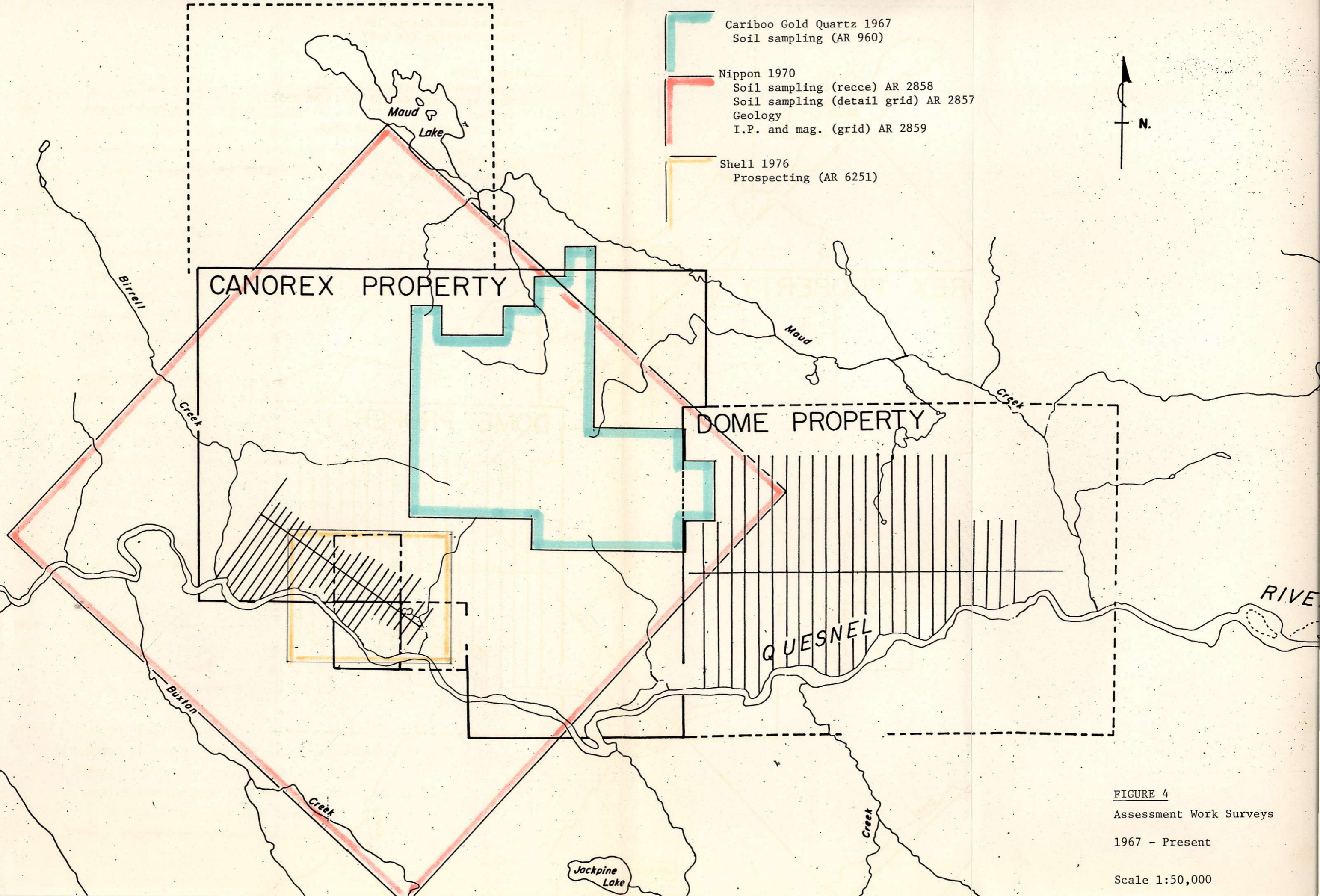
The following is a summary of the work recorded/reported on

- a) Slide Mountain property area
- and b) The Dome QR property

a) Slide Mountain Area

Earliest activity appears to have been placer gold operations on the Quesnel River and on Birrell Creek, but there are no records of this work in the government reports.

Since the mid 1960's exploration in the area has been directed towards copper. Particular attention was focussed on chalcocite, bornite, and tetrahedrite showings in limestone outcropping along the north bank of the Quesnel River, in the area now covered by the Slide 7, 8 and 9, and Stone 1 and 2 claims.



Cariboo Gold Quartz 1967
 Soil sampling (AR 960)

Nippon 1970
 Soil sampling (recce) AR 2858
 Soil sampling (detail grid) AR 2857
 Geology
 I.P. and mag. (grid) AR 2859

Shell 1976
 Prospecting (AR 6251)

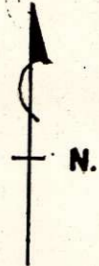


FIGURE 4
 Assessment Work Surveys
 1967 - Present
 Scale 1:50,000

- 196? Noranda Exploration Company Ltd.
Bulldozer trenching of limestone hosted copper showings.
Possible mapping and prospecting of area (no records or reports of work in B.C. government files)
- 1966-67 Cariboo Gold Quartz Mining Company Ltd. bought 59 claims from E. Hewett and Associates. (CGQ group)
- Soil sampling survey on 400' x 200' grid (1857 samples) during January 1967, through two foot snow cover. Samples were tested in the field for copper (acetic-acid/rubeanic acid test), Assessment Report 960. (Area sampled and 'anomalies' detected indicated in Figures 4 and 6).
- 1970 Nippon Mining of Canada Ltd.
Slide Group - 400 claims.
- Reconnaissance soil sampling survey (Cu, Mo, Ag) of entire group, using claim lines for control. 1200 samples (approx. three samples/claim). Assessment Report 2858 (Figures 4 and 6).
- Detail soil sampling survey (Cu) over 33 claim area in south-west portion of claim group. 950 samples were collected over a 400' x 100' grid (Figure 6). Assessment Report 2875.
- Geological survey (Figure 5) Assessment Report 2858.
- I.P. and magnetometer surveys over grid area in the south-west part of the claim group (13.4 line miles), (Figure 7)
- 1976 Shell Canada Resources Ltd.
RIV Group - 20 claims. (Claim area is the same as that covered by the Nippon 'detailed' grid in 1970).
- Prospecting, test-pitting and sampling. (Figure 4)
- 1981 Canorex Resources Inc.
Staked 11 claim - 186 unit property in March 1981.
April - limited stream sediment sampling
Sept. - linecutting - 139 line kms. 150m x 25m grid
(NS base line, E-W grid lines)
Oct. - property optioned to Norcen

LEGEND

12 Glacial

CRETACEOUS

9 Hornblende monzonite & syenite

JURASSIC

5 Analcite basalt

4 Monzonite, syenite, diorite

3 Volc. sediments

3F Felsic cong.

3E Felsic sst.

3D Lst.

3A Laharic bx.

TRIASSIC

2 Basic lavas

2D Basalts

2B Basalt bx, minor sed.

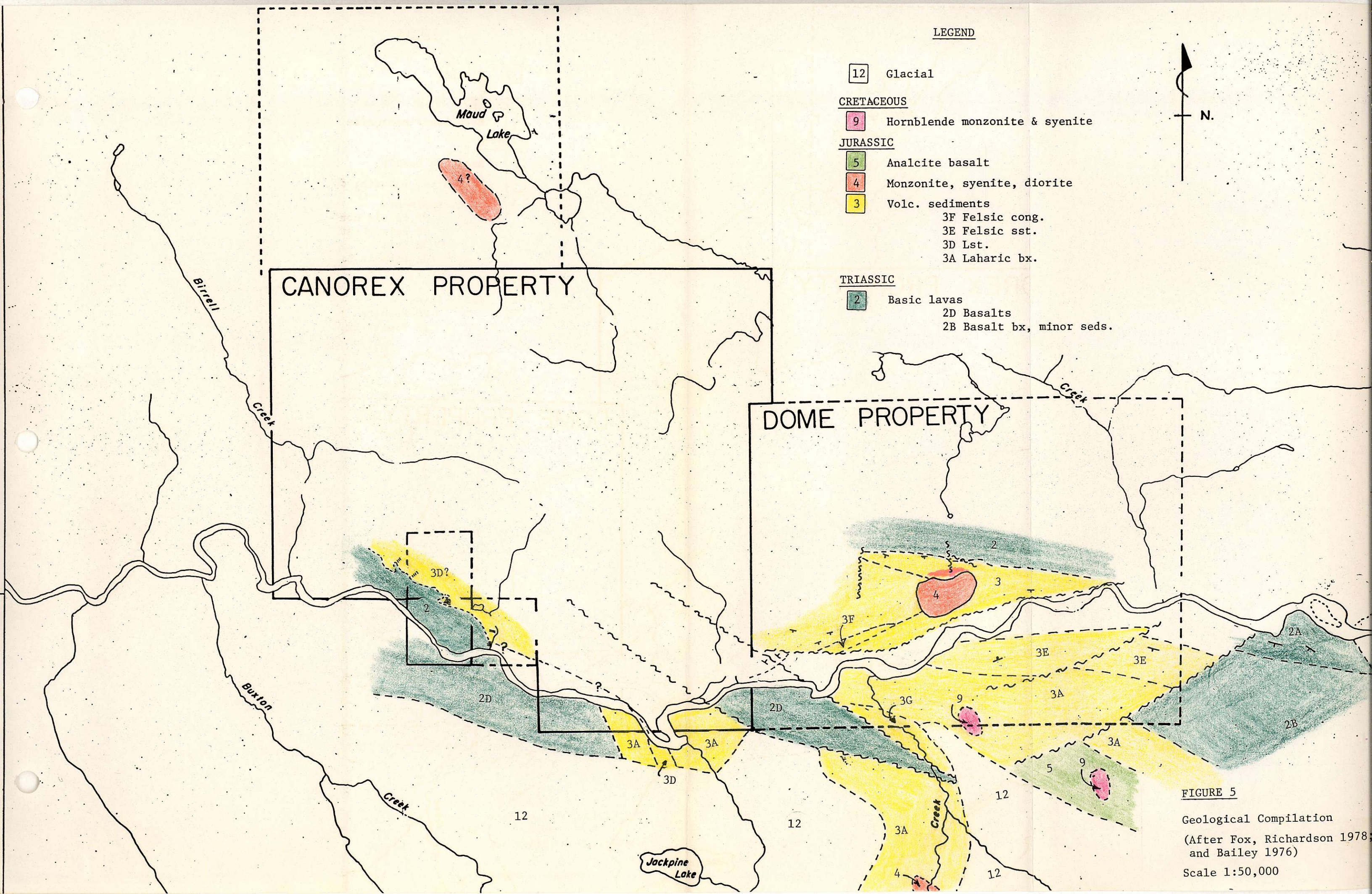
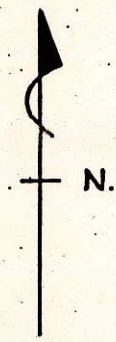


FIGURE 5

Geological Compilation
 (After Fox, Richardson 1978,
 and Bailey 1976)
 Scale 1:50,000

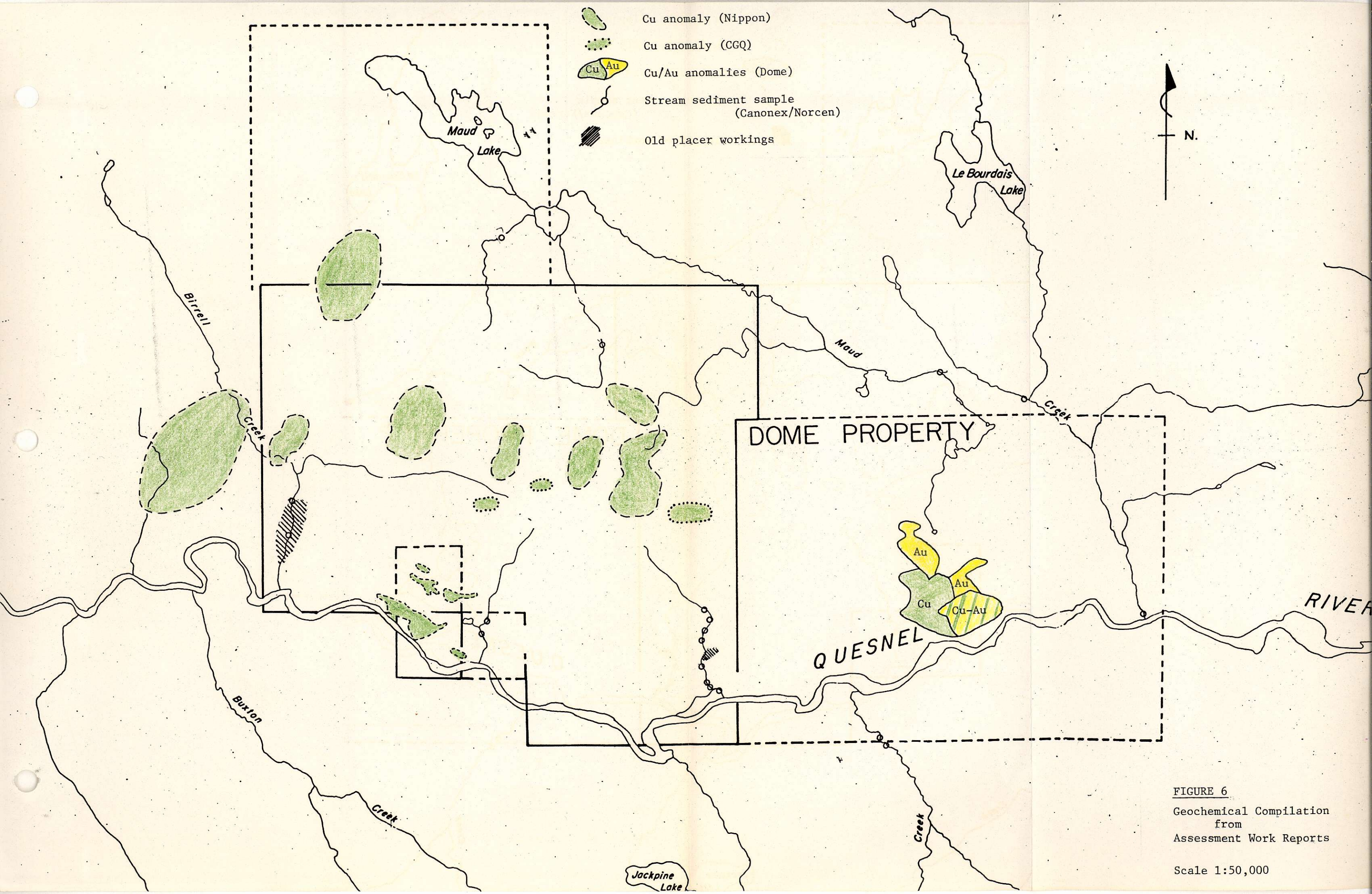


FIGURE 6
 Geochemical Compilation
 from
 Assessment Work Reports
 Scale 1:50,000

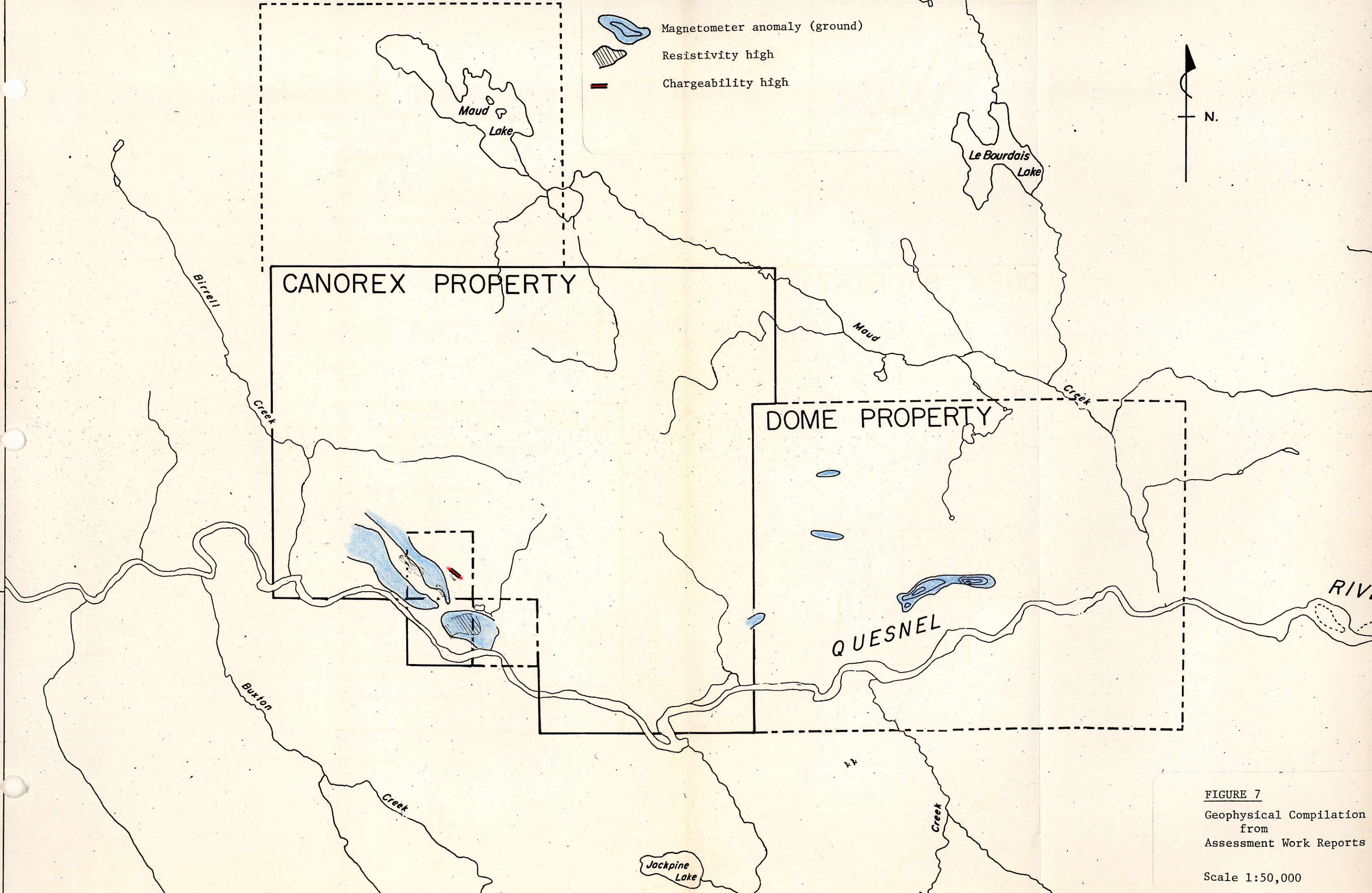


FIGURE 7
 Geophysical Compilation
 from
 Assessment Work Reports
 Scale 1:50,000

- b) Dome QR Property - Information on this area is derived mainly from the Assessment Reports: 6079 (Nov.'76); 6730 (Apr.'78); and 6967 (Nov.'78).

1975 PR 2-5 (35 units) staked by Fox Geological for the Cariboo Project (a joint venture between Newconex and Dome supervised by Fox Geological) to cover a stock and enclosing sediments and volcanic rocks.

1976 - Geochemical soil sampling
- Magnetometer survey
- Geological mapping } on 19.1 miles 400m x 100m flagged grid
(All work done by Fox Geological)

1977 PR claims abandoned and ground restaked as QR 1-6 (100 units)
- Survey grids expanded to cover larger area
- Magnetometer, geochemical and geological surveys extended to cover most of the claim group.
- Percussion drilling (9 holes, footage undisclosed)
- Diamond drilling (at least three holes, but number and footage not reported)

1978 - Percussion drilling (25 holes, 2028 metres) on the QR 1 and 3 claims, along northern margin of stock.
- 2.2 kms. drill access roads built.

1980-81 - Geochemical, magnetometer and I.P. surveys
- Diamond drilling (details unavailable)
- Access road improvement (section between Maud Lake turn off and QR camp)

1982 - Diamond drilling (no published data)

In addition to the work on the QR claims Dome/Fox has explored the 58 claim Maud Group immediately north of the Slide Group (B.C. Annual reports, 1974 and 1975).

- 1974 - Soil sampling - 528 samples from 24 mile grid covering entire property
- 1975? - Geological mapping
 - E.M. survey - (19 line kms. on Maud 1-21, 23, 25, 27, 29, 31, 37, 39, 41)
 - Magnetometer survey (40 line kms.)
 - Road building (5 kms.)
 - Trenching (300m on Maud 3, 4 and 18)

Further work is intended on the Maud claims during 1982.

GEOLOGY

a) General

The Slide and QR properties lie within the Quesnel Trough at the Morehead Lake-Quesnel River area 'constriction'. The succession in this part of the Trough consists mainly of Mesozoic volcanic rocks and derived sediments, and minor marine sediments. Intruding the volcanics and sediments are complex intrusive stocks and sills of quartz-monzonite, diorite, and syenite. Examples of this type of intrusion, with associated porphyry copper type mineralisation, are the Mt. Polley (Cariboo Bell) and Morehead Creek stocks south of the Quesnel River, and the QR and Maud property stocks north of the Quesnel (Bailey 1976).

The trend of the Trough rocks is dominantly north-north westerly, with dips towards the central axis; at the Quesnel River this trend swings abruptly east-west.

The structural style of the Trough is characterised by north-easterly trending block-faults. Folding is rare. A major north-westerly trending lineament or fault system is recognisable north and south of the Slide Mountain area, and coincides with the alkalic stocks at Maud, Shiko, and Kwun Lake. (Bailey 1976)

b) Slide/QR area

Mapping of the Slide property has been confined to a small area in the southern part of the claim group underlain by the copper bearing limestones explored by Nippon, Shell and Noranda.

Best information comes from mapping by Dome of the QR property, and by Bailey (1976) of the Morehead Lake area immediately south of the Slide and QR properties, as depicted in Figure 5. The QR stock (unit 4) intrudes easterly striking basalts and volcanic metasediments. The sediments and volcanics along the north contact of the stock are propylitised, with strong development of pyrite and epidote.

The easterly strike reverts to north-westerly, probably in the eastern part of the Slide property. The copper bearing limestones in the southern part of the Slide claims probably correlate with the Jurassic (Hettangian) massive limestone (unit 3D) mapped by Bailey on the south bank of the Quesnel River.

No intrusive stocks have been recognized so far on the Slide property; the large airborne magnetic anomaly covered by the claims may arise from a volcano-intrusive complex of the QR - Mt. Polley type.

QR GOLD DEPOSIT

Original interest in the QR property lay in its potential as a porphyry copper deposit. Attention was drawn to gold by the detection of gold soil anomalies in 1976. Drilling revealed interesting gold values in the pyrite-epidote alteration zone immediately north of the QR stock. In April 1981 Dome announced that the deposit contained drill-indicated reserves of 750,000 tons grading 0.20 ozs Au/ton.

In May 1982, following further drilling and calculation of reserves, Dome's annual report announced drilled reserves of 950,000 tons grading 0.21 Ozs Au/ton "in a compact near surface deposit"; also reported was "the delineation of several geochemical/geophysical targets within the same favourable geological environment as the original discovery".

Gold is believed to occur within heavily pyritised and epidote rich volcanic sediments along the north contact of the stock. Although there is a broad stratigraphic control, the distribution of the gold within the 1.4 unit (s) is complex and not fully understood. Ore 'shoots' cross-cut stratigraphy and the zone is apparently displaced by strong north-south faults.

Exploration Methods

Geological mapping, soil sampling, magnetometer, and, at a later stage, I.P. surveys are effective primary exploration tools.

a) Geochemistry - Interpretation of geochemistry requires caution due to the complexity of ice movement in this area; the main northerly movement is locally significantly modified by the Quesnel River channel and bedrock highs.

b) Magnetometer surveys are useful as an aid to geological interpretation. Strong highs are produced by the often arcuate hornfels magnetite rich, alteration zones. Basalts also cause complex highs, not readily distinguishable from those produced by the alkalic stocks. The QR 'gold zones' are only weakly magnetic and have little or no magnetic expression.

c) I.P. is effective in detecting the pyrite rich host deposits; however, as noted above, the gold is restricted to relatively small 'shoots' within the pyritic host.

d) E.M. (VLF) may be effective as a mapping aid, particularly in detecting important cross-cutting faults. EM methods have been tested on the QR pyritic host zone, but the sulphides apparently lack the 'continuity' to conduct.

DISCUSSION OF PREVIOUS WORK, SLIDE PROPERTY AREA

Geological and geophysical work reported over the area of the present Slide Group has been confined to the south-western part of the property (area of detailed grid, Figure 4).

Soil sampling surveys by Nippon and Cariboo Gold Quartz have covered most of the area, but none of the samples was analysed for gold.

The Nippon reconnaissance survey included molybdenum and silver, as well as copper, but sampling was too sparse to be effective for a precious metal target (three samples per claim), except in the detailed grid area where samples were analysed for copper only. No molybdenum or silver anomalies were detected by the reconnaissance work.

The Cariboo Gold Quartz programme covered about 25% of the present Slide group area. Samples were analysed for copper only, and the analytical method used is not reliable by present standards.

None of the work done to date contributes significantly to exploration for a QR type gold deposit; the potential for this target remains untested. Future exploration will require complete geological, geophysical and geo-chemical coverage of the property, as proposed below.

LOGISTICS

The Dome QR camp will be vacant this season and it has been proposed that Labrador/Vanco rent the camp for \$500.00/month. Dome/Fox have agreed to this arrangement. The camp is fully equipped, with the possible exception of a cooking stove. Use of this camp will represent a great saving in time, material and living expenses. Dome benefit by having a "caretaker" in an area prone to theft during the summer months.

PROPOSED EXPLORATION PROGRAMME SLIDE GROUP 1982

1. Preliminary property examination (approx. June 7th depending on ground and access conditions)
Purpose -
 - 1.1) To inspect access road on Slide and QR properties
 - 1.2) To check the Dome camp to establish camp and equipment requirements
 - 1.3) To check bedrock strikes on the Slide property so that extension/modification of the existing grid can be planned.
2. Preparation of air photo based contour plan of property, 1:500 scale.
3. Establish base at Dome QR camp (assuming no access or major equipment problems), approx. mid June.
4. Property work as follows:
 - 4.1) Line cutting: - modification of existing grid, if necessary (see 1.3 above).
 - extension of existing grid to cover all accessible areas of property, estimated 55 kms. at 150 metre line spacings. (see Figure 2)

- 4.2) Geological mapping - using grid, photos and contour plans for control.
- 4.3) Geochemical soil sampling - (analyses for Au, by AA method, and 30 element ICP, approx. 2500 samples)?
- 4.4) Magnetometer survey
- 4.5) VLF-EM - test orientation traverses over known lithological and structural features, particularly major faults, on the Dome QR property. (To be done on a mutual benefit basis, with Dome's approval.) Any work on the Slide property would depend on the success of the test work.
- 4.6) I.P. survey - area of survey to be selected on the basis of results of mapping, geochemical magnetometer and VLF EM?, surveys.

Further work would be dependent on the results of the above programme.

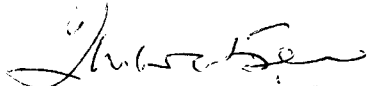
BUDGET PROPOSAL - SLIDE GROUP PROJECT 1982

Period 15th June to 15th August 1982.

01	Salaries and Fringe	\$ 30,000
02	Accommodation, Board and Travel	6,200
03	Radio, Telephone, Postage and Freight	1,300
04	Vehicle Expenses	3,500
05	Equipment Rental	4,400
06	Equipment Purchase	2,200
07	Geochemical/Assays	20,600
08	Reproductions, Maps and Publications	3,600
09	Insurance	1,000
10	Draughting	1,000
11	Fees and Administration	15,900
12	Linecutting	11,150
	TOTAL	<u>\$ 100,850</u>

Prepared by:

I.M. WATSON & ASSOCIATES LTD.



I.M. Watson, P.Eng.

REFERENCES

- | | | |
|----------------|------|---|
| Bailey, D. G. | 1976 | Notes to Accompany Preliminary Map No. 20
Morehead Lake Area, B.C. (B.C. Department
of Mines) |
| Campbell, R.B. | 1961 | Preliminary Map 93A West Quesnel River
GSC Map 3-1961 |
| McInnis, M. | 1981 | Summary Report on the Slide Claim Group
for Canorex International, Inc. |
| | 1982 | Linecutting and Geochemical Report on the
Slide 1-11 Claims |
| Ryan, T. | 1982 | Memo re: Slide Project B.C.
Labrador Mining and Exploration Co. Ltd. |
| Salazar, G. | 1981 | Slide Project, Summary Report |
| Slingsby, A. | 1981 | Inter office memo re: Slide Mountain
Norcen Energy Resources Ltd. |

ASSESSMENT REPORTS

a) Slide Mountain Area

- AR 960 1967 - Report on Geochemical Survey C.G.Q. Group
E. Mason and J. Mitchell (Cariboo Gold Quartz Co. Ltd.)

- AR 2857 1970 - Geological and Geochemical Surveys on Slide and
River Groups K. Shuts and E. Chisholm
(Nippon Mining of Canada Ltd.)

- AR 2858 1970 - Geochemical Reconnaissance Survey on Slide Group
K. Shuts and E. Chisholm (Nippon Mining of Canada Ltd.)

- AR 2859 1970 - Report on I.P. and Magnetometer Surveys
Slide Mountain Project J.G. Baird
(Nippon Mining of Canada Ltd.)

- AR 6251 1976 - Prospecting Assessment Report on RIV Claim Group
J.Brander and R. Moore (Shell Canada Resources Ltd.)

b) QR (PR) Property (Dome Mines Ltd.)

- AR 6079 1976 - Geochemical and Geophysical Report on the PR
Mineral Claims P. Fox

- AR 6730 1978 - Soil Geochemical, Magnetic and Geological Surveys
on the QR Claim Group P. Richardson

- AR 6967 1978 - Percussion Drilling on the QR 1 and QR 3 Claims
A. Gambardella and P. Richardson

Extracts from Minister of Mines Annual Reports and Dome Mines Annual Report for 1981 in appendix.

B.C. MINISTER OF MINES

ANNUAL REPORTS

(EXTRACTS)

43,400,000

SLIDE, RIVER (No. 192, Fig. H)

LOCATION: Lat. 52°37.2-43.7' Long. 121°48.7-59.2' (93A/12W)

Astride Quesnel River and on Slide Mountain, 40 miles southeast of Quesnel.

CLAIMS: SLIDE, RIVER, totalling 408.

ACCESS: By four-wheel-drive vehicle from Quesnel, 40 miles.

OWNER: NIPPON MINING OF CANADA LTD., 607, 475 Howe Street, Vancouver 1.

METAL: Copper.

DESCRIPTION: Chalcocite disseminations and veinlets in dolomitic limestone.

WORK DONE: Surface geological mapping, 1 inch equals 400 feet on 33 claims; induced polarization and magnetometer survey, 19.5 line-miles covering 33 claims; geochemical soil survey, 2,150 samples covering 25 claims.

REFERENCES: Assessment Reports 2857, 2858, 2859.

MINNE 1970 P.207

SLIDE, RIVER (No. 80, Fig. D)

LOCATION: Lat. 52° 39.8' Long. 121° 54' (93A/12W)

CARIBOO M.D. At approximately 2,800 feet elevation on the north bank of the Quesnel River, near Slide Mountain, 40 miles southeast of Quesnel.

CLAIMS: SLIDE, RIVER, totalling 71.

ACCESS: By four-wheel-drive vehicle from Quesnel, 40 miles.

OWNER: NIPPON MINING OF CANADA LTD., 607, 475 Howe Street, Vancouver 1.

METAL: Copper.

DESCRIPTION: Three chalcocite showings occur in dolomitic limestone along the boundary between the limestone and an andesitic volcanic complex.

WORK DONE: Surface geological mapping, 1 inch equals 5 feet on Slide 289 and 1 inch equals 20 feet on River 4 (surveying trench); geochemical soil survey, 1,070 samples covering 69 claims of Slide group; trenching, 30 feet on Slide 289.

REFERENCE: B.C. Dept. of Mines & Pet. Res., G.E.M., 1970, p. 207.

MINNE 1971 P.105-6

CIR 1977

RIV (Fig. E-1, NTS 93, No. 4)

LOCATION: Lat. 52° 40' Long. 121° 54' (93A/12W)
CARIBOO M.D. North of the Quesnel River, 1.5 kilometres east of
Slide Mountain.
CLAIM: RIV (20 units).
OWNER: Thomas E. Lisle.
OPERATOR: SHELL CANADA RESOURCES LTD., Box 100, Calgary, Alta.
T2P 2H5.
METAL: Copper.

DESCRIPTION: Mineralization consists of chalcocite, bornite, and occasional
chalcopyrite occurring in erratic fractures at a dolomitic/limestone
volcanic contact. Maximum thickness ranges up to 3 metres. Purple
amygdaloidal and fragmental flows of an intermediate to mafic
composition with grey and black (dolomitic) limestone constitute the
lithologies.

WORK DONE: 1976 - prospecting; 1977 - geological mapping (21 days mapping,
prospecting, and examining previous trenching); grab samples taken
from trenches and showings.

REFERENCES: Mineral Inventory 93A-40, 41; B.C. Ministry of Mines & Pet. Res.,
GEM, 1971, pp. 135, 136; Assessment Report 6251.

(93A/7E)

EN (93A-11) (Fig. D, No. 11)

LOCATION: Lat. 52° 19' Long. 120° 38' (93A/7E)
CARIBOO M.D. Between 5,000 and 7,950 feet elevation 30 miles east of Horsefly (access is by dirt road from 150 Mile House; a 6-mile four-wheel-drive vehicle road leaves Horsefly River at MacKay Creek).

CLAIMS: EN 1 to 6, 14, 28, 29 Fraction, 104 to 107, 109, 126, 127, 129, EU 1 to 26, CS 55 and 56.

OWNERS: E. Scholtz and J. Carson.

OPERATOR: NORANDA EXPLORATION COMPANY, LIMITED, Box 2380, Vancouver V6B 3T5.

METAL: Copper.

DESCRIPTION: Chalcopyrite, pyrrhotite, and pyrite occur in pods, veins, and as disseminations in granodiorite and augite porphyry. On Eureka Mountain, a thick sequence of siltstones and phyllites has been intruded successively by irregular bodies of amphibolite, augite porphyry, and granodiorite within the Quesnel Trough Mesozoic volcanic sequence.

WORK DONE: IP survey, 1.6 line-miles, 400-foot grid spacing covering EN 6, 29 Fraction, 105, and 127; surface diamond drilling, two holes totalling 1,204 feet on EN 6.

REFERENCES: *B.C. Dept. of Mines & Pet. Res.*, GEM, 1972, pp. 331, 332; Assessment Report 5215.

CEDAR (Fig. D, No. 13)

LOCATION: Lat. 52° 35' Long. 121° 30' (93A/12E, 11W)
CARIBOO M.D. Four miles southeast of Likely on the north side of Cedar Creek, at 4,700 feet elevation.

CLAIMS: CEDAR 1 to 12, 16, 17, 19, 21, 23, 25, 27, ROSE 1 to 6.

OWNER: UNION CARBIDE EXPLORATION CORPORATION, 601, 1112 West Pender Street, Vancouver.

DESCRIPTION: The claims are underlain by andesite and phyllitic black argillite.

WORK DONE: Magnetometer survey, 5.9 line-miles, 400-foot grid spacing covering Cedar 4-8, 21, 23; IP survey, 5.5 line-miles, 400-foot grid spacing and geochemical soil survey, 8 line-miles, 400-foot grid spacing, 414 samples covering Cedar 4-9, 12, 21, 23, 25; surface diamond drilling, four holes totalling 1,694 feet on Cedar 8; linecutting, 9.1 miles on Cedar claims; road construction, 400 feet on Cedar 8.

REFERENCES: *B.C. Dept. of Mines & Pet. Res.*, GEM, 1973, p. 293; Assessment Report 5198.

MAUD (93A-119) (Fig. D, No. 14)

LOCATION: Lat. 52° 44' Long. 121° 55' (93A/12W)
CARIBOO M.D. Fifteen miles northwest of Likely, on the west side of Maud Lake, at approximately 3,700 feet elevation.

CLAIMS: MAUD 1 to 58.

(93B/1E)

OWNERS: DOME EXPLORATION (CANADA) LIMITED, 600, 365 Bay Street, Toronto, Ont. and NEWCONEX CANADIAN EXPLORATION LTD., Box 40, Toronto-Dominion Centre, Toronto, Ont.

METAL: Copper.

DESCRIPTION: Weakly disseminated chalcopyrite occurs in pyritic volcanic breccias. An augite diorite stock is enclosed by altered volcanic breccias.

WORK DONE: Geochemical soil survey, 24 line-miles, 500-foot grid spacing, 528 samples covering all claims.

REFERENCE: *B.C. Dept. of Mines & Pet. Res.*, GEM, 1970, p. 207 (LEM).

QUESNEL 93B

EM (93B-31) (Fig. D, No. 15)

LOCATION: Lat. 52° 06' Long. 122° 01' (93B/1E)
CARIBOO M.D. Approximately 1 mile south of the east end of Williams Lake, at approximately 2,000 feet elevation.

CLAIMS: EM 2, 4, 6, 7, 9, ALEX Fraction.

OWNER: CARPIQUET MINES LTD., Box 157, Ashcroft.

METAL: Copper.

DESCRIPTION: Disseminated chalcopyrite and bornite occur in a granodiorite of Mesozoic age.

WORK DONE: Surface diamond drilling, two holes totalling 125 feet on EM 7.

GIBRALTAR MINE (93B-6, 7, 12, 13) (Fig. D, No. 100) By A. D. Tidsbury

LOCATION: Lat. 52° 31' Long. 122° 17' (93B/9W)
CARIBOO M.D. Twelve miles north of McLeese Lake, on Granite Creek and Lake, at approximately 4,000 feet elevation.

CLAIMS: A total of 325 claims, 134 of which are held under mineral leases.

OWNER: GIBRALTAR MINES LTD., Box 130, McLeese Lake.

METALS: Copper, molybdenum (production shown in Table 6).

DESCRIPTION:

Gibraltar mine is a unique plutonic porphyry copper-molybdenum deposit of Triassic age. Three major orebodies are distributed about a felsic core of a deformed zoned quartz diorite pluton. The orebodies are to be mined in sequence with the first stage of each involving production from the secondarily enriched part of the orebodies.

In 1974 activity occurred at all three bodies: stage 1 was completed at East Gibraltar, mining transferred to the Granite Lake orebody, and initial stripping occurred at the Pollyanna. The geology of the Granite Lake body is similar to East Gibraltar (GEM, 1973, p. 299-318), but the less deformed felsic core rocks are exposed as the western rim of the pit. Exposures of the orebody underneath the former lake show no oxidation or enrichment although this develops rapidly to the west.

(93A/12W)

MAUD (Fig. E-1, NTS 93, No. 7)

LOCATION: Lat. $52^{\circ} 44'$ Long. $121^{\circ} 55'$ (93A/12W)
CARIBOO M.D. Nineteen kilometres northwest of Quesnel Forks, on the west side of Maud Lake, at approximately 1 200 metres elevation.

CLAIMS: MAUD 1 to 58.

OWNERS: DOME EXPLORATION (CANADA) LIMITED, 600, 365 Bay Street, Toronto, Ontario M5H 2V4 and NEWCONEX CANADIAN EXPLORATION LTD., Box 40, Toronto-Dominion Centre, Toronto, Ontario M5K 1B7.

METAL: Copper.

DESCRIPTION: Weakly disseminated chalcopyrite occurs in pyrite-rich volcanic breccias.

WORK DONE: Surface geological mapping, 1:6000, covering Maud 1-58; electromagnetic survey, 19 line-kilometres, 166-metre grid spacing, covering Maud 1-21, 23, 25, 27, 29, 31, 37, 39, 41; magnetometer survey, 40 line-kilometres, 166-metre grid spacing, covering Maud 1-58; road construction, 5 kilometres on Maud 1, 3, 4, 13, 15, 16, 18, 27, 29, 30, 32 (between Twenty Mile Pass and Maud Lake); trenching, 300 metres on Maud 3, 4, and 18.

REFERENCES: *B.C. Dept. of Mines & Pet. Res.*, GEM, 1974, p. 240; MI 93A-119.

ML (Fig. E-1, NTS 93, No. 8)

LOCATION: Lat. $52^{\circ} 35'$ Long. $121^{\circ} 47'$ (93A/12W)
CARIBOO M.D. Fifteen kilometres west of Likely, 2 kilometres south of the west end of Morehead Lake, at approximately 1 000 metres elevation.

CLAIMS: ML 1 to 24.

OWNERS: DOME EXPLORATION (CANADA) LIMITED, 600, 365 Bay Street, Toronto, Ontario M5H 2V4 and NEWCONEX CANADIAN EXPLORATION LTD., Box 40, Toronto-Dominion Centre, Toronto, Ontario M5K 1B7.

DESCRIPTION: Chalcocite, bornite, and chalcopyrite are disseminated in limestone and maroon to grey sandstone.

WORK DONE: Surface geological mapping, 1:10 000, covering all claims; trenching, 260 metres on ML 4, 12, and 21.

REFERENCES: *B.C. Dept. of Mines & Pet. Res.*, Geological Fieldwork, 1975, p. 59; MI 93A-118.

BJ, CARIBOO-BELL (Fig. E-1, NTS 93, No. 9)

LOCATION: Lat. $52^{\circ} 33'$ Long. $121^{\circ} 38'$ (93A/12E)
CARIBOO M.D. Eight kilometres southwest of Likely, on Mount Polley, at approximately 1 200 metres elevation.

CLAIMS: BJ, BOOTJACK, RED, GREEN, totalling approximately 130.

A large gold property on Opapimiskan Lake, approximately 80 miles north of Pickle Lake, Ontario, is operated as a joint venture in which the Dome Mines Group has a 35 percent participating interest. The work is managed by Dome Exploration. A definition drilling program has outlined drill-indicated reserves in excess of one million tons grading approximately 0.2 ounces of gold per ton in two discrete zones in banded iron formation. Preliminary feasibility studies, including metallurgical, environmental and mining investigations, are currently in progress. The main thrust of the 1982 exploration program will be to block out additional reserves. In order to accomplish this, a major drilling program to test favourable areas close to the known deposits will be carried out during the first quarter of 1982.

Work continued on the Quesnel deposit in the Cariboo district of central British Columbia where drill-indicated reserves of 950,000 tons grading 0.21 ounces of gold per ton have been identified in a compact near-surface deposit. In addition to the drilling carried out in 1981, a comprehensive exploration program was undertaken to test the potential of the remainder of the property. This resulted in the delineation of several geochemical/geophysical targets within the same favourable geological environment as the original discovery. During 1982, further drilling will be carried out to explore these targets as well as to investigate some deep intersections of gold mineralization adjacent to the discovery.

In the Yukon, within a few miles of the Alaska Highway, participation continues in a joint-venture exploration program which involves tin prospects on several properties. On the most interesting of these, further drilling was carried out during 1981. The deposit is structurally complex and will require much more work to assess its ultimate potential.

In the Detour Lake area, a joint-venture exploration agreement has been concluded with Amoco Canada Petroleum Company Ltd. whereby the Dome Mines

Group and Amoco will participate in exploration carried out within a specific area involving 583 claims near the Detour deposit.

In the United States, exploration activities are concentrated in the west, particularly Nevada and neighbouring states where major gold deposits have been discovered by various companies in the last few years. During 1981, the Dome Mines Group had active programs on 9 properties in Nevada and carried out drilling on 6 of these. In addition, the Dome Mines Group has a 33 $\frac{1}{3}$ percent working interest in the Cordex IV joint venture which is also actively engaged in precious metal exploration in Nevada.

During most of 1981, the permanent exploration staff consisted of 10 geologists and 7 support staff operating out of Toronto, Timmins and Reno, Nevada. Early in 1982, a field office was established in Red Lake in order to handle exploration more efficiently in this important mineral-producing region.