BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	1995/1996
REPORT #:	PAP 95-28
NAME:	STEPHEN KOCSIS

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations, section 15, 16 and 17.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (*see* section 16) required with this TECHNICAL REPORT.

Name Stephen Peter Kocsis Reference Number 95/96 P060

LOCATION/COMMODITIES

Project Area (as listed in Part A) Antler MINFILE No. if applicable

Location of Project Area NTS 93A14W Lat 52° 58' Long 121° 25'

Description of Location and Access Drive 5 km E from Wells along Hwy 26, 13.5 Km E along the 3100 Road, and 5 Km S along the Upper Antler Creek Road.

Main Commodities Searched For Lode gold.

Known Mineral Occurrences in Project Area Placer gold.

WORK PERFORMED

1. Conventional Prospecting (area) search for quartz veins, sampling - 75 ha.
2. Geological Mapping (hectares/scale) general bedrock observations - 75 ha.
3. Geochemical (type and no. of samples) 33 rock, 41 soil samples
4. Geophysical (type and line km)
5. Physical Work (type and amount) 3,000 m grid lines, four 10 m long trenches
6. Drilling (no,. holes, size, depth in m, total m)
7. Other (specify)

SIGNIFICANT RESULTS

Commodities lode gold Claim Name Nugget Mountain 12

Location (show on map) Lat 53° 58.5' Long 121° 24.6' Elevation 4300'

Best assay/sample type quartz boulder - 0.030 opt, soil - 327 ppb

Description of mineralization, host rocks, anomalies Gold-bearing quartz boulder found near historical trench concurring with soil anomaly. Local bedrock consists of sericitic and chloritic phyllite.

Supporting data must be submitted with this TECHNICAL REPORT

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations, section 15, 16 and 17.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (*see* section 16) required with this TECHNICAL REPORT.

Name Stephen Peter Kocsis Reference Number 95/96 P060

LOCATION/COMMODITIES

Project Area (as listed in Part A) Big Valley MINFILE No. if applicable

Location of Project Area NTS 93H4E: Lat 53° 11' Long 121° 35'

Description of Location and Access Near the confluence of Big Valley and Cafe creeks. Drive 1 km east of Wells along Hwy 26, and 12 km north along the Downey Pass Road and Big Valley Road.

Main Commodities Searched For Placer and lode gold.

Known Mineral Occurrences in Project Area Placer gold.

WORK PERFORMED

1. Conventional Prospecting (area) 75 ha
2. Geological Mapping (hectares/scale) Bedrock observations - 75 ha.
3. Geochemical (type and no. of samples)
4. Geophysical (type and line km) 222 m refraction seismic survey
5. Physical Work (type and amount) 7 test pits - sampling for placer gold.
6,. Drilling (no,. holes, size, depth in m, total m)
7. Other (specify)

SIGNIFICANT RESULTS

Commodities Placer gold Claim Name Big Valley 1

Location (show on map) Lat 53° 10.7' Long 121° 35.1' Elevation 3950'

Best assay/sample type Postglacial gravel - 1.76 g/cu.m

Description of mineralization, host rocks, anomalies 2.2 m thick postglacial gravel - brown coloured, muddy sand matrix boulder/cobble gravel, overlying brown compacted interglacial gravel and diamicton (debris flow).

Supporting data must be submitted with this TECHNICAL REPORT

British Columbia
Prospectors Assistance Program
Final Technical Report
(1995)

Lode and Placer Gold Exploration at Big Valley, Cariboo Mining District, Barkerville Area.

N.T.S. Map 93H4E
Latitude 53° 11′, Longitude 121° 35′

Author:

Stephen Kocsis, P.Geo.
301-776 Vaughan Street
Quesnel, B.C.
V2J 2T5
1-604-992-9570

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Summary

The 1995 Big Valley mineral and placer gold exploration program consisted of 3 parts. 1) Bedrock was mapped over an area in attempt to locate mineralized zones. 2) Test pits were excavated for the purpose of identifying bedrock, and evaluating placer gold concentrations in associated alluvium. 3) A refraction seismic survey was utilized to investigate the underlying bedrock profile at a known placer gold-bearing area.

Soil geochem analyses was not employed during the 1995 Big Valley Prospecting Program. Seismic data showed consistent thick overburden (>15 m) across the intended geochem survey site. Soils in the area were formed from thick, distally-derived alluvium and till, and are unsuitable for geochem work. The 1995 budget for geochemical analyses was utilized for analytical work on the Antler Property.

Property Description

The Exploration Program outlined in this report took place along the east slope of Hardscrabble Mountain; near the confluence of Cafe and Big Valley creeks. The **Big Valley** area is part of the Cariboo Mining District and can be found on the northeast portion of map 93H4E (lat. 53° 11′ - long. 121° 35′). The Property is located about 8 km north of the Wells community and consists of the following 10 mineral claims and 3 placer claims (see figure 2):

Claim Name	Tenure Number	Expiry Date
Mineral		
Lynx 1	307528	Jan 26, 1996
Lynx 2	307529	Jan 26, 1996
Lynx 3	307530	Jan 26, 1996
Lynx 4	307531	Jan 26, 1996
Lynx 5	336529	Jun 10, 1996
Lynx 6	336530	Jun 10, 1996
Lynx 7	336531	Jun 10, 1996
Lynx 8	336532	Jun 10, 1996
Lynx 9	338453	Jul 15, 1996
Lynx 10	338454	Jul 15, 1996
Placer		
Big Valley 1	265650	Jul 19, 1996
Keno 4	265898	Feb 02, 1996
Keno 5	265899	Feb 02, 1996

Access

The Big Valley Property can be reached by driving 1 km east along the Barkerville Highway (#26) from the community of Wells. From this point, drive 9 km north along the Downey Pass Road and Big Valley Road. Continue north for 1.5 km along the Big Valley Road to reach the northern portion of the property near Stewart Creek. All roads are accessible by a 2-wheel drive pickup truck.

Bedrock Geology and Gold Occurrences in the Barkerville Area

In the Barkerville area lode gold is hosted by middle Paleozoic marbles and deformed-silicified phyllite (metabasalts?) of the Downey Succession. The Downey is one of the carbonate-rich successions in the Barkerville Terrane. The terrane is dominated by continental shelf and slope clastics, carbonates and volcaniclastic rocks. Known gold occurrences in the area are generally found 'locked' in pyritized zones, and are occasionally seen in native form.

Gold mineralization in the Barkerville area appears to have three controls; **1)** *Stratigraphic controls* - placer and lode gold deposits are associated primarily with bedrock belonging to the Downey Succession; **2)** *Structural controls* - auriferous replacement pyrite in marbles are located in the hinge zones and less frequently along the limbs of regional and minor folds, and gold-bearing quartz is most commonly associated with northerly striking faults; **3)** *Metamorphic controls* - lode gold concentrations are mainly confined to rocks exhibiting a chlorite grade of metamorphism.

Lode gold was mined from the Downey succession at locations 9 km southwest, near Wells, at Cow Mountain and Island Mountain. About 1.2 million ounces was produced from the Wells mining camp. The gold was hosted in pyritic marbles and in fault-controlled silicified zones.

The Big Valley Property covers part of a 1,200 m wide belt of Downey rocks. This belt extends 7 km southeast to Eight Mile Lake where known placer gold occurrences were mined by the Thistles Company. This company and others have mined an estimated 30,000 ounces of placer gold from the area surrounding Eight Mile Lake, Summit Creek, and Pinus Creek. This belt of Downey rocks also extends 7 km northwest from the Property to Sugar Creek.

Through an independent study, I have determined that 60% of the placer gold mined from the Barkerville area came from alluvium that directly overlies bedrock belonging to the Downey

succession. The total placer gold production for the area exceeds 3 million ounces and much of this is believed to have derived from several known and unknown lode gold deposits hosted in parts of the Downey Succession.

The Property and surrounding area lies across or near the Pleasant Valley Thrust. The thrusts marks the accreted zone between the Barkerville and Cariboo lithospheres (Terranes). The thrust zone may host fracture-related gold-quartz mineralization and associated gold bearing alluvium.

1995 Bedrock Mapping Results

Bedrock exposures around the Big Valley property are rare. Bedrock was recently exposed along parts of the new Cafe Creek logging road and road branches. Listed below are descriptions of bedrock exposed along the new roads. Locations given are distances north from the junction of the Big Valley Road and Cafe Creek Road:

Location	Description
300 m.	Slightly olive medium grey sericite phyllite; well foliated; slightly calcareous.
1,500 m.	Medium grey sericite phyllite with bands of olive chloritic phyllite; 15% brecciated quartz fragments and discontinuous thin quartz veins up to 5 cm wide; partly deformed - tightly folded; calcareous in part; some dark grey argillaceous limestone; S1-300°, dip-70°S.
1,700 m.	Culvert location; light to medium grey sericite phyllite.
1,900 m	Medium dark grey limestone with abundant white calcite stringers; layered with dark grey phyllite; S1-300°, dip-77°S; overburden mainly consists of clay and decomposed bedrock.
2,050 m.	Medium to light grey layered limestone and phyllite; abundant brown weathering.
2,100 m.	50 m - 20° along branch road: light steel grey phyllite with layers of light grey quartzitic/micaceous limestone, some calcareous coarse-grained quartzite, S1-310°, dip-73°S.
2,100 m.	400 m -20° along branch road: light grey to white very coarse to coarse-grained quartzite, some coarse-

crystalline calcite cement, some thinnly bedded olive phyllite, up to 1% disseminated coarse-grained pyrite, S1-310°, dip-80°S.

3,200 m. Layered medium grey and olive (slightly chloritic) sericite phyllite; S1-257°, dip-64°S.

3,900 m. Initial Post for Lynx 5 and 6 claims.

4,450 m. Initial Post for Lynx 7 and 8 claims.

4,500 m. Reference point for LPM survey.

4,600 m. Cafe Creek crossing; overburden from this point to 4,750 consists of dark grey lodgment till containing 30% dark grey clasts.

4,750 m. Medium grey sericite phyllite; less olive slightly chloritic phyllite; partly weathered brown; S1-252°, dip-72°.

4,950 m. Final Post for Lynx 7 and 8 claims.

5,100 m. Abundant large angular boulders of calcareous olive phyllite containing up to 25% slightly pyritic quartz breccia (stretched and rotated quartz fragments < 1 cm dia.).

5,600 m. End of Cafe Creek Road.

Bedrock is exposed for a short distance along the Big Valley Road, near the excavation site (Big Valley Road crossing Cafe Creek). It consists of medium grey phyllite layered with olive chloritic phyllite, S1-285°, dip-70°S, moderately foliated. Non of the test pits reached bedrock.

1995 Test Pit (TP) Excavations

Listed below are descriptions and gold grades of surficial material encountered in 7 test pits. Gold grades were determined by washing 1 m^3 of material at given depth intervals. All layers were panned. Layers that produced significant gold showings in the pan were sampled for gold grade determinations. Descriptions of colours panned are also given for layers that produced poor gold showings. N/a is applied to gold grades where quantities of panned gold was insufficient for weighing, or where layers contained no gold - such as soil or massive clay.

Interval (meters)	Description	Grade g/m^3
95-BV-TP01		
0.0 to 1.0	Soil and clay.	n/a
1.0 to 2.5	Brown uncompacted pebble/cobble gravel with a mud-rich matrix; abundant green-coloured clasts.	0.59
2.5 to 3.5	Reddish brown pebble/cobble gravel with a sand/clay matrix.	trace
3.5 to 5.5	Brown compacted boulder diamicton (older debris flow).	0.15
95-BV-TP02		
0.0 to 0.9	Clay-rich soil.	n/a
0.9 to 2.1	Brown uncompacted boulder gravel with a mud-rich matrix; abundant green-coloured clasts.	0.55
2.1 to 3.3	Boulder gravel as above.	1.76
3.3 to 4.3	Brown semi-compacted pebble sand (older alluvium).	trace
95-BV-TP03		
0.0 to 0.6	Black humous soil.	n/a
0.6 to 0.9	Massive uncompacted brown mud.	n/a
0.9 to 1.5	Brown uncompacted boulder gravel with a mud-rich matrix.	trace
1.5 to 3.0	Brown compacted diamicton (older debris flow).	trace

3.0 to 4.5	Slightly reddish brown compacted pebble/cobble gravel.	trace
4.5 to 5.5	Well compacted cobble diamicton (older debris flow).	trace
95-BV-TP04		
0.0 to 0.9	Mud-rich sand/pebble soil.	n/a
0.9 to 2.0	Brownish grey uncompacted cobble gravel with occassional boulder and mud-rich matrix; 5 vf gold colours from 3 pans.	n/a
2.0 to 3.1	Brownish grey uncompacted bedded couble/boulder gravel with a mud-rich matrix; strong imbrication - 5°; beds dip 12°, plunging 345°; 7 f and 50 vf gold colors from 5 pans.	n/a
95-BV-TP05		
0.0 to 1.2	Water saturated mud with occassional oxidized-red angular boulder-quartz rhyolite with <5% coarse feldspar phenocrysts.	n/a
1.2 to 2.9	Gradational change to brownish grey uncompacted pebble/cobble gravel with a mud-rich matrix; 3 vf gold colours from 2 pans.	n/a
2.9 to 3.2	Brown compacted massive silt.	n/a
3.2 to 4.4	Brown compacted pebble/cobble gravel with a mud-rich matrix; 16 vf gold colors from 4 pans.	n/a
95-BV-TP06		
0.0 to 0.5	Soil.	n/a
0.5 to 0.8	Brown pebble gravel with a sandy matrix.	n/a
0.8 to 1.1	Brown compacted diamicton - debris flow.	n/a
1.1 to 1.9	Brown compacted pebble/cobble gravel.	n/a
1.9 to 2.5	Brown compacted diamicton - debris flow.	n/a
2.5 to 2.7	Brown compacted pebble/cobble gravel.	n/a
2.7 to 3.0	Brown compacted diamicton - debris flow.	n/a
2.5 to 2.7	Brown compacted pebble/cobble gravel.	n/a

2.7 to 3.2	Brown compacted diamicton - debris flow.	n/a
3.2 to 5.0	Brown semi-compacted cobble gravel with a sandy matrix; boulder lag layer in upper 0.3 m; beds dipping S-SE.	n/a
5.0 to 5.9	Brown compacted diamicton - debris flow; some mud laminae.	n/a
5.9 to 6.4	Brown compacted lodgement till.	n/a
95-BV-07		
0.0 to 1.2	Brownish grey cobble/boulder gravel, sandy matrix.	0.28
1.2 to 2.4	gravel a/a.	0.43
2.4 to 3.6	gravel a/a.	0.31

Surficial Geology

Four sedimentological units have been identified during the 1995 surficial survey program; 1) postglacial alluvium; 2) late Wisconsin lodgement till; 3) mid-Wisconsin or older interglacial alluvium and diamicton - debris flow; and 4) early or pre-Wisconsin lodgement till. Listed below are time (years before present - ybp) periods applied to each unit:

Unit	Period	Time Span (ybp)
1	postglacial	10,000 to present
2	late Wisconsin	30,000 to 10,000 (glacial)
3	mid Wisconsin	45,000 to 30,000 (interglacial)
4	early Wisconsin	60,000 to 45,000 (glacial)

Units 3 and 4 may pre-date the mid and early Wisconsin periods. There is evidence showing that the Barkerville area has been glaciated twice during the Pleistocene. The extensive unweathered till unit blanketing the area is with certainty excepted as late Wisconsin. There has been no attempt to date occurrences of older underlying weathered till. Older till has been identified at Big Valley, Eight Mile Lake, and at the confluence of Pleasant Valley and French creeks. Older till occurrences appear to be restricted to major valley networks; suggesting that ice flow was confined to selective valleys during the older glacial period.

Unit 1

Significant gold-bearing postglacial alluvium was identified in pits TP01, TP02 and TP07. At the TP01 and TP02 pit sites, the alluvium consists of water-saturated brown-coloured muddy boulder gravel. The gravel is massive with no distinctive bedding or imbrication patterns. Gold grades vary from 0.55 to 1.76 g/m^3, and the gravels are up to 2.4 m thick. At the TP07 pit site, the gravel contains a dry sandy matrix, moderately developed bedding, and imbrication patterns indicating a northwest paleo-direction. The average Au grade throughout the 3.6 m deep section equals 0.34 g/m^3.

Unit 2

Unweathered greenish grey lodgement till was identified 150 m southwest of the test pit sites. Dark grey to black lodgment till was mapped along the Cafe Creek new logging road - where it crosses Cafe Creek. Till colour usually contrasts the type of local underlying bedrock; green - derived from chloritic rocks, and black - derived from graphitic rocks.

Unit 3

This unit was observed in all test pits. It consists of bedded compacted brown-coloured gravels and debris flows layers. The unit was deposited during the mid Wisconsin period, or earlier, by a series of alluvial and mud-rich debris flow processes. The gravels and diamicton contain traces of gold throughout and grades occasionally reach 0.15 g/m^3.

Unit 4

Unit 4 is a brown-coloured weathered diamicton and was identified at the bottom of test pit TP04. The diamicton is denser and contains more clay than the overlying clast-rich debris flow layers. The unit resembles lodgement till and is probably early Wisconsin or older.

Discussion on Gold Occurrences

Placer gold values on the Property occur in units 1 and 3. The highest grades, up to 1.76 g/m^3, were found in unit 1. The unit is made up of postglacial alluvium, and gold is concentrated in boulder-rich layers. The gold may have been concentrated by the subsequent erosion of underlying low grade mud-rich diamicton layers (up to 0.15 g/m^3 Au) in unit 3. Unit 2 does not appear at this site - late Wisconsin till has been eroded or was not initially deposited. The gold grade variances in unit 1 appear to have been controlled by selective stream erosion of unit 3, and possible erosion of higher grade preglacial gravels located

proximal to bedrock.

Other concentrates found in the postglacial auriferous gravel consists of magnetite and heavily oxidized black-coated pyrite (magnetite:pyrite = 5:1; sulfide:gold = 5:1). The presence of highly oxidized pyrite suggests that the concentrate originated from sediments that was subjected to a long period of weathering. The percentages of different gold particle size ranges are listed below:

Partial Size (mm)	Percentage
< 0.5	10
0.5 - 2.0	75
2.0 - 5.0	12
> 5.0	3

The largest gold partial recovered was 6 mm dia. The shapes of the gold particles are consistent and can be best described as smooth flattened elongated ovoid (particle ovoid dia:thickness = 7:1). Less than 5% of the particles resemble characteristics expected for locally-derived placer gold, such as embedded quartz grains and angular textures.

Refraction Seismic Survey Results

A refraction seismic survey line, striking 240°, was shot along the excavation site. The 216.4 m (710 ft) line consisted of 72 stations, each spaced 3.05 m (10 ft) apart. The purpose of the survey was to determine the profile of bedrock underlying known gold occurrences in high grade postglacial gravels and low grade interglacial debris flow horizons. Investigation by the excavation program was limited to depths less than 6.4 m and bedrock was not reached. Results from the seismic survey indicates that bedrock is up to 17.4 m deep.

The generated bedrock profile is shown in figures 3a and 3b. The vertical scale in figure 3b. is exaggerated by a factor of 2.83. The 'squeezing' effect of the horizontal scale is a visual aid used for interpreting the bedrock morphology in a smaller frame.

Sedimentological unit boundaries could not be distinguished by the refraction method. Units plotted on the seismic profile are based on information gathered from the excavation program. Test pits located on or near the seismic survey line are plotted on figure 3a. Test pits that appear to commence below the ground surface are locations off the seismic line where ground elevation drops.

Four elevated bedrock terraces have been identified by the seismic survey. The terraces could have resulted from preglacial fluvial erosion by a stream meandering back and forth across the floor of Big Valley. Bedrock lows along line positions 175, 325, 475 and 660 feet resemble fluvial incisions.

If the terraces resulted from preglacial stream erosion, there would be potential for significant volumes of gold-bearing alluvium on, or near bedrock. Test pits 1 and 2 were excavated 20 m north of seismic line position '540 feet'. Gold grades reaching 1.76 g/m^3 were recovered from near-surface postglacial gravels at this location. It is possible that the gravels were enriched by fluvial erosion of underlying, bedrock-proximal, auriferous preglacial alluvium. Bedrock at this line position is 3 m deep, and the highest gold values found in postglacial gravels appear to be restricted to this location. Test pit 1 was excavated to a depth of 5.5 m. The pit is located 20 north of the seismic line, and since bedrock was not reached, it appears that bedrock drops off to the north.

Qualifications of the Author

I, Stephen Peter Kocsis, studied the Earth Sciences at the University of Waterloo and was issued a B.Sc. degree in 1983.

From February of 1980 to March of 1986 I was employed as a Petroleum Exploration Consultant; based out of Calgary, Alberta. I performed geological supervision at exploration and development wellsite locations throughout the Western Canadian Sedimentary Basin.

From February 1987 to December of 1988 I was employed by the University of Toronto - Glaciated Basin Research Center. I was a Research Associate for Professor Nick Eyles and was a co-author on four published geological papers. Our work evolved around Glacial Geology research in the provinces of Ontario and British Columbia, and in the State of Alaska. My work primarily focused on the study of Pleistocene Placer Gold Deposits in the B.C. Cariboo Mining District.

From 1982 to 1986 I worked on several Placer and Mineral Gold Exploration Projects in the B.C. Cariboo Mining District. I did this work during summer lay-offs from the Petroleum Exploration Industry - periods lasting up to 4 months each year.

From January of 1990 to present I have been residing in British Columbia and have been self employed as a Mining and Geological Consultant - specialized in Placer Geology. I have worked throughout the B.C. Cariboo Mining District and in parts of the Yukon Territory.

I belong to the B.C. Association of Professional Engineers and Geoscientists - P.Geo. certification issued July 6, 1993 (Registration Number 20451).

I successfully completed a Placer Gold Exploration Program at my Antler Creek Property in 1994 and received assistance from the Explore B.C. Grant Program (Grant Identification Number 94/95M-39). I also received 2 grants from the Prospectors Assistance Program for two seasons after successfully completing the programs.

Per. 

Stephen Kocsis, December 21, 1995

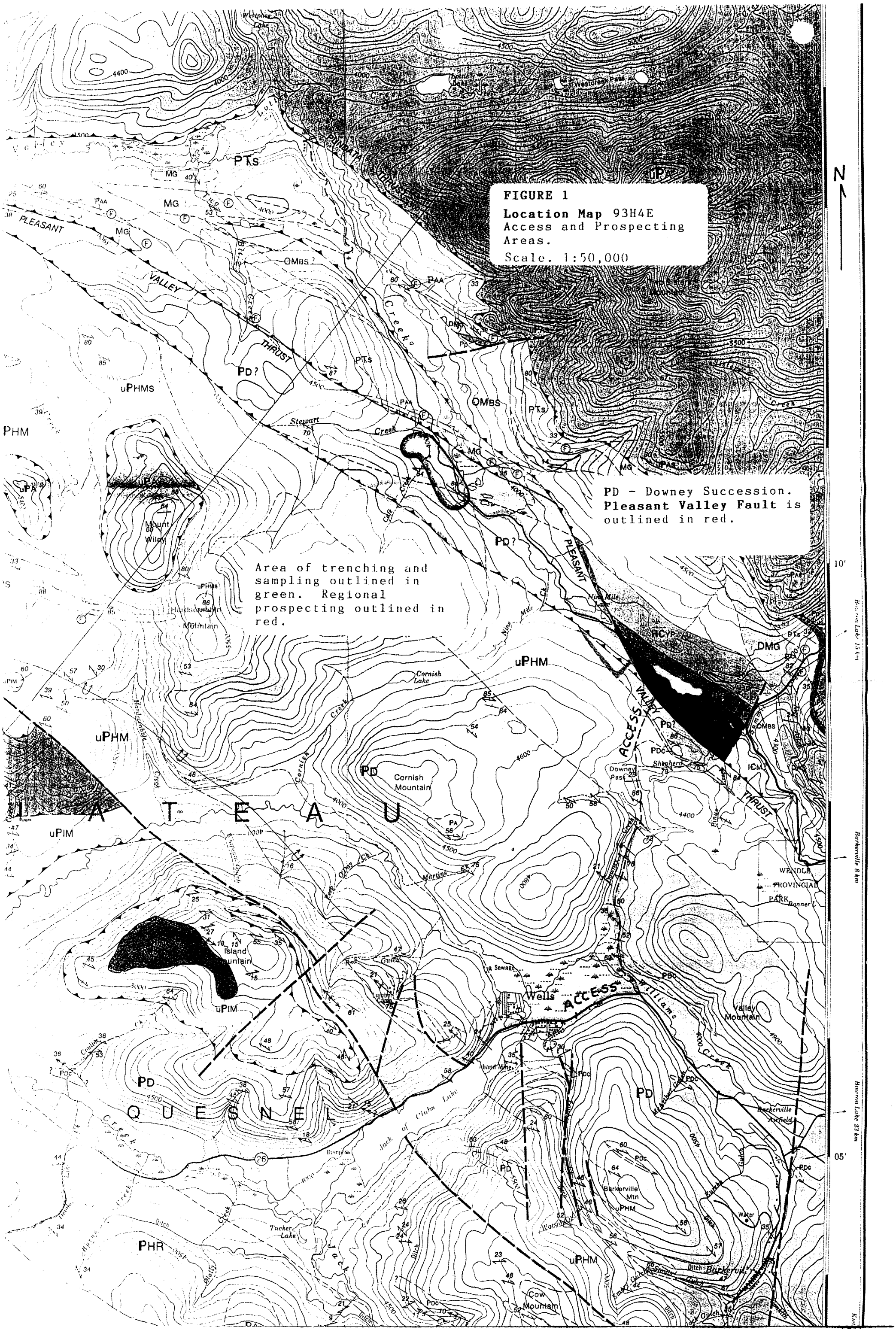
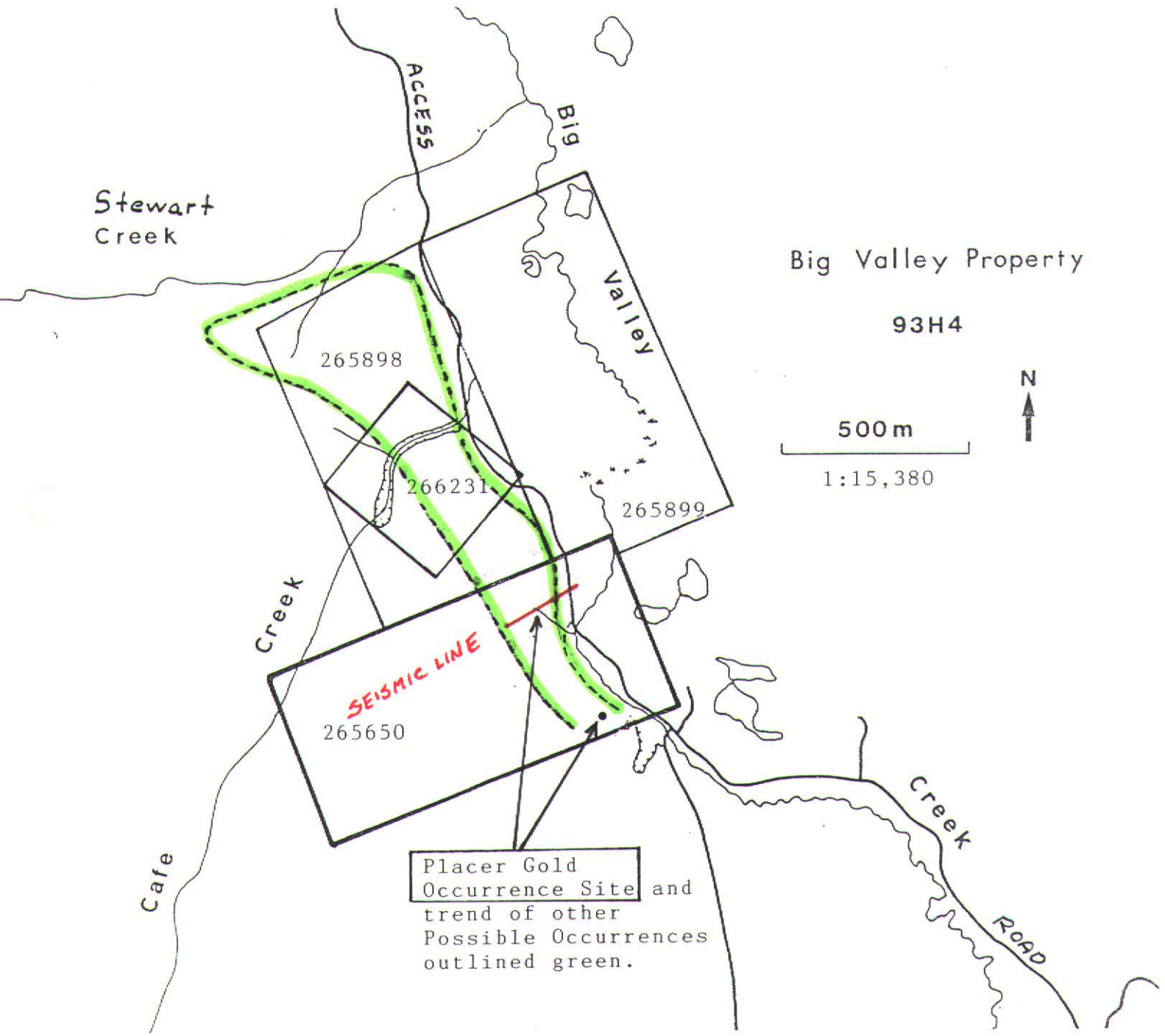


FIGURE 1
Location Map 93H4E
Access and Prospecting Areas.
Scale. 1:50,000
PD - Downey Succession.
Pleasant Valley Fault is outlined in red.
Area of trenching and sampling outlined in green. Regional prospecting outlined in red.
PLEASANT VALLEY THRUST
ACCESS
QUESNEL PLATEAU
PTs
MG
uPA
PAA
OMBS
uPHMS
uPHM
uPIM
PD
PD?
PDC
PHR
DMG
RCYP
ICM?
Mount Wiley
Hardscrabble Mountain
Cornish Mountain
Island Mountain
Valley Mountain
Barkerville Mtn
Cow Mountain
Tucker Lake
Cornish Lake
Nine Mile Lake
Wells
Barkerville
Stewart Creek
Cornish Creek
Hardscrabble Creek
Jack of Clubs Lake
Westcreek Pass
Downey Pass
WELLS PROVINCIAL PARK
Barkerville 8 km
Bowron Lake 15 km
Bowron Lake 23 km
10'
05'
N

FIGURE 2
AREA OF PROSPECTING INVOLVING

PLACER GOLD EXPLORATION

(TRENCHING)

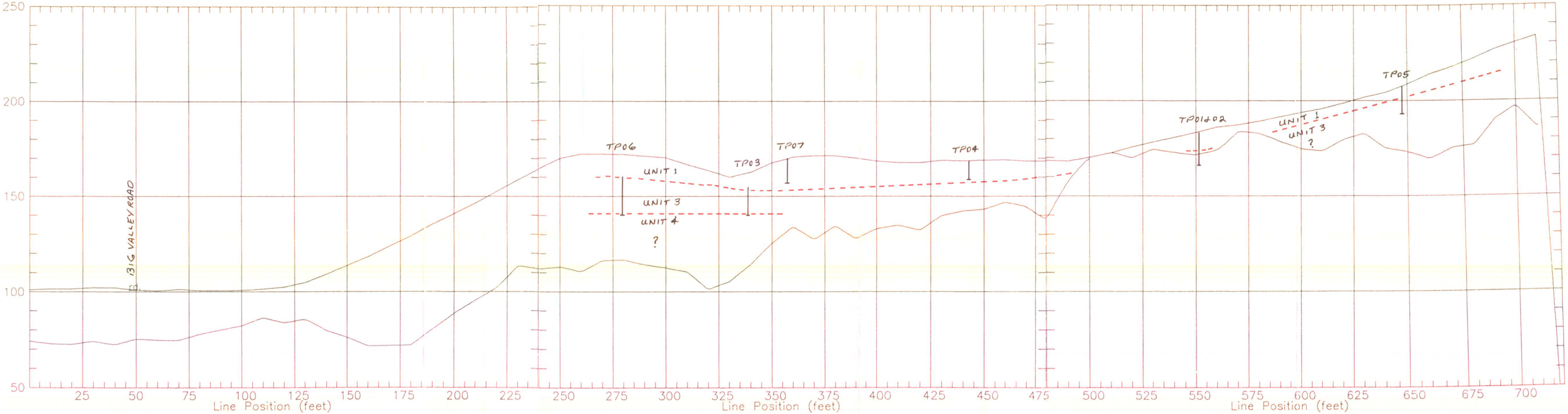


BIG VALLEY

EAST

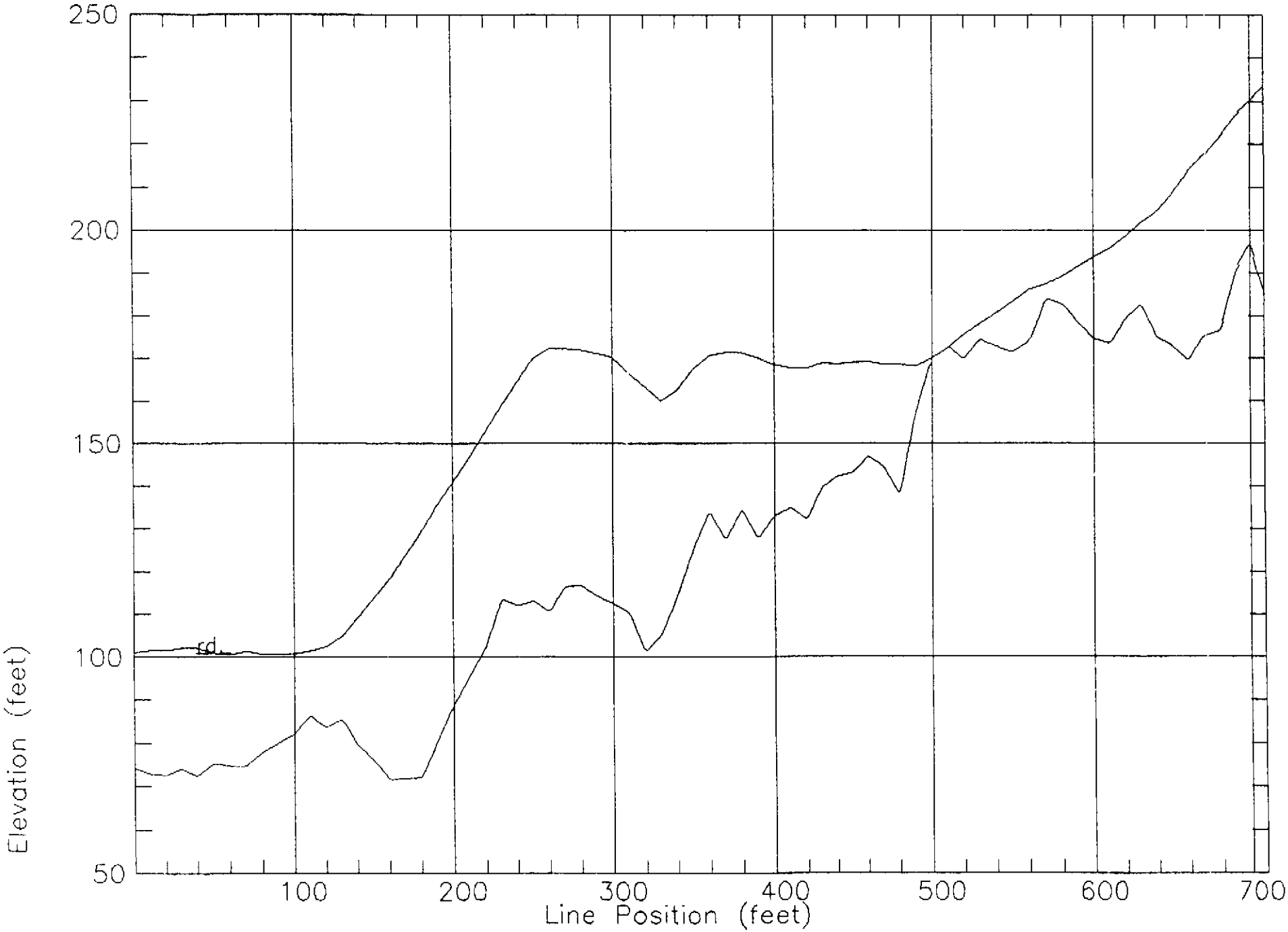
Figure 3a: Seismic Bedrock Profile and Surficial Geology.

WEST



BIG VALLEY

FIGURE 30.



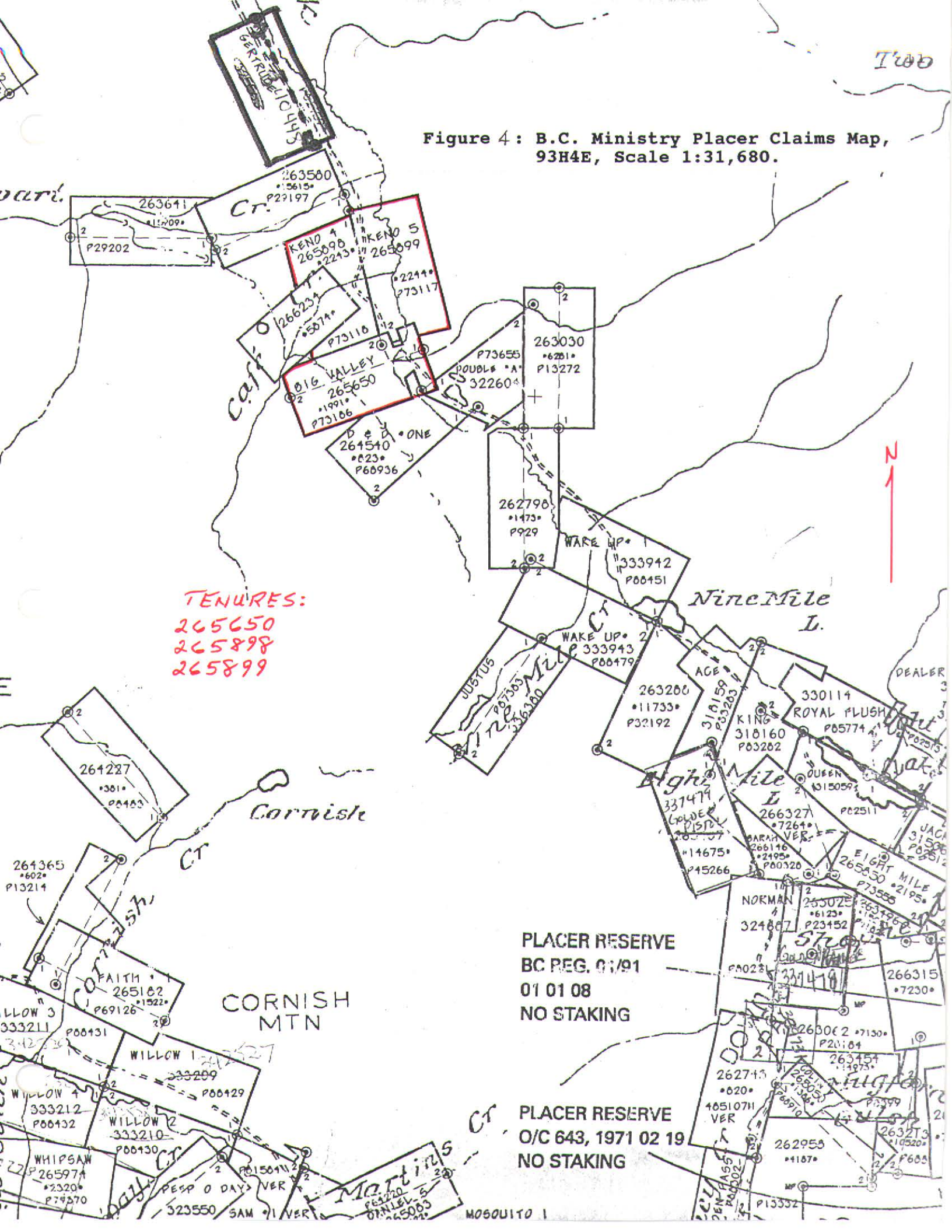


Figure 4: B.C. Ministry Placer Claims Map, 93H4E, Scale 1:31,680.

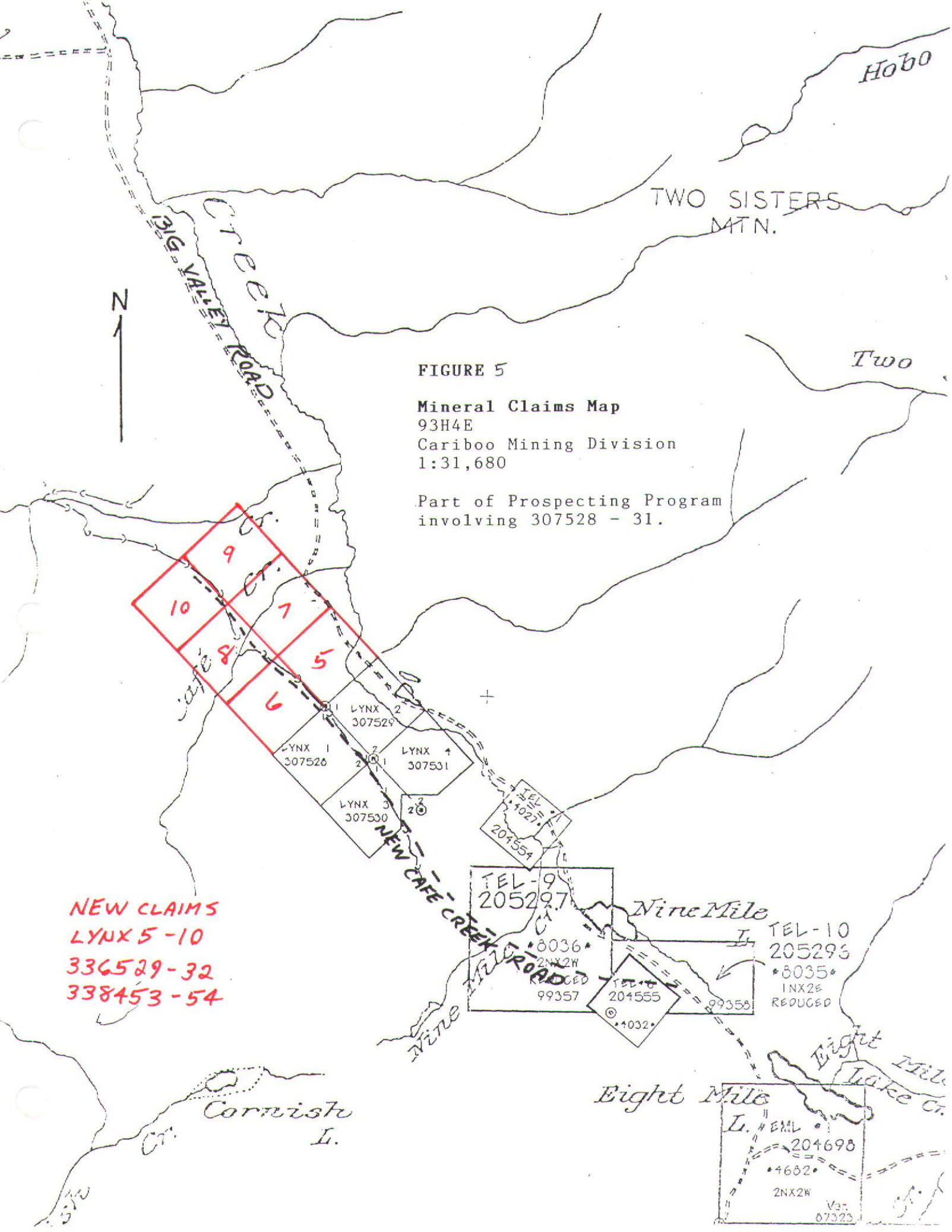


FIGURE 5

Mineral Claims Map
93H4E
Cariboo Mining Division
1:31,680

Part of Prospecting Program
involving 307528 - 31.

British Columbia
Prospectors Assistance Program
Final Technical Report
(1995)

Lode Gold Exploration at Antler Creek, Cariboo Mining District, Barkerville Area.

N.T.S. Map 93A14W
Latitude 52° 58′, Longitude 121° 25′

Author:

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301-776 Vaughan Street
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V2J 2T5
1-604-992-9570

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Figures

Summary

Three trenches were excavated for the purpose of exposing and sampling bedrock. A 2,500 m long baseline was constructed along the west slope of Nugget Mountain. The geochem survey consisted of 41 soil samples along 2 lines, and 33 rock samples (mainly quartz veins). Two Au soil anomalies were found along Line 2. The anomalies are located 50 m and 250 m east up the slope of Nugget Mountain - from a point near the historical site of Old Antler Town. A gold-bearing quartz vein (.090 opt or .93 gpt) was discovered at the lower Au soil anomaly site - up to 327 ppb Au.

Property Description

The Antler property consists of 2 placer claims and 14 mineral claims (see figure figure 7). The Property is situated along upper Antler Creek and can be located on NTS map number 93A14W (latitude 52° 58′, longitude 121° 25′). To reach the Property, drive 5 km east from Wells along Highway 26, 0.5 km north along the Bowron Lake Road, 13.5 km east along the 3100 Road, and 5 km south along the upper Antler Creek Road (see figure 1):

Tenure Number	Claim Name	Anniversary Date
Mineral Claims		
341226	Nugget Mountain 1	Oct 12, 1996
341227	Nugget Mountain 2	Oct 12, 1996
341228	Nugget Mountain 3	Oct 12, 1996
341229	Nugget Mountain 4	Oct 12, 1996
341230	Nugget Mountain 5	Oct 12, 1996
341231	Nugget Mountain 6	Oct 12, 1996
341232	Nugget Mountain 7	Oct 12, 1996
341233	Nugget Mountain 8	Oct 12, 1996
341234	Nugget Mountain 9	Oct 12, 1996
341235	Nugget Mountain 10	Oct 12, 1996
341236	Nugget Mountain 11	Oct 22, 1996
341237	Nugget Mountain 12	Oct 22, 1996
341238	Nugget Mountain 13	Oct 22, 1996
341239	Nugget Mountain 14	Oct 22, 1996
Placer Claims		
307011	Highgrade	Jan 11, 1997
318158	Bigtime	Jun 16, 1996

Bedrock Geology

In the Barkerville area lode gold is hosted by middle Paleozoic marbles and deformed-silicified phyllite (metabasalts?) of the Downey Succession (see figure 1). The Downey is one of the carbonate-rich successions in the Barkerville Terrane. The terrane is dominated by continental shelf and slope clastics, carbonates and volcaniclastic rocks. Known gold occurrences in the area are generally found 'locked' in pyritized zones, and are occasionally seen in native form.

Gold mineralization in the Barkerville area appears to have three controls; **1)** *Stratigraphic controls* - placer and lode gold deposits are associated primarily with bedrock belonging to the Downey Succession; **2)** *Structural controls* - auriferous replacement pyrite in marbles are located in the hinge zones and less frequently along the limbs of regional and minor folds, and gold-bearing quartz is most commonly associated with northerly striking faults; **3)** *Metamorphic controls* - lode gold concentrations are mainly confined to rocks exhibiting a chlorite grade of metamorphism.

Lode gold was mined from the Downey succession at locations 18 km northwest of the Antler property, near Wells, at Cow Mountain and Island Mountain. About 1.2 million ounces was produced from the Wells mining camp. The gold was hosted in pyritic marbles and in fault-controlled quartz veins. There has been no lode gold production recorded from areas within the Antler property. About 300,000 oz of placer gold was produced from the Property from 1859 to 1861.

Bedrock on the Antler Property is dominated by grey and olive coloured sericitic phyllite, and green chloritic phyllite. Sericitic and chloritic quartzite occurrences appear to have resulted from a combination of ductile and brittle deformation of early-stage quartz veins (brecciation), host rock silicification, and quartz recrystallization. Lesser amounts of light to dark grey argillaceous, partly silicified, limestone occurs - mainly near the confluence of Antler Creek and Nugget Gulch. The primary targets are gold-bearing quartz veins. The veins occur in 2 forms; 1) S1-veins that parallel regional strike; and 2) cross-cut veins controlled by northerly striking faults.

Geochem Soil Survey

A 2,500 m long baseline was constructed over the Antler Property. The baseline runs along the lower eastern slope of Nugget Mountain along a 360° azimuth. Sample stations have been assigned northing and easting grid coordinate numbers. The south end of the baseline has been assigned the reference station coordinate number 10000(northing)/10000(easting). Distances (meters) north and east of the reference station are added to the respective 10000/10000 coordinate number, and distances south and west are subtracted. For example; coordinate 10200E/12000N represents a position on the grid 200 m east and 2000 m north of the reference station.

Sample numbers, coordinate numbers (along 2 east-west lines), and respective Au geochem results are given below. Station intervals are 20 or 10 m. Soil horizon descriptive definitions are; BT - brown, clay-rich horizon; BF - red brown, iron-rich horizon; and C1 - weathered bedrock. The base each horizon sampled is given in centimeters. See Geochemical Analyses Certificate (Acme Anylitical Laboratories Ltd. - Appendix 1) for 30 element plus Au ppb results and procedures:

Geochem Line 1

Sample	Easting	Northing	Soil Horizon	Base (cm) Horizon	Au ppb
A00001S	10000	12000	BT	60	6
A00002S	10020	12000	BT	50	10
A00003S	10040	12000	BT	70	9
A00004S	10060	12000	BT	50	4
A00005S	10080	12000	BT	40	5
A00006S	10100	12000	BT	35	9
A00007S	10120	12000	BT	50	14
A00008S	10140	12000	BT	50	10
A00009S	10160	12000	BT	40	20
A00010S	10180	12000	BT	60	11
A00011S	10200	12000	BT	40	2
A00012S	-9980	12000	BT	55	6
A00013S	-9960	12000	BT	40	45
A00014S	-9940	12000	BT	45	5
A00015S	-9920	12000	BT	25	1
A00016S	-9900	12000	BT	20	<1
A00017S	-9880	12000	BT	25	7
A00018S	-9860	12000	BT	45	1
A00019S	-9840	12000	C1	20	<1

Geochem Line 2

Sample	Easting	Northing	Soil Horizon	Base (cm) Horizon	Au ppb
A00020S	10000	11230	BT	60	3
A00021S	-9980	11230	BT	55	11
A00022S	-9960	11230	BT	30	4
A00023S	-9940	11230	BT	60	4
A00024S	-9920	11230	BF	60	11
A00025S	-9900	11230	BT	45	103
A00026S	-9880	11230	BT	35	80
A00027S	-9840	11230	BT	100	9
A00028S	-9820	11230	BT	40	6
A00029S	-9800	11230	C1	30	4
A00030S	-9780	11230	BT	60	5
A00031S	-9960	11230	BT	25	3
A00032S	-9940	11230	C1	20	1
A00033S	-9920	11230	BT	50	4
A00034S	-9900	11230	BT	75	2
A00035S	-9700	11230	BT	120	4
A00036S	-9690	11230	C1	25	23
A00037S	-9680	11230	C1	20	327
A00038S	-9670	11230	C1	25	292
A00039S	-9860	11230	C1	25	13
A00040S	-9650	11230	C1	25	55
A00041S	-9640	11240	C1	30	3

All samples collected from the grid appear to be soils that formed by various degrees of bedrock weathering, and not from the weathering of sediments such as alluvium or till. For this reason, soil samples containing high gold and related base metal values most likely resulted from the weathering of very local mineralized bedrock. All soil horizons sampled contained various amounts of angular local bedrock fragments (5 to 80%); bedrock depths will probably not exceed 2 m. Slope azimuth and steepness have been catalogued in field notes. This information can be used at a later time for determining trends of soil solifluction and element dispersion.

Two significant Au 'spikes' have been recorded along Line 2 (see figure 3). The first spike represents a 20 m wide zone where 2 neighbouring stations returned 103 and 80 ppb Au. A second spike, 200 m down slope to the west, illustrates a 10 m wide zone where neighbouring stations returned 327 and 292 ppb Au. An 'infant' Au (55 ppb) spike follows 20 m further west. Two quartz samples retrieved from the area of the westerly Au soil spike returned values of .030 and .009 opt (see Geochem Rock Survey). The Au spikes are distributed along a flat background line with values less than 11 ppb Au. High arsenic values (55 to 304 ppm) accompany each Au spike (see figure 4). Base metal (Pb,Zn,Cu) values increase over the easterly Au zone; Pb stands out at 241

ppm (see figure 5). There is no apparent base metal association with the westerly Au zone.

There were no significant Au values recorded along Line 1, with the exception of a one-station 45 ppb infant spike (see figure 6).

Geochem Rock Survey

Rocks collected (33 samples) over the Antler Property were sent to Acme Lab. Samples were pulverized and sieved into -100 and +100 mesh portions. Au was determined by partial (10 g) fire assay from 1 A.T. for the -100 mesh portion, and total sample fire assay for the +100 mesh portion. The certified assay results (total Au opt) are given in Appendix 1. Listed below are sample descriptions and respective Au values. See figure 2 for sample locations. Samples 21001 to 21004 were taken from Trench 1; trench strikes west-east (00m is west end of trench):

Sample	Description	Au opt
21001	1 m chip across strike at 00 + 0m east, olive sericitic - chloritic quartzite, trace fine-grained disseminated pyrite, S1-300°, dip-77°N.	.002
21002	0.5 m chip across strike at 00 + 3m east, as above, <1% pyrite.	.001
21003	1 m chip across strike at 00 + 5m east, olive talcy chloritic sericite phyllite with 60% quartz breccia, up to 2% pyrite.	.004
21004	00 + 5m east, 25 cm wide cross-cut quartz vein striking 30°, white/light yellow brown staining, vuggy and moderately fractured.	<.001
21005	1 m chip at 00 + 5m east, black argillaceous limestone, 15% quartz stringers, <1% disseminated fine-grained pyrite.	.001
21201	1 m wide discontinuous cross-cut quartz vein, 2% patchy masses <10 cm dia fine to coarse-grained pyrite.	.008
21202	scattered brown-stained quartz boulders.	.001
21203	multiple parallel white quartz veins <25 cm wide, 10% limonite powder, 1% green sericite flakes.	<.001
21204	scattered brown-stained quartz boulders.	.001
21205	50 cm wide quartz vein parallel to S1-318°/78°N, grid location 10000E/12195N.	.001

21206	30 cm wide quartz vein parallel to S1, grid location 10000E/12196N.	<.001
21207	25 to 40 cm wide cross-cut quartz vein strike 003°.	.001
21208	10 cm wide quartz vein parallel to S1.	.001
21209	50% parallel S1 quartz veins across 1.5 m zone.	.002
21210	40 cm wide quartz vein parallel to S1.	<.001
21211	3 narrow cross-cut quartz veins striking 37° - total 30 cm quartz over 40 cm zone.	.001
21212	20 cm wide quartz vein parallel to S1, faint yellow brown staining along fractures, 10% limonite, 3% coarse-flaked sericite.	.005
21213	25 cm wide ductile-displaced broken quartz vein, 20% coarse-grained limonite possibly after pyrite.	<.001
21214	45 cm dia quartz boulder from historical trench, grid location -9680E/11230N.	.030
21215	20 cm dia quartz boulder, grid location -9680E/11225N.	.001
21216	4 parallel quartz veins (5 to 10 cm wide) across 2 m wide zone, veins parallel to S1-290°, dip-80°N, host rock is olive grey pyritic sericite phyllite, grid location -9680E/11202N.	.001
21217	30 cm wide quartz vein parallel to S1, 5% streaky semi massive medium-grained pyrite, grid location -9680E/11200N.	.009
21218	30 cm wide quartz vein, strike 310°, plunge 70°N, grid coordinate -9690E/11195N.	.001
21219	20 cm wide cross-cut quartz vein, strike 20°, plunge vertical, grid coordinate -9675E/11215N.	<.001
21220	1 m wide quartz vein from historical trench, vein strike parallel to S1-320°, plunge 75°S, adit/waste dump located 100 m NW along strike from trench.	.002
21221	chips from quartz boulder dump near historical trench as described above.	.001
21222	25 cm dia quartz float	.001
21223	20 cm wide quartz vein parallel to S1-320°.	<.001
21224	35 cm dia quartz boulder	.001
21225	25 cm wide quartz vein in fault gouge striking 270° plunge vertical, host rock dark grey phyllite S1-320° dip 80°N.	.001
21226	multiple parallel quartz veins 10 to 20 cm wide, 40 cm dia brecciated quartz fragments along fault gouge.	.007
21227	35 cm wide quartz vein from historical trench, strike unknown.	.009

From the 33 rock samples (mainly quartz veins) collected and assayed, 7 quartz samples came back with values between .004 and .090 opt (0.12 to 0.93 gpt). Gold grades along economic quartz veins at different mining camps are generally known to be erratic. For example; at the Idaho-Maryland property in California, Emperor Gold (VSE) reports that gold values within economic veins can be extremely erratic, with values varying from 0.05 to 89.4 opt over horizontal distances less than 3 m (The Northern Miner, 11/12/95, Vol. 81, No. 41).

The 7 veins found on the Antler property should be considered gold-bearing and not disregarded until further work is completed. The veins should be thoroughly sampled over strike length. Trenching and detailed sampling at the gold-bearing vein sites is planned for the 1996 exploration season.

Sample 21214 contained the most significant gold value (.090 opt or 0.93 gpt). The sample was taken from a quartz boulder adjacent a historical hand-dug trench; located near the site of Old Antler Town. The gold-bearing vein is accompanied by consecutive high Au soil values (23,327,292,13,55 ppb - 10 m spacing along geochem Line 2). The vein is also centrally located along a 2 km section of Antler Creek where an estimated 300,000 oz of placer gold was mined.

Recommendation

The geochem soil survey should be expanded around the 2 anomalous Au zones found along Line 2. Four additional parallel lines, 2 to the north and 2 to the south, will cover possible extensions of the anomaly. The lines should be separated by 100 m with sample stations placed 20 m apart. The 2 southern lines will have to extend 100 m east of the baseline to cover the possible southeast extension of the upper (eastern) anomaly.

A 50 m long trench should be excavated across the lower (western) anomalous zone along Line 2. A gold-bearing quartz boulder (0.93 gpt) was found over this zone. The boulder was part of a small dump pile located near a historical trench.

The upper anomalous Au zone is situated along a slope with a steepness greater than 40°. With additional soil sampling, the anomaly may be traced into a location more suited for trenching.

Qualifications of the Author

I, Stephen Peter Kocsis, studied the Earth Sciences at the University of Waterloo and was issued a B.Sc. degree in 1983.

From February of 1980 to March of 1986 I was employed as a Petroleum Exploration Consultant; based out of Calgary, Alberta. I performed geological supervision at exploration and development wellsite locations throughout the Western Canadian Sedimentary Basin.

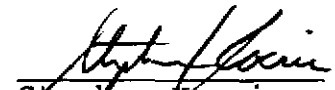
From February 1987 to December of 1988 I was employed by the University of Toronto - Glaciated Basin Research Center. I was a Research Associate for Professor Nick Eyles and was a co-author on four published geological papers. Our work evolved around Glacial Geology research in the provinces of Ontario and British Columbia, and in the State of Alaska. My work primarily focused on the study of Pleistocene Placer Gold Deposits in the B.C. Cariboo Mining District.

From 1982 to 1986 I worked on several Placer and Mineral Gold Exploration Projects in the B.C. Cariboo Mining District. I did this work during summer lay-offs from the Petroleum Exploration Industry - periods lasting up to 4 months each year.

From January of 1990 to present I have been residing in British Columbia and have been self employed as a Mining and Geological Consultant - specialized in Placer Geology. I have worked throughout the B.C. Cariboo Mining District and in parts of the Yukon Territory.

I belong to the B.C. Association of Professional Engineers and Geoscientists - P.Geo. certification issued July 6, 1993 (Registration Number 20451).

I successfully completed a Placer Gold Exploration Program at my Antler Creek Property in 1994 and received assistance from the Explore B.C. Grant Program (Grant Identification Number 94/95M-39). I also received 2 grants from the Prospectors Assistance Program for two seasons after successfully completing the programs.

Per. 

Stephen Kocsis, December 21, 1995

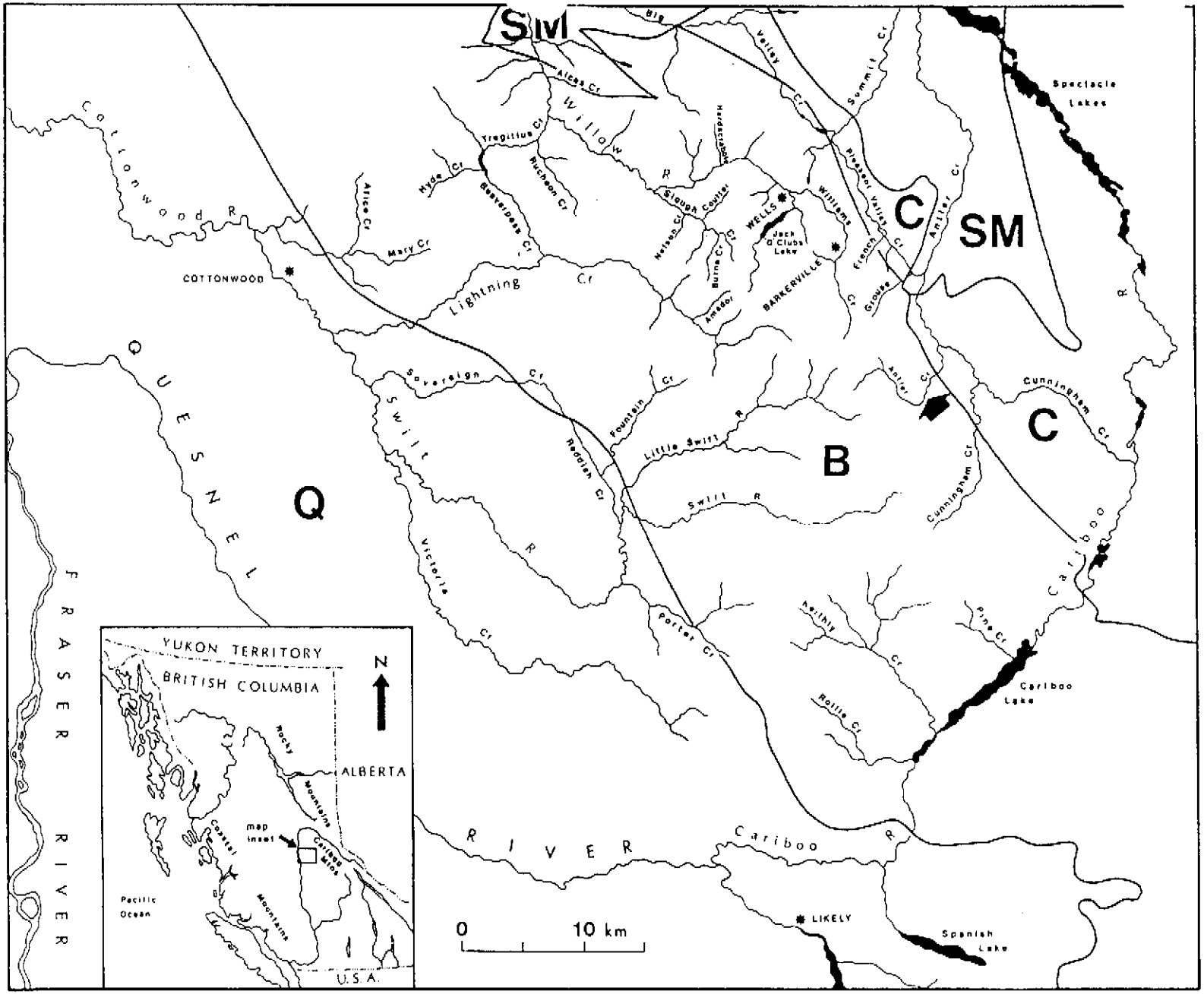
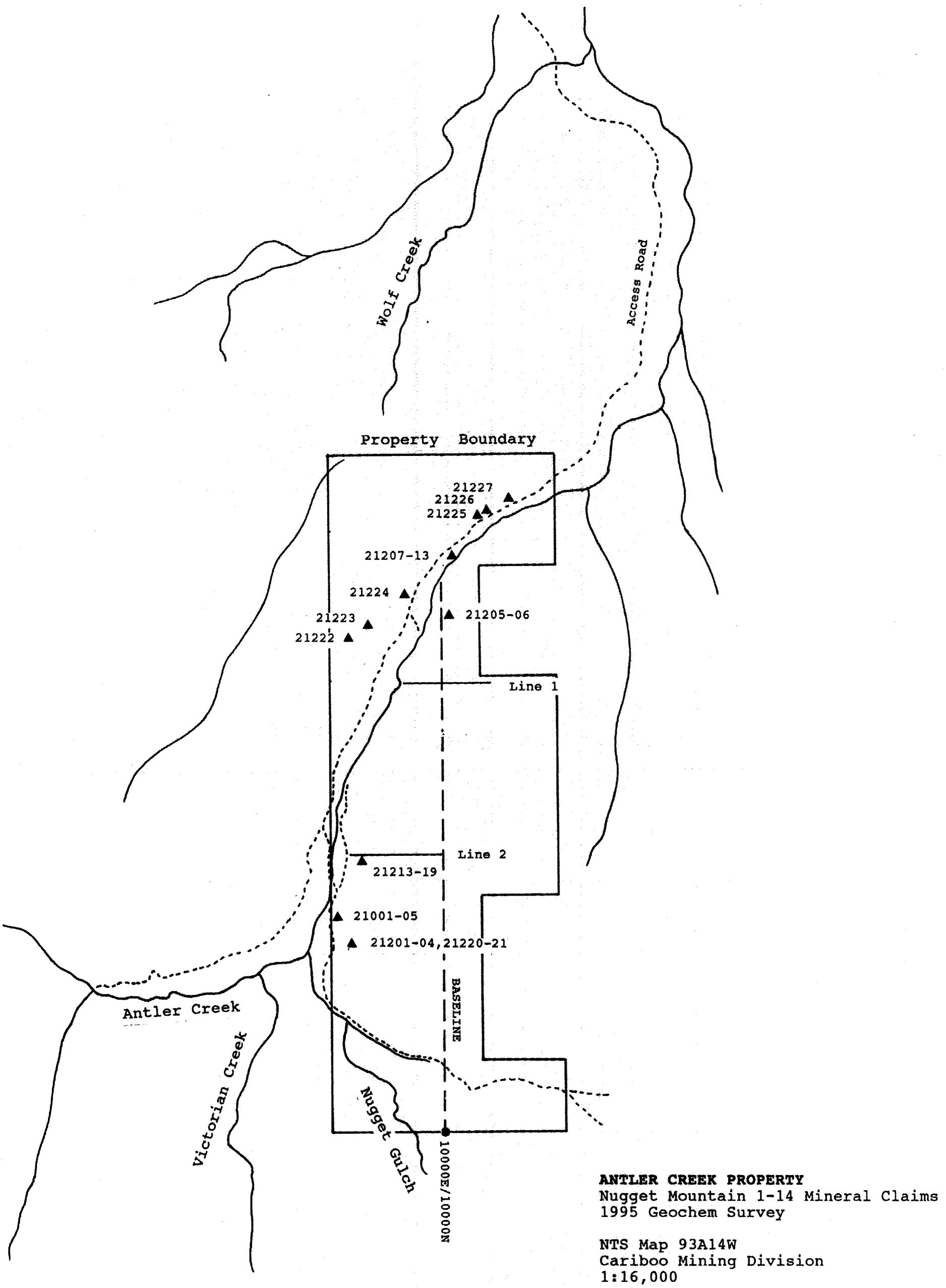


Figure 1. Location map showing 4 Geological Terranes; Q - Quesnel, B - Barkerville, C - Cariboo, SM - Slide Mountain.



ANTLER CREEK PROPERTY
Nugget Mountain 1-14 Mineral Claims
1995 Geochem Survey

NTS Map 93A14W
Cariboo Mining Division
1:16,000

Geochem Soil Survey
Line 1 @ 12000N (10200E to -9840E)
Line 2 @ 11230N (10000E to -9640E)

Rock Sample Sites 21001-05, 21201-27

Figure 2

Figure 3

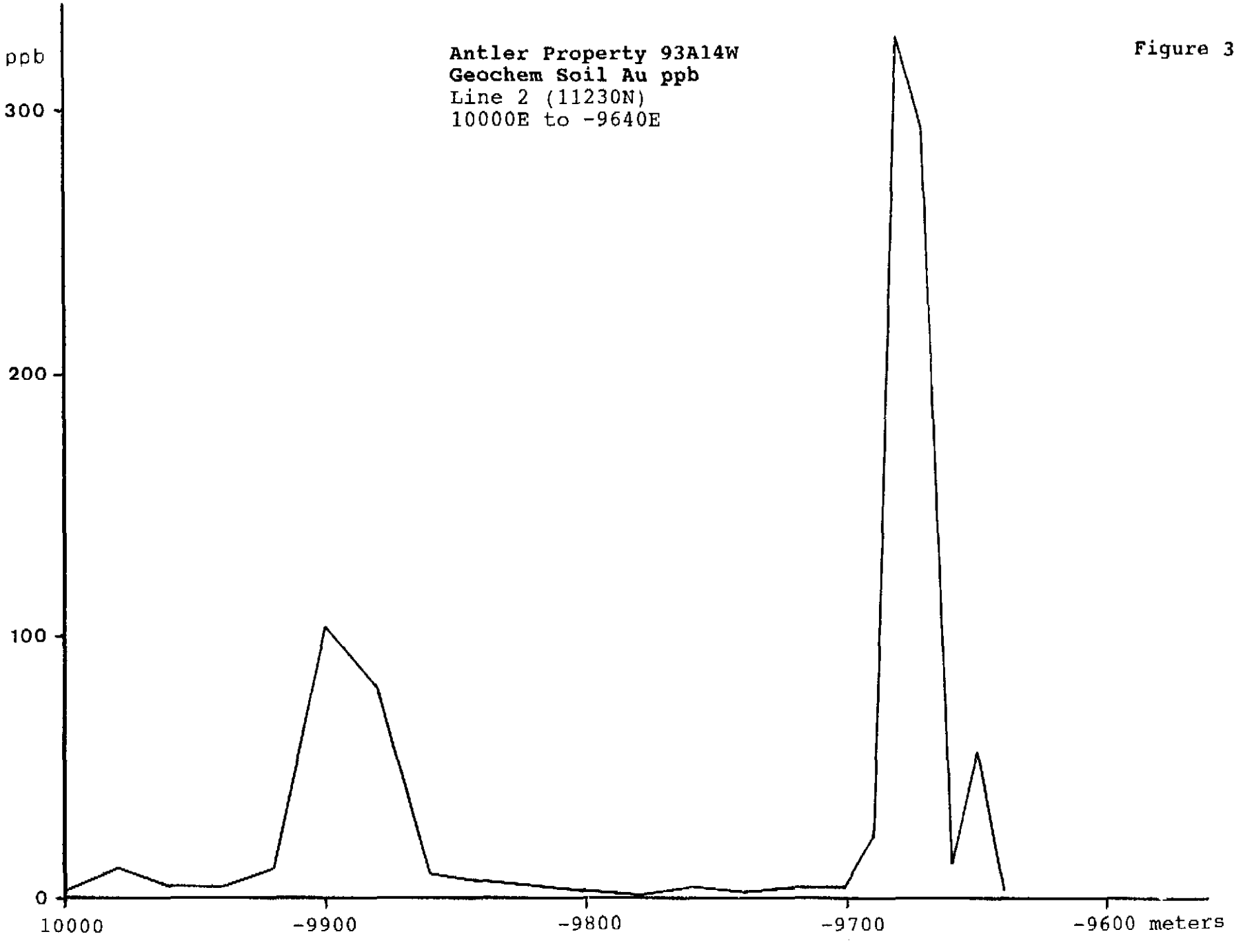

Antler Property 93A14W
Geochem Soil Au ppb
Line 2 (11230N)
10000E to -9640E
ppb
300
200
100
0
10000
-9900
-9800
-9700
-9600 meters

Figure 4

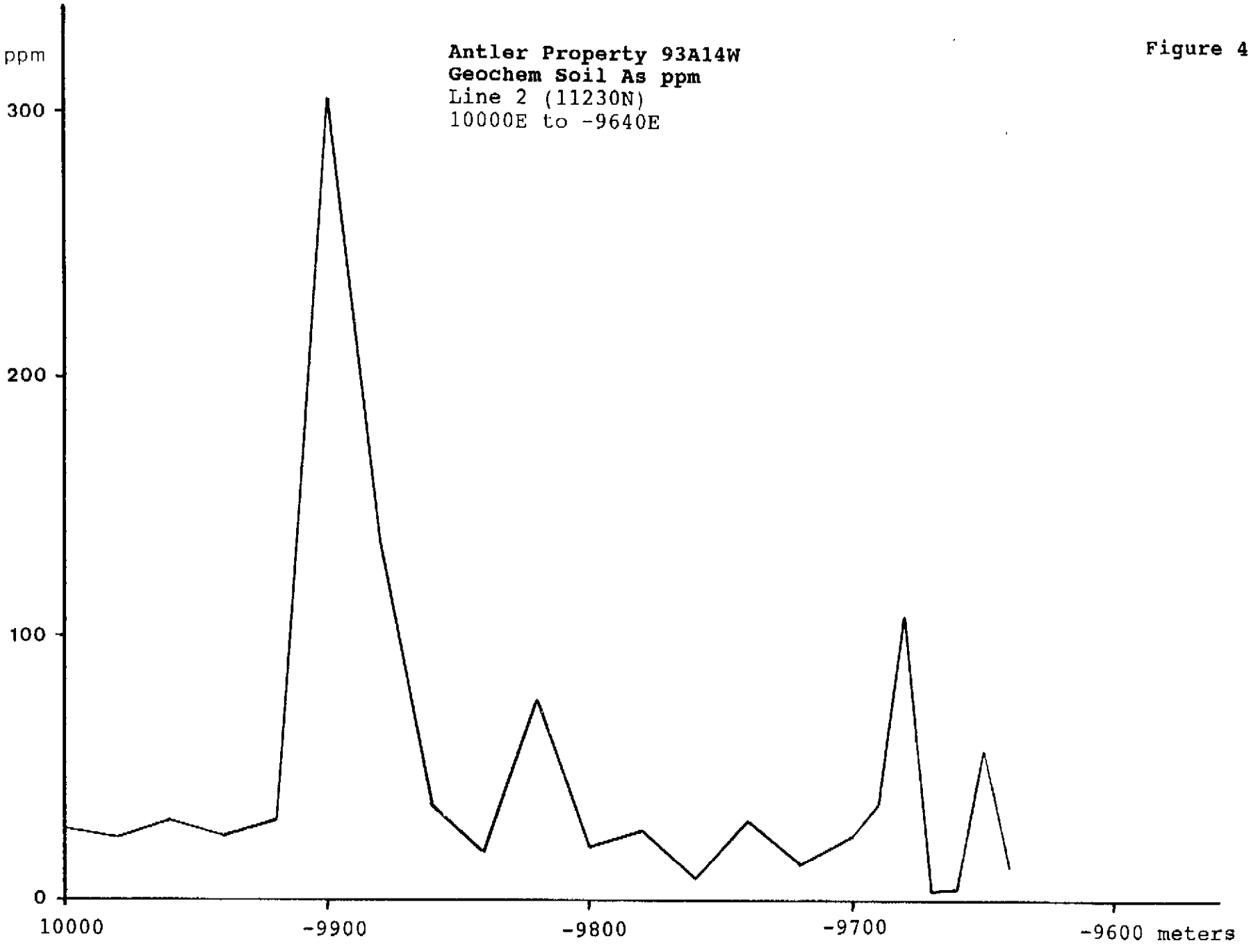

Antler Property 93A14W
Geochem Soil As ppm
Line 2 (11230N)
10000E to -9640E
ppm
300
200
100
0
10000
-9900
-9800
-9700
-9600 meters

Figure 5

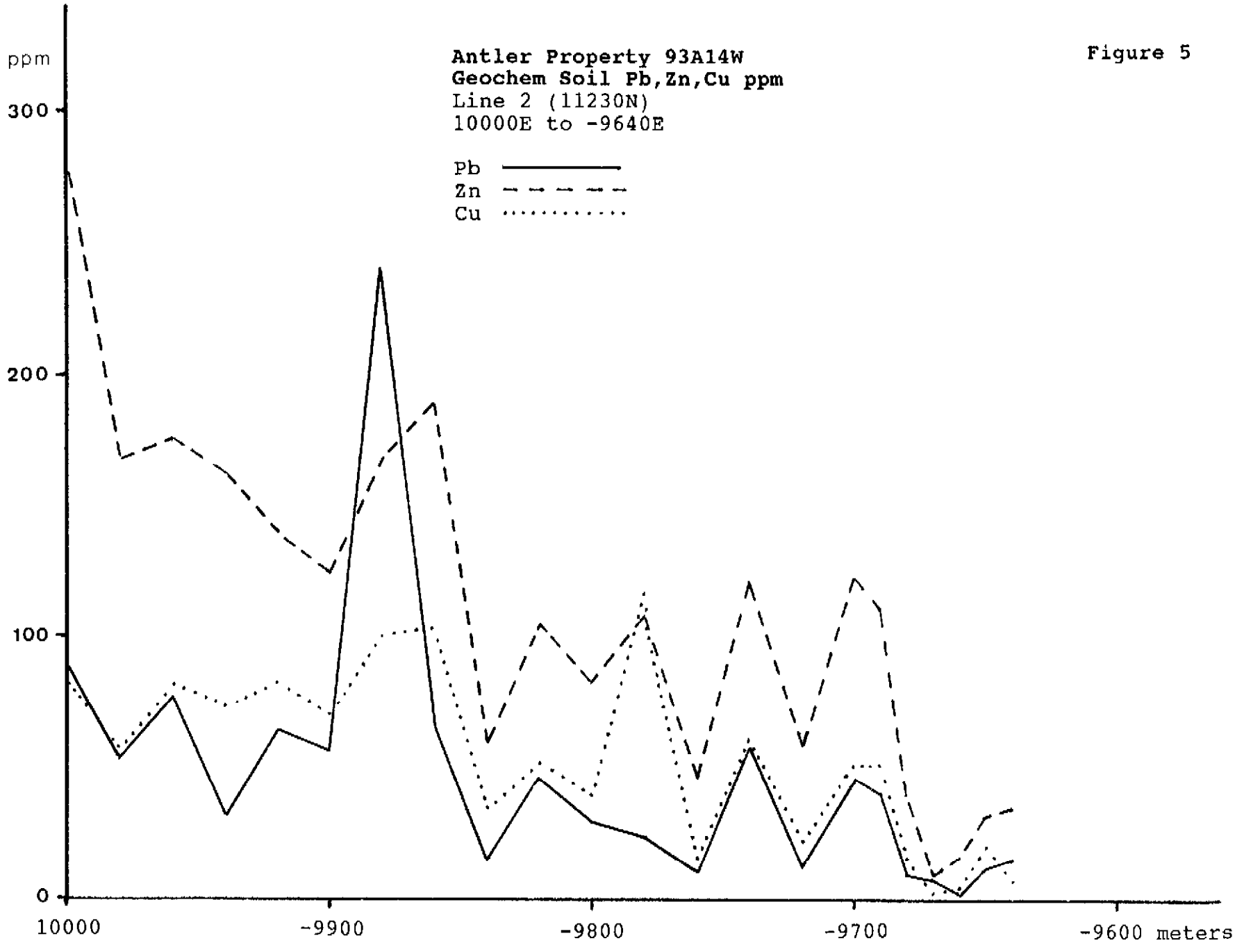
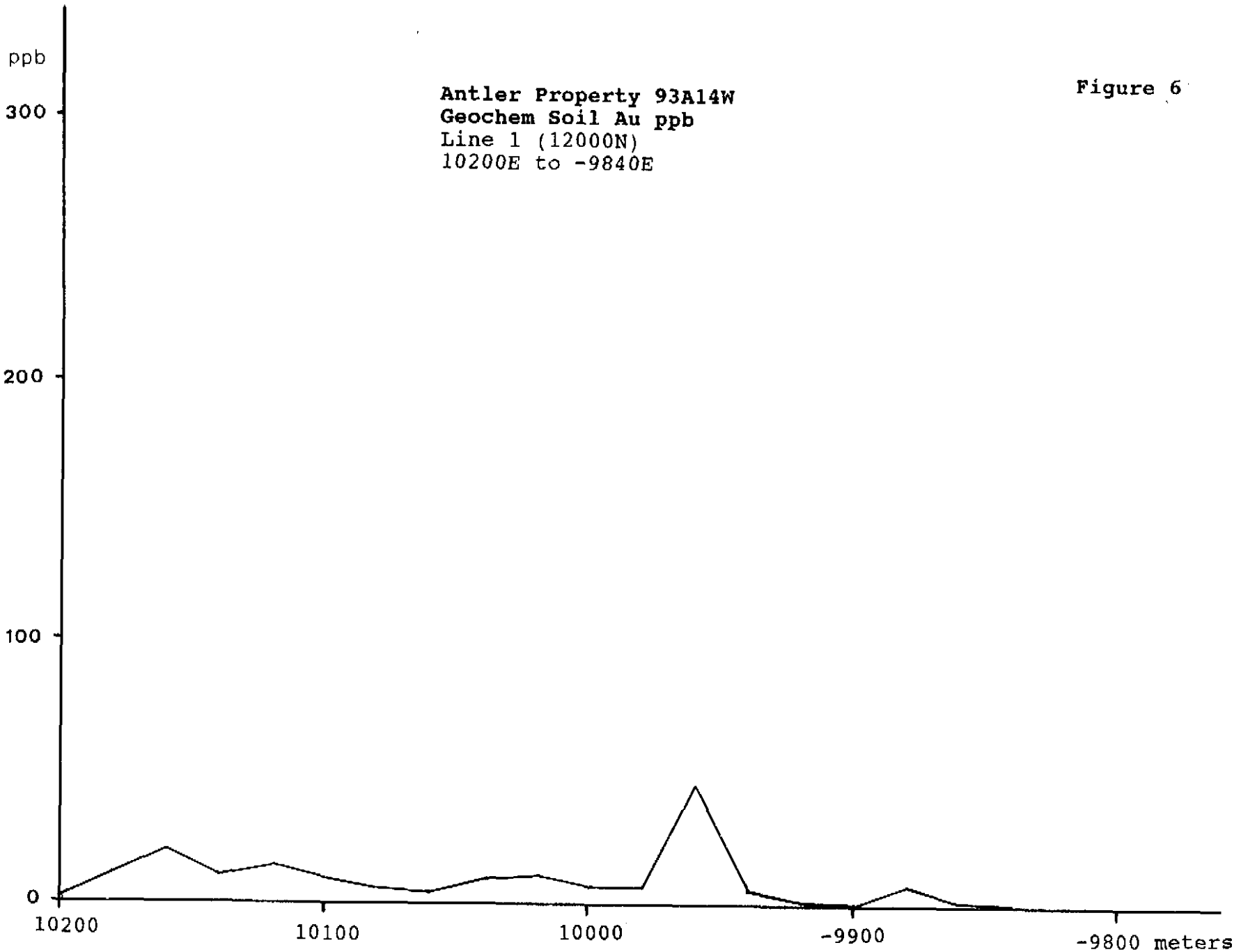
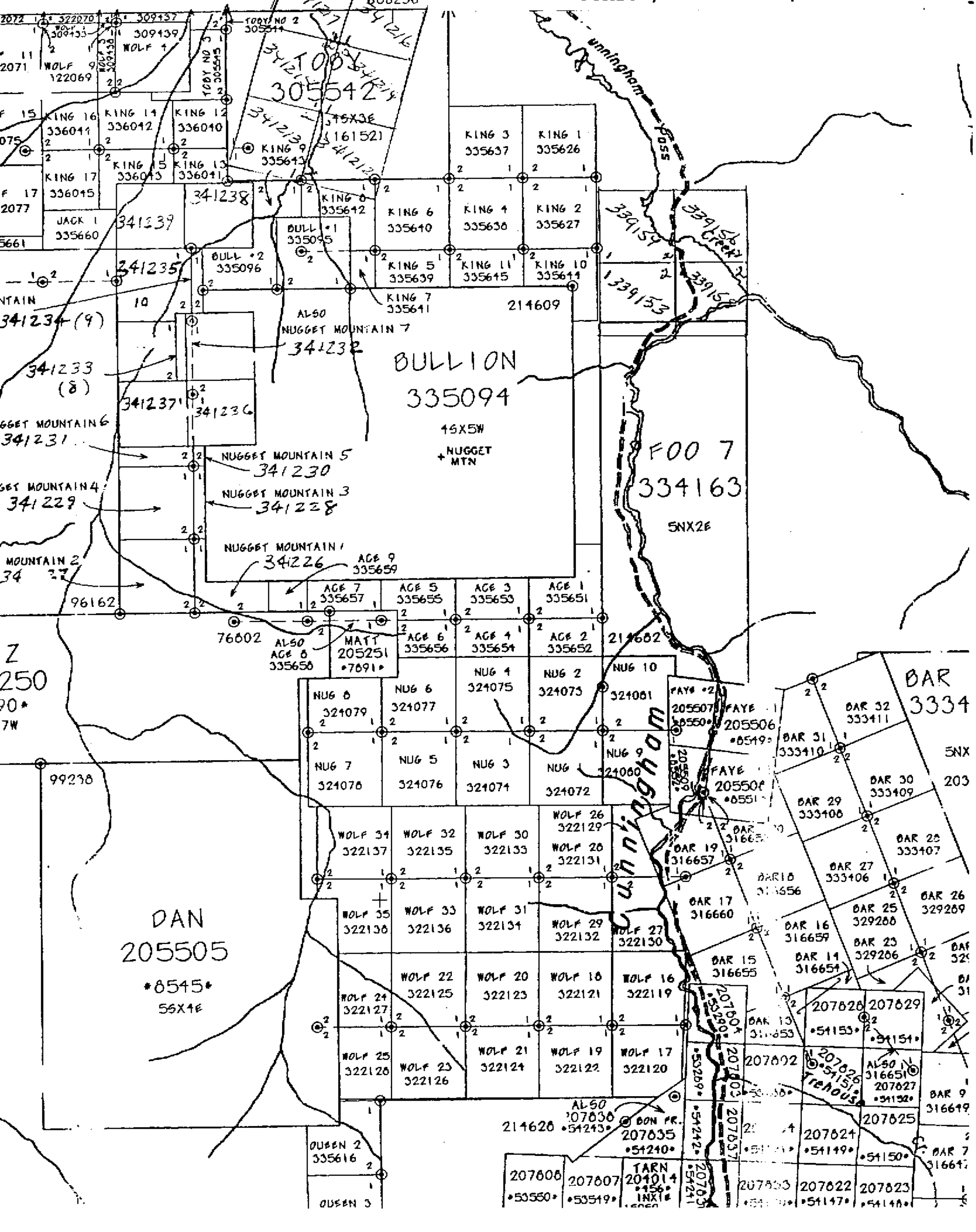

Antler Property 93A14W
Geochem Soil Pb,Zn,Cu ppm
Line 2 (11230N)
10000E to -9640E
Pb
Zn
Cu
ppm
300
200
100
0
10000
-9900
-9800
-9700
-9600 meters

Figure 6



Antler Property 93A14W
Geochem Soil Au ppb
Line 1 (12000N)
10200E to -9840E

Figure 7: B.C. Ministry Mineral Claims Map, 93A14W, Scale 1:31,680.



ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

ASSAY CERTIFICATE

Cariboo Mining Services File # 95-4367 Page 1

301 - 776 Vaughan St., Quesnel BC V2J 2T5 Submitted by: Stephen Kocsis

SAMPLE#	-100 gm	+100 gm	-100Au opt	+100Au opt	TotAu opt	DupAu opt
A 21001	632	14.4	.002	.010	.002	-
A 21002	584	10.1	<.001	.023	.001	-
A 21003	556	10.4	.004	<.001	.004	-
A 21004	551	6.3	<.001	<.001	<.001	-
A 21005	600	15.5	.001	.001	.001	-
A 21201	565	12.4	.003	.207	.008	-
A 21202	532	20.8	.001	.001	.001	-
A 21203	570	12.0	<.001	.002	<.001	-
A 21204	562	17.7	.001	<.001	.001	-
A 21205	556	9.7	<.001	.015	<.001	<.001
RRE A 21205	642	3.7	.001	.087	.001	-
A 21206	558	12.8	<.001	.001	<.001	-
A 21207	557	12.7	<.001	.046	.001	-
A 21208	589	9.6	.001	<.001	.001	-
A 21209	619	6.7	<.001	.140	.002	-
A 21210	615	13.7	<.001	.002	<.001	-
A 21211	585	5.4	.001	.003	.001	-
A 21212	615	12.9	.005	.011	.005	-
A 21213	554	4.0	<.001	.007	<.001	-
A 21214	588	15.8	.028	.075	.030	-
A 21215	611	10.0	.001	.001	.001	-
A 21216	599	6.5	.001	.004	.001	-
A 21217	514	18.1	.009	.002	.009	-
A 21218	592	18.1	.001	.001	.001	-
A 21219	503	32.0	<.001	<.001	<.001	-
A 21220	548	6.7	.002	.012	.002	<.001
RRE A 21220	596	35.8	<.001	<.001	<.001	-
A 21221	595	13.7	.001	<.001	.001	-
A 21222	508	24.0	.001	.001	.001	-
A 21223	502	.7	<.001	<.001	<.001	-
A 21224	562	14.1	.001	.002	.001	-
A 21225	585	2.8	.001	.002	.001	-
A 21226	542	5.6	.007	<.001	.007	-
A 21227	540	1.9	.009	.006	.009	-

-100 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -100 MESH. +100 AU - TOTAL SAMPLE FIRE ASSAY.
- SAMPLE TYPE: P1 ROCK P2 TO P3 SOIL

DATE RECEIVED: OCT 25 1995 **DATE REPORT MAILED:** Nov 14/95 **SIGNED BY** ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Cariboo Mining Services File # 95-4367 Page 2

301 - 776 Vaughan St., Quesnel BC V2J 2T5 Submitted by: Stephen Kocsis

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
A00001S	1	51	19	83	<.3	39	17	701	4.76	13	<5	<2	14	16	<.2	<2	<2	15	.23	.065	41	18	.51	33	.01	<3	1.14	.01	.03	<2	6
A00002S	<1	28	20	59	<.3	24	12	453	3.94	<2	<5	<2	<2	7	<.2	<2	<2	8	.09	.039	17	10	.28	22	<.01	<3	1.00	<.01	<.01	<2	10
A00003S	1	40	27	89	<.3	39	21	890	5.31	22	<5	<2	4	18	<.2	3	<2	15	.33	.081	25	23	.44	39	<.01	<3	1.47	<.01	.02	<2	9
A00004S	1	51	37	91	<.3	38	20	860	5.26	19	<5	<2	11	12	<.2	<2	<2	15	.19	.033	40	18	.49	33	<.01	<3	1.11	<.01	.02	<2	4
A00005S	1	56	28	85	.5	51	18	580	5.30	24	<5	<2	8	17	<.2	<2	<2	15	.23	.071	34	23	.51	33	<.01	<3	1.87	<.01	.01	<2	5
A00006S	1	42	21	98	<.3	44	20	618	4.78	25	<5	<2	10	6	<.2	<2	<2	16	.06	.045	41	24	.58	33	<.01	<3	1.34	<.01	.02	<2	9
A00007S	1	48	34	114	<.3	44	24	1009	5.57	27	<5	<2	11	21	<.2	<2	<2	18	.36	.080	41	25	.57	43	.01	<3	1.22	.01	.03	<2	14
A00008S	1	55	30	117	.6	55	25	1358	5.40	21	<5	<2	9	16	.3	<2	<2	16	.28	.077	32	24	.50	48	<.01	<3	1.97	<.01	.02	<2	10
A00009S	1	56	36	97	<.3	51	27	974	5.49	22	<5	<2	8	9	.3	<2	<2	16	.10	.048	30	28	.50	31	<.01	<3	1.65	.01	.01	<2	12
RE A00009S	1	56	39	104	.3	53	28	1018	5.77	25	<5	<2	8	9	.3	2	<2	16	.11	.050	31	29	.52	33	<.01	<3	1.74	.01	.02	2	20
A00010S	1	35	26	122	.4	45	19	594	5.28	22	<5	<2	9	13	.2	<2	<2	19	.20	.056	37	29	.59	38	.01	<3	1.49	<.01	.02	<2	11
A00011S	1	56	37	105	<.3	52	21	959	6.01	21	<5	<2	7	13	<.2	<2	<2	18	.18	.049	31	29	.56	44	<.01	<3	1.43	<.01	.01	<2	2
A00012S	1	64	47	93	.7	46	24	841	6.31	24	<5	<2	6	21	.3	2	<2	15	.34	.106	27	25	.49	37	<.01	<3	1.50	<.01	.02	<2	6
A00013S	1	65	26	91	<.3	39	19	760	5.05	21	<5	<2	11	5	<.2	2	<2	11	.05	.030	45	15	.35	30	<.01	<3	.94	<.01	<.01	2	45
A00014S	1	55	12	77	.3	20	16	539	6.64	17	<5	<2	4	6	.4	<2	<2	32	.07	.063	23	24	.36	34	.01	<3	2.14	<.01	.01	5	5
A00015S	1	24	12	77	<.3	32	14	621	6.03	15	<5	<2	8	5	<.2	<2	<2	18	.06	.067	19	32	.51	39	<.01	<3	1.91	<.01	.02	<2	1
A00016S	1	22	16	58	<.3	19	7	215	4.43	11	<5	<2	4	5	.2	3	<2	21	.02	.039	25	20	.22	35	.01	<3	1.20	<.01	.01	<2	<1
A00017S	1	31	42	82	.3	22	12	440	7.46	21	<5	<2	9	5	<.2	<2	2	27	.02	.049	32	24	.26	54	.01	<3	1.41	<.01	.01	<2	7
A00018S	1	42	11	76	<.3	31	12	383	8.10	25	<5	<2	7	4	<.2	<2	<2	16	.03	.035	26	22	.22	37	.01	<3	1.24	<.01	.01	<2	1
A00020S	2	82	88	280	1.1	86	31	1631	7.14	26	<5	<2	7	32	.4	<2	<2	31	.41	.105	29	63	.66	130	<.01	<3	2.49	.01	.08	<2	3
A00021S	1	56	55	169	.4	49	23	1370	6.36	23	<5	<2	5	33	.6	<2	<2	30	.43	.131	22	40	.64	91	<.01	<3	1.66	.01	.05	<2	11
A00022S	1	82	78	177	.6	62	28	1548	6.90	30	<5	<2	5	52	<.2	<2	<2	32	.79	.117	23	47	.71	86	<.01	<3	1.73	.01	.06	<2	4
A00023S	2	74	32	163	<.3	63	26	893	6.07	24	<5	<2	12	13	.2	<2	<2	28	.08	.040	47	44	.86	96	<.01	<3	2.08	.01	.08	<2	4
A00024S	1	83	65	140	.3	63	30	1569	7.37	30	<5	<2	7	19	<.2	<2	<2	25	.23	.104	35	35	.52	69	<.01	<3	1.75	<.01	.03	<2	11
A00025S	1	71	57	134	.6	35	19	906	7.30	304	<5	<2	4	12	<.2	<2	<2	26	.12	.079	26	31	.36	92	.01	<3	1.51	.01	.02	<2	103
A00026S	2	101	241	168	.5	36	21	1061	7.38	138	<5	<2	3	12	.5	<2	<2	32	.16	.136	23	37	.43	66	.01	<3	1.48	.01	.04	<2	80
A00027S	2	103	67	190	.9	71	29	1805	7.06	36	<5	<2	5	29	.2	<2	<2	29	.37	.115	25	40	.64	86	.01	<3	1.59	.01	.04	<2	9
A00028S	1	35	15	60	<.3	26	11	369	4.30	18	<5	<2	6	7	.3	2	2	16	.03	.064	40	19	.30	67	<.01	<3	1.26	<.01	.03	<2	6
A00030S	1	39	29	82	.7	38	17	932	6.32	20	<5	<2	4	40	.2	<2	<2	19	.49	.084	33	24	.33	56	.01	<3	1.58	.01	.03	<2	5
A00031S	1	116	23	107	.8	18	22	1889	9.43	26	<5	<2	4	48	<.2	<2	<2	82	.68	.097	12	13	.64	66	<.01	<3	2.34	<.01	.01	<2	3
A00032S	1	15	10	46	<.3	13	6	228	2.53	8	<5	<2	3	10	.2	<2	<2	26	.06	.044	78	10	.07	59	<.01	<3	.82	.01	.04	<2	1
A00033S	1	60	57	110	.5	45	21	1161	5.69	30	<5	<2	4	31	.2	<2	<2	31	.44	.075	29	36	.38	89	<.01	<3	1.64	.01	.04	<2	4
A00034S	<1	22	12	58	<.3	27	11	541	4.36	13	<5	<2	10	20	<.2	2	<2	13	.29	.059	49	24	.58	56	<.01	<3	1.89	<.01	.04	<2	2
A00035S	1	56	42	121	.4	45	21	1512	5.10	23	<5	<2	6	23	<.2	<2	<2	20	.28	.093	33	30	.48	74	<.01	<3	1.56	.01	.05	<2	4
STANDARD C/AU-S	21	64	36	132	6.9	69	33	1063	4.03	42	17	8	41	55	19.9	17	21	57	.51	.095	40	67	.93	187	.09	26	1.94	.06	.15	10	47

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: P1 ROCK P2 TO P3 SOIL AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 25 1995 **DATE REPORT MAILED:** Nov 14/95 **SIGNED BY** ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
A00019S	<1	17	9	22	<.3	20	8	416	2.96	11	5	<2	3	4	<.2	<2	<2	8	.07	.043	21	4	.06	25	<.01	<3	.43	<.01	.05	<2	<1
A00029S	1	51	46	104	<.3	42	27	2129	8.93	75	<5	<2	3	9	<.2	<2	5	8	.02	.111	29	6	.04	43	<.01	<3	.51	<.01	.04	<2	4
A00036S	1	51	40	110	<.3	41	21	1157	4.90	36	5	<2	4	19	.2	<2	<2	24	.26	.089	33	25	.38	72	.01	<3	1.22	.01	.05	<2	23
A00037S	2	15	9	39	.6	11	4	185	2.08	107	<5	<2	5	7	<.2	<2	<2	24	.03	.035	46	6	.03	25	.01	<3	.53	<.01	.03	2	327
A00038S	<1	2	7	8	<.3	2	1	37	.54	3	7	<2	5	5	<.2	<2	<2	7	.02	.021	42	3	.01	40	<.01	<3	.65	<.01	.02	<2	292
A00039S	<1	3	<3	16	<.3	5	2	71	1.01	4	6	<2	6	9	<.2	<2	<2	7	.01	.021	46	4	.02	33	<.01	<3	.60	<.01	.02	<2	13
RE A00037S	1	14	8	37	.6	10	4	167	1.97	100	5	<2	5	6	<.2	<2	2	22	.02	.033	41	5	.03	23	.01	<3	.50	<.01	.02	<2	218
A00040S	1	20	12	31	<.3	18	7	157	3.48	55	<5	<2	7	6	<.2	<2	<2	9	.02	.045	33	3	.03	33	<.01	<3	.56	<.01	.03	<2	55
A00041S	2	7	15	34	<.3	10	4	110	3.10	12	<5	<2	8	5	<.2	<2	2	19	.04	.028	31	15	.23	45	<.01	<3	1.37	<.01	.03	<2	3

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.
AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.