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GEOLOGICAL AND GEOCHEMICAL EVALUATION
AND
EXPLORATION RECOMMENDATIONS

URAL PROJECT

Latitude 51°00' North
Longitude 122°52' West
N.T.S. 92J/15W and 92O/2W
LILLOOET MINING DIVISION

for

GEOMEX CANADA RESOURCES LTD.
Calgary, Alberta

by

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SEPTEMBER 1983

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MAPS (back pocket)

1 Geological and Geochemical Compilation

CERTIFICATE

I, Michael Fox, of #24, 23 Glamis Drive S.W., Calgary, Alberta, do hereby certify that:

1. I am a registered Fellow in good standing of the Geological Association of Canada, and a registered Professional Geologist in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
2. I am a graduate of the University of British Columbia, B.Sc. (1974).
3. I have been practising my profession as a geologist for nine years and I have worked in the field of mineral exploration since 1965.
4. I do not currently own any interest, direct, indirect, or contingent, in the shares of Geomex Canada Resources Ltd., or in the Ural Project claims or any other property within a radius of ten kilometres of the Ural Project claims.
5. I have conducted a completely independent analysis of all data available for this property.
6. I have spent thirty (30) days examining the Prospect; my most recent visit to the property was during the period September 16 - 23, 1983.

DATED at Calgary, Alberta, this 30th day of September, A.D. 1983



Michael Fox, B.Sc., F.G.A.C., P.Geol.

- 1 -

SUMMARY

The Ural Project claims cover two principal types of precious metal targets. These are, firstly, the possibility of bulk-tonnage gold/arsenic/antimony deposits, and secondly, the possibility of high-grade poly-metallic (gold, silver, lead, zinc, arsenic, antimony, and copper) vein deposits. The geochemical surveys have indicated good potential for the presence of both.

The best possibilities for bulk-tonnage deposits indicated to date would be on the Lucky Jem and the East Taylor Basin zones. The best example of a high-grade poly-metallic vein is the Lucky Strike deposit.

The "A" Grid geochemical anomaly could be associated with either a bulk-tonnage or a vein-type target. Further sampling was conducted this fall with the samples currently being analyzed.

A four-phase program has been recommended, with the field aspects of the first phase already completed.

INTRODUCTION

Synopsis

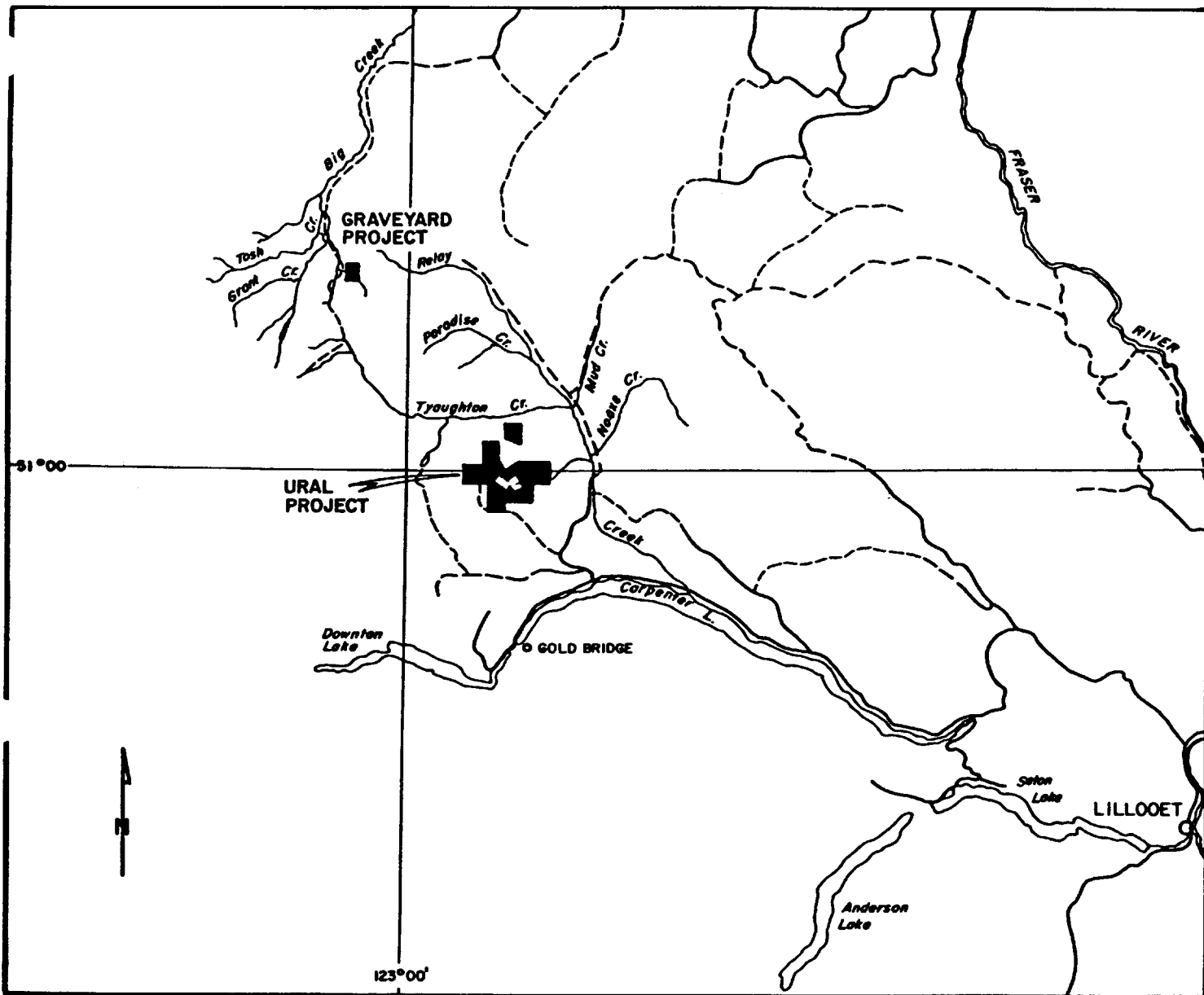
In September 1983, the writer was retained by Geomex Canada Resources Ltd. to prepare a geological and geochemical evaluation and to formulate exploration recommendations for a mining property located in southwestern British Columbia. The property consists of seven mineral claims, two fractional mineral claims, and seven reverted Crown granted mineral claims, totalling approximately 3591 hectares (8874 acres), referred to collectively herein as the Ural Project.

This report is an evaluation of systematic geological and geochemical work carried out in the project area in 1975, 1976, 1980, and 1982. The results of 1983 work are still pending. The results of earlier exploration, carried out between 1910 and 1969, documented in the B.C. Minister of Mines Annual Reports, are also incorporated into this report.

Current exploration interest centres around the Lucky Jem and the Lucky Strike poly-metallic vein-type precious metal occurrences and a number of Au-in-soils anomalies defined by grid-controlled geochemical sampling. A 700m wide Au/As anomaly, open along strike, is present along the trend of a stockwork zone above the Lucky Jem, described by earlier workers. Gold geochemical anomalies in the "A" grid and Taylor Basin grid areas of the property indicate the potential for similar vein or stockwork type precious metals mineralization.

Location and Access

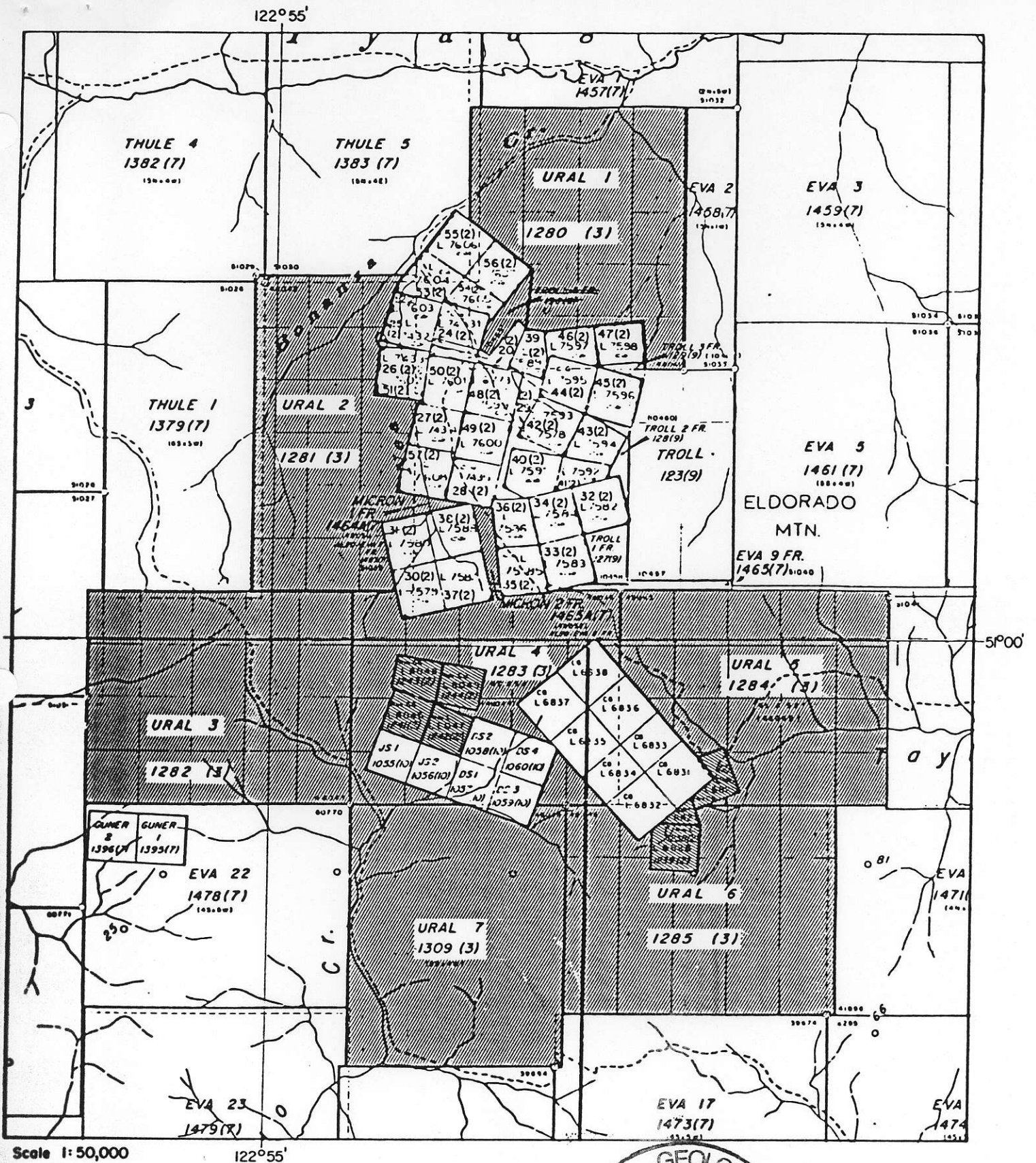
The Ural 1-7 mineral claims, the Micron 1 and 2 Fractions, and the seven reverted Crown grants, all of which constitute the Ural Project, form two separate claim blocks situated in the Bridge River (Bralorne-Pioneer) placer and lode gold district, approximately 180 km north of Vancouver, British Columbia, and some 18 km north of the Bralorne-Pioneer mine. The approximate geographic coordinates of the centre of the claim blocks are 51°00' North latitude and 122°52' West longitude (Figure 1).



Scale 1: 600,000 approx.

----- roads, trails

Figure 1
PROPERTY LOCATION MAP

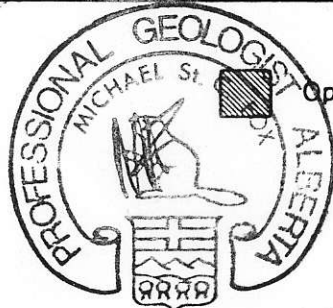


Owned claims

Optioned claims

Figure 2

URAL CLAIMS



The claims are accessible by a 13 km long four-wheel-drive trail into Taylor Basin which connects via the Tyaughton Creek road with the Lillooet-Gold Bridge gravel highway approximately 90 km west of Lillooet (Figure 1).

Property and Ownership

The Ural and Micron claims are located in the Lillooet Mining Division and are registered in the name of Golden Rule Resources Ltd. of Calgary, Alberta. The claims are described more specifically as follows:

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record Number</u>	<u>Date of Record</u>
Ural 1	20	1280	} March 13, 1980
Ural 2	18	1281	
Ural 3	20	1282	
Ural 4	20	1283	
Ural 5	20	1284	
Ural 6	20	1285	
Ural 7	20	1309	March 31, 1980
Micron 1 Fr.	1	1464	} July 29, 1980
Micron 2 Fr.	1	1465	

Seven reverted Crown-granted mineral claims, listed below, are located internally to the Ural and Micron claims and are presently held under option agreement by Golden Rule Resources Ltd.:

<u>Claim Name</u>	<u>Lot Number</u>	<u>Record Number</u>	<u>Date of Record</u>	<u>Acreage</u>
Lucky Strike Fr.	L.6827	1238	Feb. 11, 1980	11.18
Lucky Strike	L.6828	1239		50.58
Homestake No.4	L.6829	1240		35.63
Bob No.3	L.8046	1241		51.65
Bob No.4	L.8047	1242		51.65
Bob No.5	L.8048	1243		48.37
Bob No.6	L.8049	1244		51.65

For purposes of applying assessment work, the above claims have been divided into three groups, described as follows:

1. Ural 1 (not contiguous with the other claims).
2. Micron Group: Ural 2, 4, 5, 6; Micron 1 and 2 Fractions; and the seven reverted Crown grants.
3. Ural Group: Ural 3 and 7.

Physiography and Glaciation

The claims lie within the Coast Mountains physiographic province, an intensely glaciated mountainous region of narrow-crested ridges, cirques, serrated peaks, and deeply cut valleys filled with glacial deposits and alluvium. Peak elevations and higher ridges average approximately 2,440 m ASL, well above treeline which is at about 1,980 m ASL. Bedrock exposures are excellent along ridges and most drainages. Despite the extreme topographic relief and consequent rarity of glacial deposits at higher elevations, little outcrop is to be found elsewhere, owing to a widespread thin cover of fine rubbly talus and felsenmeer. At lower elevations, below 1,830 m ASL, there is a widespread layer of volcanic ash which originated at Plinth Peak, located 60 km to the southwest. On the northern (lower) slopes of the Ural 1 claim, the ash attains thicknesses of up to 0.6 m. The ash is a dacitic pumice, dated at 2440± B.P.

History and Previous Development

Following the discovery of placer gold on Bridge River near Lillooet in 1858, a number of placer claims were located in 1859 on Gun Creek and along the lower reaches of Bridge River. In 1882, prospectors discovered placer gold on Hurley River, and in 1886 on Cadwallader Creek. In 1896, intensive prospecting led to the discovery of gold-quartz veins near the confluence of Hurley River and Cadwallader Creek and the first lode gold claims (the Elephant and the Forty Thieves) were located on July 2, 1896. Subsequently, the area developed into one of the most important gold-producing camps in British Columbia.

Prospecting in the Ural Project area resulted in the discovery, around 1909, of the Lucky Jem veins originally known as the White and Bell prospect. The Lucky Strike prospect may have been known as early as 1912, although earlier descriptions are somewhat vague geographically. Other occurrences of significance are the Northern Lights and the Robson prospects, both of which are located on adjacent claim groups owned by companies unrelated to either Geomex Canada Resources Ltd. or Golden Rule Resources Ltd.

During 1975 and 1976, parts of the claims now constituting the Ural Project, were explored by a major resource company. The work consisted of grid-controlled geochemical sampling and geological mapping, and was confined mainly to the block of 35 reverted Crown grants adjoining the Ural 1 claim on the south.

In 1980, Golden Rule Resources Ltd. acquired the Ural 1 to 7 mineral claims and the Micron 1 and 2 fractional mineral claims. Subsequently, the seven reverted Crown grants were acquired. Programs consisting of geological mapping and geochemical sampling were carried out in 1980, 1982, and 1983. The results of the 1980 and 1982 programs are described in detail in reports filed with the B.C. Ministry of Energy, Mines and Petroleum Resources. At the date of this report, the 1983 program had only just been completed and results and analyses are pending.

REGIONAL GEOLOGY

The Ural claims and adjacent claim groups are underlain by an assemblage of serpentized ultramafic rocks; mafic to intermediate volcanic rocks metamorphosed to greenstones; and metamorphosed fine-grained clastic and chemical sediments, including argillite, chert, siliceous tuffs, and limestone. The sedimentary rocks are presently considered to have been deposited in a deep marine environment. Volcanic rocks vary from 'sub-volcanic' dioritic and gabbroic bodies to fine-grained massive flows which occasionally exhibit amygdaloidal textures and pillow structures. The probable degree of regional metamorphism is lower greenschist facies. There is no appreciable development of schistosity or other metamorphic textures.

The assemblage described above is intruded by a small quartz diorite pluton, approximately 10 km² in area, at Eldorado Mountain and by a number of smaller felsic intrusive bodies elsewhere on the claims. Intrusive contacts are characterized by fracturing, silicification, and pyritization of the older rocks. The entire claims area is transected by strong northerly, northwesterly, and northeasterly trending fault systems, which appear to be fundamental controls of alteration, mineralization, and emplacement of intrusive rocks.

The claims lie within a hydrothermal zone of regional dimensions (Pearson, 1975). The presence of arsenopyrite, gold, silver, stibnite, jamesonite, chalcopyrite, sphalerite, and pyrrhotite in the ores of the various showings in the claims area indicates that the property is situated within a poly-metallic part of the hydrothermal system.

PROPERTY GEOLOGY

Property mapping carried out in 1980 and 1982 has partially defined a complex volcanic and sedimentary stratigraphic succession comprised of ultramafic rocks, greenstones, greenstone breccias, chert, argillite, and limestone. The stratigraphic relationships of the above units are further complicated by thrusting and late-stage normal faulting. Field work done to date suggests the following succession:

Sedimentary and Volcanic Rocks

UPPER TRIASSIC

HURLEY FORMATION

Map Unit U^RH

Siltstone, argillite; light grey to black, thinly laminated to massive; well fractured, siliceous, rhyolitic(?), tuffaceous interbeds.

MIDDLE TRIASSIC

BRIDGE RIVER GROUP

Map Unit m^RBRs

Chert, banded chert, chert breccia, quartz-chert breccia, silty chert breccia. Banded chert is not common in those areas of the claims mapped to date. Typically, this unit consists of an orange-weathering breccia comprised of chert fragments cemented in a siliceous matrix; breccia fragments may also consist of white quartz and light grey, green, or black chert fragments in varying proportions. Brecciation was probably a result of diagenetic autobrecciation of the brittle, highly siliceous beds.

Map Unit m^RBRv

Greenstone. This unit consists of mafic to intermediate volcanics exhibiting a variety of textures ranging from massive flows to breccias and tuffs. The small body near the lower Lucky Strike adit, previously grouped with the "Bralorne intrusions", is actually a tuff containing elongated fragmentals. In a number of areas mapped to date, this unit is absent and the chert unit rests directly on the basal ultramafic unit.

Map Unit m^RBRu

Ultramafic rocks. Peridotite, pyroxenite, danite, all undifferentiated, and serpentized and steatitized equivalents. Chromium-bearing accessory minerals occur in hairline fractures from place to place; garnierite occasionally was observed as a coating on deeply weathered outcrops.

Map Unit qcm

Quartz-carbonate-mariposite zones. These zones consist of assemblages of fine-grained to coarsely crystalline quartz, calcite, ankerite, and mariposite. Microscopic pyrite is also fairly abundant. Quartz and calcite commonly occur as anastomosing complex networks of veinlets throughout the rock. These zones are tentatively interpreted as mylonitized alteration products of ultramafic rocks developed in thrust zones which have undergone intense shearing and deformation. They inevitably occur in contact with ultramafic rocks in an apparent stratigraphically lowermost position in the geologic section. However, a number of characteristics of these zones, including vugs, crystalline quartz and carbonate in exotic comb structures and drusy cavities, chalcedonic silica, the preferential emplacement of small intrusive bodies in or closely adjacent to these zones, and the development of epithermal polymetallic lodes in these zones, all indicate that they have also acted as major hydrothermal conduits. Thus, ambiguities are present in the evidence supporting both mylonitic thrust zones and late-stage normal faulting and related hydrothermal features. Further work will likely demonstrate the validity of both interpretations.

Intrusive Rocks

Map Units KTgd
eTfp

A small (10 km²) quartz diorite pluton underlies Eldorado Mountain and exhibits complicated contacts with the enclosing stratified rocks. Substantial areas of the Ural 1, 4, and 5 claims are underlain by apophyses or related phases of the intrusive body. Elsewhere on the Ural claims, a host of small dykes and sills cuts the older sedimentary and volcanic rocks. These small intrusive bodies vary widely in composition, ranging from an exotic carbonatized hornblende porphyry at the upper Lucky Strike adit through gabbro, quartz diorite, porphyritic and microporphyritic quartz-feldspar granite, and rhyolite.

On the accompanying property geology map, the small intrusive bodies are arbitrarily grouped as a single unit, notwithstanding the wide variations in composition.

ECONOMIC GEOLOGY

The Lucky Jem and the Lucky Strike precious metals occurrences, located within the mineral dispositions constituting the Ural Project, are described in detail below.

Lucky Jem

The Lucky Jem mineral occurrences are thought to have been the first discovered in the vicinity of the project area, with claim locations being made in 1910 by a prospector named Grant White. The property was originally known as the White and Bell prospect.

The main workings consist of two adits located near the headwaters of Eldorado Creek at about 2,012 m ASL, 3000 m southwest of Peak 8160 on the Nea-Taylor Creek divide. Other workings include ground sluicing near the adits and a number of pits and trenches which explored various showings over a wide zone at higher elevations on the slopes above the adits. When the workings were examined by the writer, the adit portals were much caved although the No.2 adit was accessible for a distance of about 6 m in from the entrance. Due to the deep weathering, extensive oxidation, and intense quartz-carbonate alteration in and near the adits, little could be determined about the structural relationships or compositions of rocks in the mineralized zone. Large blocks of massive sulphide mineralization on the No.2 adit dump indicated that the vein attained widths in excess of 61 cm. Sulphide mineralization consists of massive aggregates of pyrite, arsenopyrite, with lesser amounts of chalcopyrite and stibnite.

In the Minister of Mines 1933 Annual Report, George A. Clothier, Resident Mining Engineer, described the Lucky Jem prospect as an area "...1,000 feet long by 600 feet high, (from which) free gold can be panned practically everywhere from the decomposed material covering the surface."¹ The gold was thought to have been derived from the oxidized remains of "...many small veins of arsenopyrite which can be seen striking in every direction in a wide zone of fracturing."

According to a special report prepared by B. T. O'Grady, British Columbia Department of Mines' Resident Mining Engineer for the Lillooet District, the major showings on the property occur in fractures cutting northwesterly striking metamorphosed sediments of the Hurley Group, which are intruded by an arm of the quartz diorite stock that underlies much of Eldorado Mountain. The No.1 adit, when examined by O'Grady, had been driven north along the strike of an oxidized vein for a distance of 11.3 m. The vein varied in width from 51 cm to 91 cm and was observed to be gently folded and relatively flat-lying, with a dip of 15°E. Samples collected by O'Grady assayed from 0.02 to 1.0 oz/ton Au, and from a trace to 0.6 oz/ton Ag. The No.2 adit, located 65 m west of the No.1 adit, at about

¹George A. Clothier, 1933, British Columbia Minister of Mines Annual Report, p.268.

the same elevation, was driven approximately 8 m at 340° Az on a pair of subparallel intersecting veins, the westerly vein dipping 60°E and the easterly vein dipping 80°W. At their point of intersection, the combined width of the two veins is 127 cm. Samples collected by O'Grady assayed from a trace to 0.04 oz/ton Au, and from a trace to 1.4 oz/ton Ag.

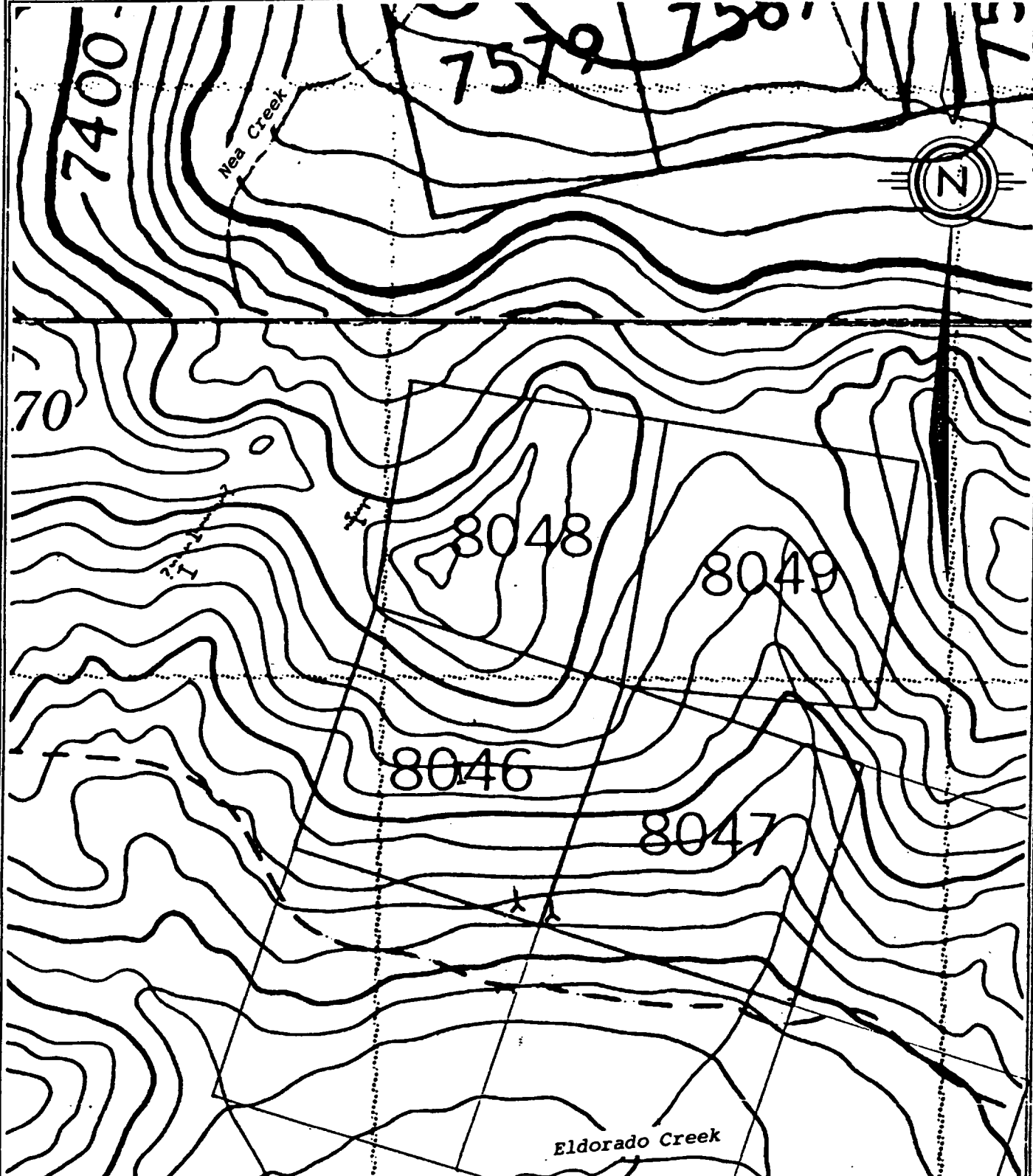
On the mountain slopes above the two adits, O'Grady sampled a number of showings which occur in northeasterly striking, steeply southeasterly dipping fracture zones in the quartz diorite. The showings consist of massive fracture-filling arsenopyrite in oxidized, deeply weathered and decomposed zones. Samples of some of the fresher material assayed from 0.2 to 0.6 oz/ton Au, and from a trace to 0.2 oz/ton Ag.

In the Minister of Mines 1945 and 1946 Annual Reports, it was reported that one of the adits was extended for 15 m in 1945 and a further 69 m in 1946. Cairnes (1943) reported that this work and a considerable amount of diamond drilling was carried out while the property was under option to Britannia Mining and Smelting Co. No information is available concerning the results of this work. The locations of the various workings have been plotted on Figure 3, according to O'Grady's descriptions. Table I encapsulates the assay results of samples collected during O'Grady's examination.

Lucky Strike

The earliest reference to a showing in the vicinity of the Lucky Strike prospect appeared in the Minister of Mines 1925 Annual Report, in a description of the Iron Ridge Group. Although the description of the location of the showing is vague, it is probably the same mineralized zone investigated by the Lucky Strike No.1 and No.2 adits. The Victoria claim mentioned by A. M. Batement in G.S.C. Summary Report 1912 may also be one and the same, since the geological description given bears a similarity to the geology of the Lucky Strike prospect.

After allowing its option to lapse on the Northern Lights No.1 to No.8 claims, Goldside Mines Ltd. optioned the Lucky Strike group late in 1935 and carried out underground exploration in 1936 and subsequent years to 1940. The principal working on the Lucky Strike prospect is the lower or No.1 adit, located on the Homestake No.4 claim, with its portal situated at approximately 1,913 m ASL. When the property was examined by the writer, the workings were found to be entirely accessible although the portal was somewhat caved, and the drift contained about 0.5 m of water. The adit was driven to investigate a mineralized zone striking N7°W along the spine of a low, steep-sided ridge that projects well out into Taylor Basin from the much higher surrounding ridges. Sulphide mineralization has been intermittently exposed by surface cuts over a strike length of 77 m along the spine of the ridge at the contact between a 3 m wide basic dyke and the enclosing serpentinites. A faulted continuation of this zone, located approximately 34 m to the west, has been intermittently exposed by open cuts along a strike length of about 21 m. B. T. O'Grady (1936) supplied a detailed description of the location of the open cuts and the character of mineralization exposed in them (see Figure 4). Sulphide mineralization



LEGEND

- Adit
- Open Cut
- Fault or Shear

A circular professional geologist seal for Michael S. C. Fox, Alberta. The seal contains the text "PROFESSIONAL GEOLOGIST" at the top, "MICHAEL S. C. FOX" in the middle, and "ALBERTA" at the bottom. In the center of the seal is a stylized signature and a small emblem.

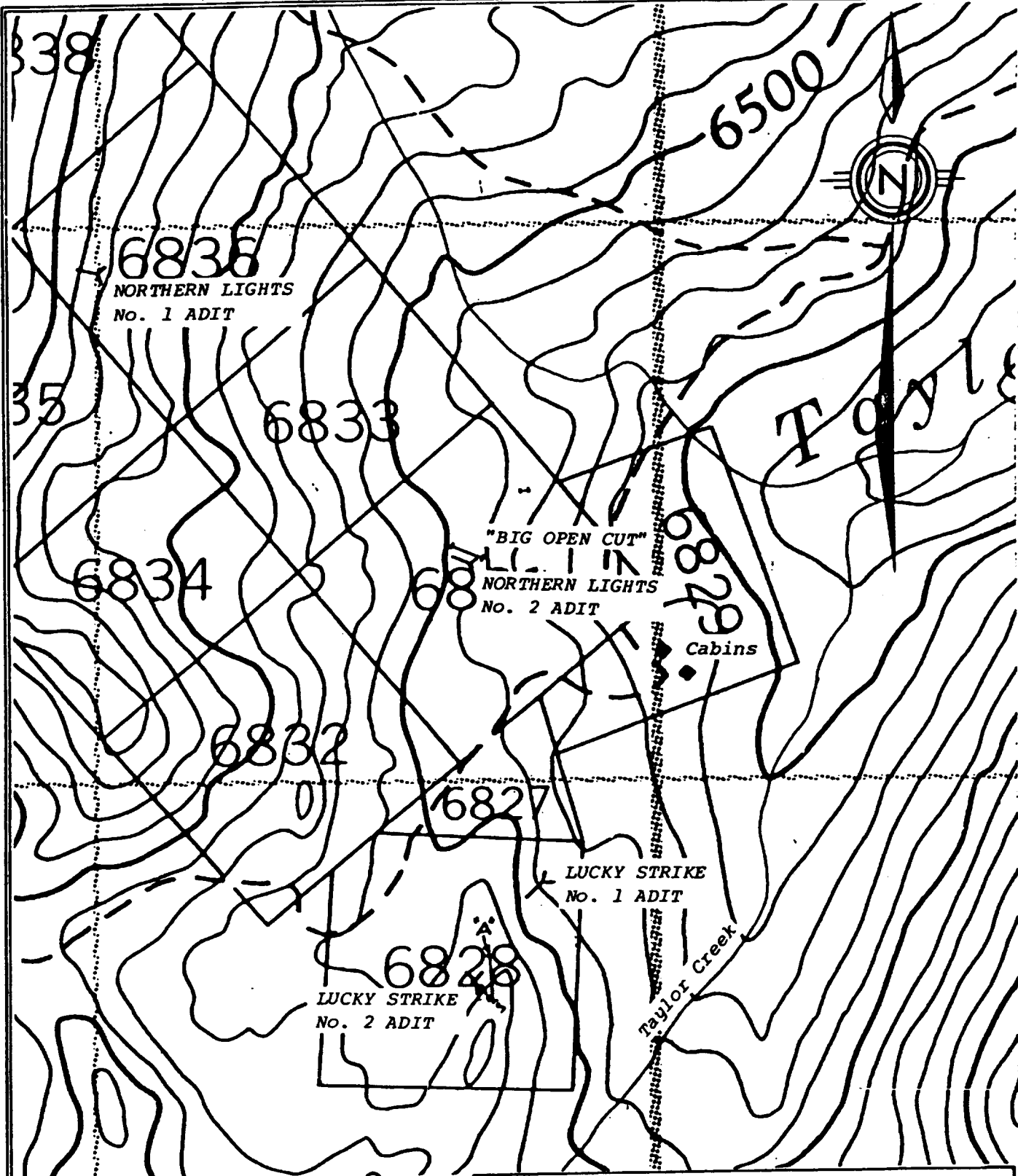
GEOMEX CANADA RESOURCES LTD.

LOCATIONS OF WORKINGS
LUCKY JEM AREA
URAL PROJECT

DATE: SEPT., 1983	FIGURE NO: 3
GEOLOGIST: M. S. C. FOX	SCALE: 1:10,000

TABLE I : Assays and Sampling described in Minister of Mines Special Report
on the Lucky Jem Prospect, by B. T. O'Grady, 1935(?)

<u>Location</u>	<u>Station</u>	<u>Attitude of Mineralized Zone</u>	<u>Sampled</u>	<u>Gold</u>	<u>Silver</u>
A. WORKINGS IN HURLEY GROUP METASEDIMENTS					
No.1 Adit Portal at 2,009 m ASL	11.30 m (37')		50.8 cm (20.0")	0.02 oz/ton	Trace
	9.15 m (30')		50.0 cm (22.0")	1.00 oz/ton	0.5 oz/ton
	7.62 m (25')		91.4 cm (36.0")	0.10 oz/ton	0.6 oz/ton
	6.10 m (20')		81.3 cm (32.0")	0.36 oz/ton	Trace
	4.57 m (15')		71.1 cm (28.0")	0.04 oz/ton	0.4 oz/ton
No.2 Adit, 210' N 85°W from No.1 adit with Portal at 2,012 m ASL	3.05 m (10')	N20°W/60°E (W.Vein)	61.0 cm (24.0")	0.04 oz/ton	0.4 oz/ton
	3.05 m (10')	N20°W/80°W (E.Vein)	97.6 cm (38.4")	0.04 oz/ton	Trace
	6.10 m (20')	N20°W/60°E (W.Vein)	42.7 cm (16.8")	Trace	Trace
	6.10 m (20')	N20°W (central rock parting	(?)	Trace	Trace
	6.10 m (20')	N20°W/80°W (E.Vein)	39.6 cm (15.6")	0.03 oz/ton	1.4 oz/ton
	7.62 m (25')	N20°W/60°E (W.Vein)	21.3 cm (8.4")	Trace	Trace
	7.62 m (25')	N20°W/80°W (E.Vein)	39.6 cm (15.6") ?	0.02 oz/ton	0.2 oz/ton
7.62 m (25')	N20°W (central rock parting	128 cm (50.4")	Trace	Trace	
B. WORKINGS IN QUARTZ DIORITE / GRANODIORITE					
Trench	N 18°W from No.2 adit at 7,160' ASL	"flat, southerly dipping"	61 x 102 cm (24"x40")	0.16 oz/ton	Trace
Open Cut	Summit between Eldorado and Bonanza Creeks at 7,505' ASL	NE strike, steep SE dip	5 cm (2")	0.20 oz/ton	0.2 oz/ton
Open Cut	950' westerly from above at 7,370' ASL	NE strike	61 cm (24")	0.60 oz/ton	Trace
Open Cut	southerly from above location at 7,255' ASL		51 x 91 cm (20"x36")	Not Assayed	Not Assayed



LEGEND

- Adit
- Open Cut
- Fault or Shear

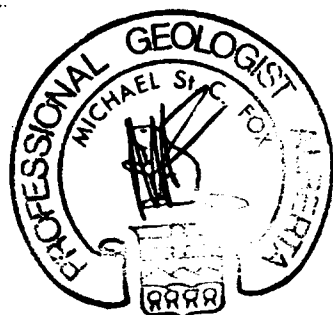
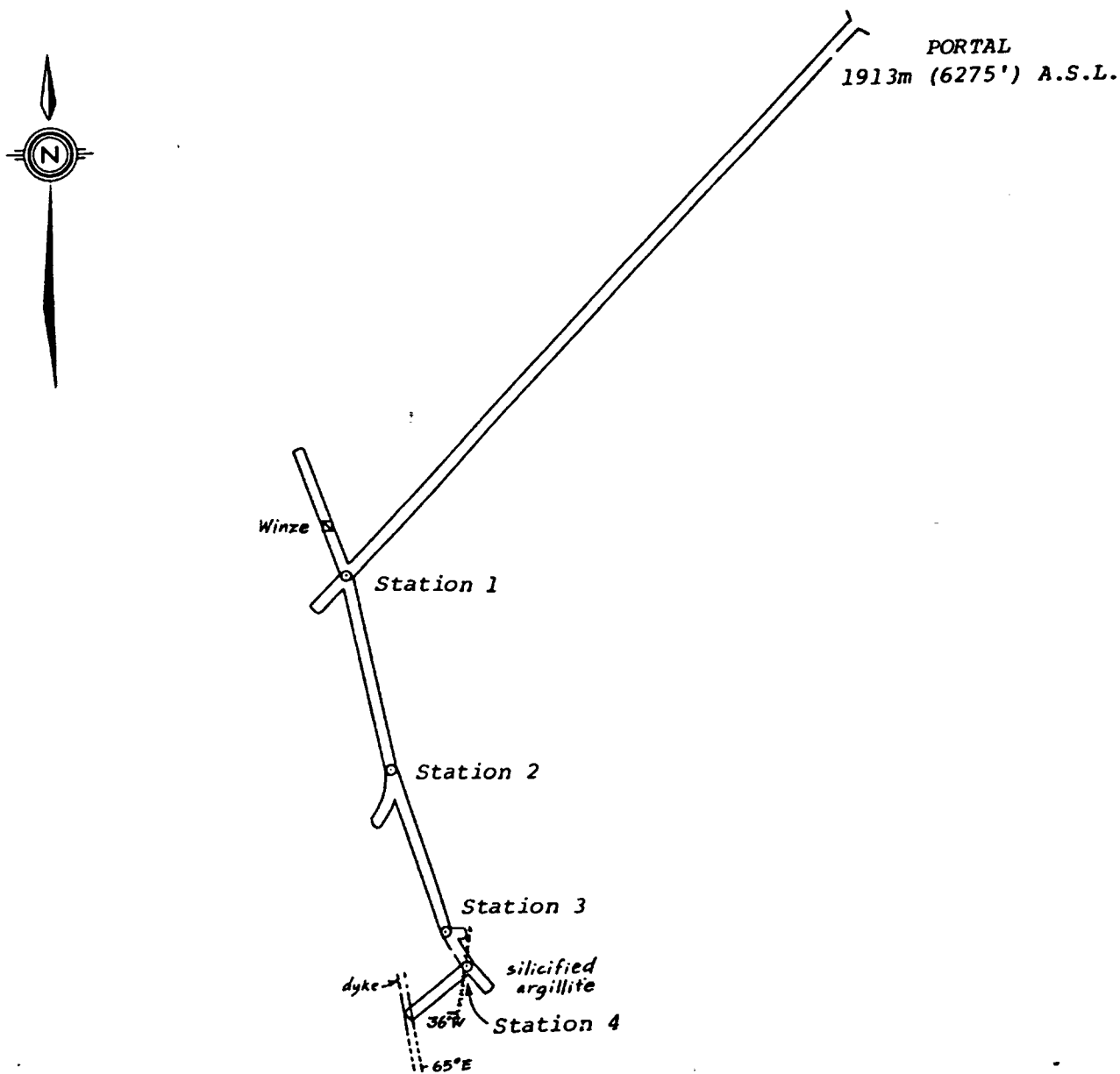
GEOMEX CANADA RESOURCES LTD.	
LOCATIONS OF WORKINGS NORTHERN LIGHTS & LUCKY STRIKE AREA	
URAL PROJECT	
DATE: SEPT, 1983	FIGURE NO: 4
GEOLOGIST: M. S. C. FOX	SCALE: 1:10,000

encountered in the adit consists of irregular pods, lenses, and streaks of sphalerite, jamesonite, pyrite, chalcopyrite, and massively crystalline arsenopyrite, which occur along both sides of the dyke at its contacts with the serpentinite. Gangue minerals consist of quartz-carbonate-mariposite(?) assemblages that represent hydrothermally altered serpentinite. A plan of the adit is shown in Figure 5, and has been reconstructed from a verbal description of the workings published in the 1936 Minister of Mines Annual Report. Table II summarizes sampling and assay data from the same source. According to a later description by Cairnes (1943), the south drift was extended approximately 30 m southwesterly from Station 4, and an additional 44.2 m in a more southerly direction to the face. Only minor sulphide mineralization was encountered in these workings, which are not plotted on Figure 5.

A second adit, referred to as the Coronation Adit in the Minister of Mines 1937 Annual Report, but here referred to as the Lucky Strike No.2 adit, is situated an estimated 200 m southwesterly from the No.1 adit, with its portal at an elevation of approximately 2,035 m ASL. When examined by the writer, the adit was seen to be driven southerly about 10 m on a southerly striking, vertically dipping zone of mineralization which occurred at the contact of a carbonatized hornblende porphyry dyke and the enclosing serpentinite. The mineralized zone consists of a 10 cm wide vein of massive arsenopyrite, jamesonite(?), sphalerite, pyrite, and minor chalcopyrite. Narrow stringers of sulphide mineralization were observed in a spectacularly banded hydrothermally altered serpentinite gangue consisting of a quartz-carbonate-mariposite assemblage. Small pods and very fine-grained disseminations of sulphide minerals occur in this zone for some distance from the dyke.

Minor amounts of surface and underground work were reported to have been carried out in 1938, 1939, and 1940, when operations were suspended.

PLAN OF LUCKY STRIKE No. 1 ADIT
 SCALE 1:1,000 (1 cm : 10 m)
 (Reconstructed from description in 1936 Minister of Mines Annual Report)



GEOMEX CANADA RESOURCES LTD.	
LUCKY STRIKE No. 1 ADIT URAL PROJECT	
DATE · SEPT., 1983	FIGURE NO : 5
GEOL. : M. S. C. FOX	SCALE : 1:1000

**TABLE II Summary of Sampling and Assays at Lucky Strike Prospect
as reported by B. T. O'Grady, Minister of Mines 1936 Annual Report**

<u>Location</u>	<u>Width</u>	<u>Au</u> <u>oz/ton</u>	<u>Ag</u> <u>oz/ton</u>	<u>% Zn</u>	<u>% As</u>	<u>% Sb</u>
1. OPEN CUTS REFERENCED TO POINT "A" ON SPINE OF RIDGE						
40.7 m S	142 cm (56")	0.12	3.0	10.1		
60.2 m S	91.4 cm (36")	1.02	6.0	18.3		
57.9 m S/33.5 m W	25.4 cm (10")	1.04	2.0			
2. LUCKY STRIKE No.1 ADIT						
2a. North Drift, west wall of dyke, North of Station 1						
3.0 m	15-20 cm	0.26	1.0			
4.7 m	25.4 cm	0.40	0.6			
7.0 m	163 cm	0.74	2.8	4.7	1.15	4
9.1 m	91.4 cm	0.56	0.8			
4.9 m section at 10.7-15.5 m	avg 10 cm	0.60	2.0			
2b. North Drift, east wall of dyke, North of Station 1						
0.6 m section at 13.1-13.7 m	max 61 cm	1.30	1.2			
N side of winze, 10.7m	229 cm	0.44	3.0		5.3	
N side of winze, 10.7m	229 cm	0.50	1.0	8.2	0.65	
S side of winze, 7.6m	15 cm	0.20	1.0	9.0		
S side of winze, 7.6m	71.1 cm	0.70	2.2	8.7		
2c. South Drift, south wall						
8.5 m section 2.4-11m S of Station 1	avg 28 cm	0.24	0.1			
0.46m section 15.5- 16m S of Station 1	10 cm	"low grade"	"low grade"			
4.9m section 18-22.9 m S of Station 1	10-20cm	"low grade"	"low grade"			
4.3 m section 1.1-5.3m S of Station 2	8 cm	N.A.	N.A.			

GEOCHEMISTRY

Geochemical sampling carried out in 1980 consisted of the collection of 1,013 soil samples and 166 rock samples. This work was distributed over the Ural 1, 3, 4, 5, 6, and 7 claims. An additional 527 soil samples were collected in 1982 from grids within the Ural 4, 5, and 6 claims. Sampling and analytical procedures have been described in detail by the writer in two earlier assessment reports dated March 1981 and February 1983. These reports are on file with the B.C. Ministry of Energy, Mines and Petroleum Resources and their contents are a matter of public record.

The geochemical anomalies are described in detail in the above mentioned assessment reports. Significant anomalous areas are briefly described as follows:

Taylor Basin Area

The east side of Taylor Basin is characterized by a 2,000 m long series of zones geochemically anomalous in Au, Sb, As, and Zn, varying in width from 100 m to 400 m. Rock sampling carried out in this area has not, to date, related the anomalous soils trends to specific structurally or lithologically controlled mineralized zones.

Lucky Strike Area

Geochemical responses over the Lucky Strike showings consist of highly anomalous Au, Ag, Sb, As, Cu, Pb, and Zn values in a relatively restricted area. The anomalous results reflect the poly-metallic character of the vein minerals.

Lucky Jem Area

Highly anomalous Au, As, Sb, Cu, and Pb in soils values define a broad 700 m wide by 800 m long zone, open at both ends, on the slopes above the Lucky Jem adits. Although this area was not examined in detail

in 1980, previous accounts of the geology of the area (see "Economic Geology" section of this report) describe a wide zone of fracturing in the altered sediments and intrusive rocks, throughout which "...many small (highly oxidized) veins of arsenopyrite ... can be seen striking in every direction."¹

"A" Grid Area

The "A" Grid is a reconnaissance grid which was positioned to investigate particularly interesting geology and structure along the ridge which borders Eldorado Creek Basin on the south. Highly anomalous Au-in-soils values of up to 2.5 ppm were discovered in this area, and are coincident with geochemical trends containing anomalous As, Sb, Cu, and Ni in soils values. The trend delineated by work to date is a bifurcating zone 200 m to 400 m wide, by 500 m in length, and is open at both ends.

Despite the high elevations of the anomalous zone, bedrock exposure is not good and the soil anomalies have not been related to specific zones of structurally or lithologically controlled mineralization. Mapping to date, however, indicates the presence of a very strong northeasterly trending fault zone which exhibits a close spatial relationship to the main anomalous trend.

¹George A. Clothier, 1933, B.C. Minister of Mines Annual Report, p.268.

CONCLUSIONS

- 1.a) Geochemical sampling and geological mapping of the Ural Project area have identified four major multi-element geochemical anomalies.
 - b) The anomalous zone in the vicinity of the Lucky Strike adit relates to the poly-metallic mineralization in the Lucky Strike vein system.
 - c) The anomalous zones at the Lucky Jem prospect exhibit a close spatial relationship to a stockwork zone of auriferous sulphide veinlets described by earlier workers.
 - d) The geochemically anomalous zones at the East Taylor Basin and the "A" Grid areas have not been related to bedrock mineralization, but could relate to either vein or stockwork type mineralization. The possibility remains open that favourable strata at either location may host disseminated bulk-tonnage or "Carlin" type mineralization.
2. Geological mapping has delineated bedrock units which appear to define an antiformally folded thrust structure in the Taylor Basin area. Further detailed mapping of this area, combined with an in-depth structural analysis of fracture and fault patterns may provide important information with respect to structural controls or patterns of vein type mineralization.
 3. The Lucky Strike No.1 adit explored a poly-metallic vein system developed in altered ultramafic rocks. Geological mapping indicates that the vein would intersect a competent greenstone unit at a shallow depth beneath the level of the adit. Competency of host rock units has been a critical determinant of economic tenor and widths of vein type mineralization elsewhere in the Bridge River district. The Lucky Strike vein occurs within a strong structure that has persisted through a relatively incompetent serpentinite unit and may host economically viable mineralization within the competent greenstone unit.
 4. Geochemical analyses of rock samples collected in the Taylor Basin and the "A" Grid areas have not, to date, related soil geochemical anomalies

to specific mineralized or altered lithologies or structures. However, rock sampling carried out to date has not been designed to utilize rock geochemical exploration techniques to evaluate these zones. Although these anomalies may well relate to narrow vein type mineralized zones, it is the writer's opinion that conditions in these two grid areas may be favourable for the development of micron size particulate and/or sulphide-bound gold mineralization. Further exploration will require a combined geological and geochemical approach including detailed whole rock analyses, thin section studies, and very detailed systematic rock geochemical sampling. The objectives of this work should be as follows:

- a) To generate background major, minor, and trace element geochemical profiles of unaltered and unmineralized areas.
- b) To generate major, minor, and trace element geochemical profiles of altered and/or mineralized areas either depleted or enriched in specific suites of elements as a consequence of hydrothermal activity.
- c) To relate known soil geochemical anomalies to the expected style of alteration and/or mineralization or to lithologically or structurally controlled 'leakage halos' related to any such mineralization.

In conjunction with this in-depth geochemical approach, ground VLF-EM surveying and detailed "float" prospecting should be carried out to focus on the potential vein type mineralization in these two areas.

5. The above points (section 4) apply equally well to the Lucky Jem area, where existing road access and more favourable terrain conditions would additionally permit the utilization of mechanical backhoe trenching to further evaluate the geochemical anomalies. Work to date has not included any detailed geological mapping, and geochemical coverage to date is of a semi-reconnaissance nature on a 50 m x 250 m grid pattern. More detailed geochemical coverage at 25 m x 50 m intervals and detailed grid-controlled mapping would be pre-requisite to any trenching program.

6. It should be kept in mind that geochemical, topographic, and overburden conditions at the property have probably resulted in a separation of tens or even hundreds of metres of soils anomalies from the subcrop exposures of mineralized zones.

RECOMMENDATIONS

A multi-phase exploration program is recommended to evaluate the known mineralized zones and geochemical anomalies.

1. Phase I Program

Due to the lateness of the exploration season, a minimal exploration program of further geochemical sampling and geological mapping of the Ural 1 grid and the "A" grid areas was conducted. This work will satisfy the two-fold objectives of extending the coverage of anomalous zones and performance of necessary assessment work on the Ural 1, 3, and 7 claims. This work was carried out during September 1983 under the writer's supervision. At the time of writing this report, field aspects of the program had been completed, but geochemical analyses are still pending.

2. A Phase IIA program should include:

- a) additional grid emplacement in the north Taylor Basin, the "A" Grid, and the Lucky Jem areas.
- b) detailed soil and rock geochemistry plus thin section and whole rock studies in the above three areas, as outlined in the previous section of this report (see "Conclusions").
- c) detailed grid-controlled geological mapping at a minimum scale of 1:2500.
- d) detailed prospecting of all anomalous areas.
- e) ground magnetic surveying of all grid areas and ground VLF-EM surveying in selected areas of expected vein-type mineralization.
- f) rehabilitation of the Lucky Strike and the Lucky Jem underground workings; surveying, mapping, and sampling of same.
- g) Mineralographic and metallurgical studies of Lucky Strike and Lucky Jem ore specimens to establish sulphide paragenesis, controls, and associations of accompanying precious metals mineralization, and to determine the significance of sulphide and precious metals paragenesis within the context of regional hydrothermal zoning.

3. The Phase IIA program should be sufficient to define Phase IIB trenching or drilling targets which could be trenched or drilled in the latter part of the 1984 exploration season. Backhoe trenching would be cost effective in the Lucky Jem and the "A" grid areas. Terrain conditions would permit only hand trenching in the East Taylor Basin area unless a costly program of road building were also undertaken to provide access into the anomalous area.
4. Contingent upon favourable results of the Phases I, IIA, and IIR programs, a Phase III program of extensive diamond drilling is provisionally recommended, to take place in the 1985 exploration season.

RECOMMENDED BUDGET

PHASE I — Fall 1983

(Assessment requirements and follow-up work on Ural 1, 3, 7 claims)

Mobilization and demobilization	2,500	
Helicopter support	2,000	
Mapping and sampling program	8,000	
Geochemical analyses	3,000	
Report preparation, drafting, reproductions	1,500	
Miscellaneous and contingencies	<u>1,500</u>	18,500

PHASE IIA — July-August 1984

Mobilization and demobilization	3,500	
Helicopter support	5,000	
Detailed mapping, follow-up sampling program	25,000	
Geophysical surveys (ground mag, VLF-EM)	10,000	
Road repair — ditching, culverts	5,000	
Rehabilitation of Lucky Strike workings	5,000	
Surveying, mapping, and sampling of above adits	5,000	
Geochemical analyses (1000 samples @ \$10)	10,000	
Whole rock analyses (200 samples @ \$25)	5,000	
Thin section, mineralographic, metallurgical studies	5,000	
Assays (100 samples @ \$15)	<u>1,500</u>	80,000

PHASE IIB — August-September 1984

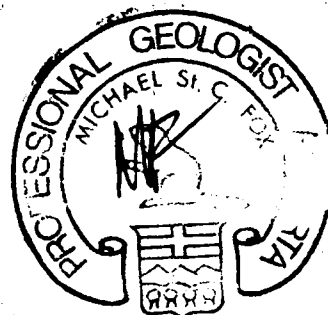
Backhoe trenching — Lucky Jem area	15,000	
— "A" Grid area	15,000	
Hand trenching — East Taylor Basin area	10,000	
Drill site preparation (Lucky Strike, Lucky Jem, "A" Grid, and Taylor Basin zones)	10,000	
Trench mapping and sampling	10,000	
Assays, geochemical analyses	5,000	
Reclamation	10,000	
Report preparation, drafting, etc.	5,000	
Contingencies, miscellaneous, filing fees	<u>15,000</u>	95,000

PHASE III — 1985

Contingent upon the success of Phases I, IIA, and IIB programs, provision is made for a diamond drilling program during the 1985 season.

4,000' (1220 m) NQ wireline drilling @ \$40/foot (all inclusive)

160,000
GRAND TOTAL \$ 353,500



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