REPORT ON
GEOLOGICAL SURVEY and
EXAMINATION OF TRENCHES

by
I. G. Sutherland, B.Sc.

on the

Kem 1, Kem 6 and Audrey West
MINERAL CLAIMS

situated east of Thutade Lake
in the Omineca Mining Division

57°05'N Lat.; 126°41'W Long.
NTS ~~92E~~/2E
94E

owned by
INCA RESOURCES INC.

work by
KIDD CREEK MINES LTD.

September, 1982

Vancouver, B.C.

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INTRODUCTION

Location, Access and Terrain

The Kem-Audrey property is located 11 km east of the northerly tip of Thutade Lake in the Toodoggone River area of north-central B.C. (Figures 1 and 2). The nearest supply and transportation centres are Smithers, located about 250 km to the south, and Watson Lake, Yukon, located about 350 km to the north.

Direct access to the property is via fixed wing aircraft to the Sturdee Valley airstrip, located about 25 km northwest of the claims, and helicopter thereafter.

The Kem-Audrey claims are situated between 1400 m and 2000 m elevation in steep, glaciated, mountainous terrain. Many portions of the property are inaccessible because of steep or unstable slope conditions. Alpine vegetation and well exposed rock are found above the timberline which ranged between 1666 m and 1700 m. The major area of interest is confined to the western portion of the claim group, situated well above the timberline.

Property History and Definition

The Fokker mineral claim staked by D.W. Chisholm on September 16, 1929, represents the earliest known geological work performed on the property. His claim tag was found in 1981, near the western boundary of the Kem-Audrey claim group. In 1968, Kennco Explorations (Western) Ltd. staked the Attycelley group in the same general area and held the claims until 1973. During this period, exploration consisted mainly of geochemical surveys.

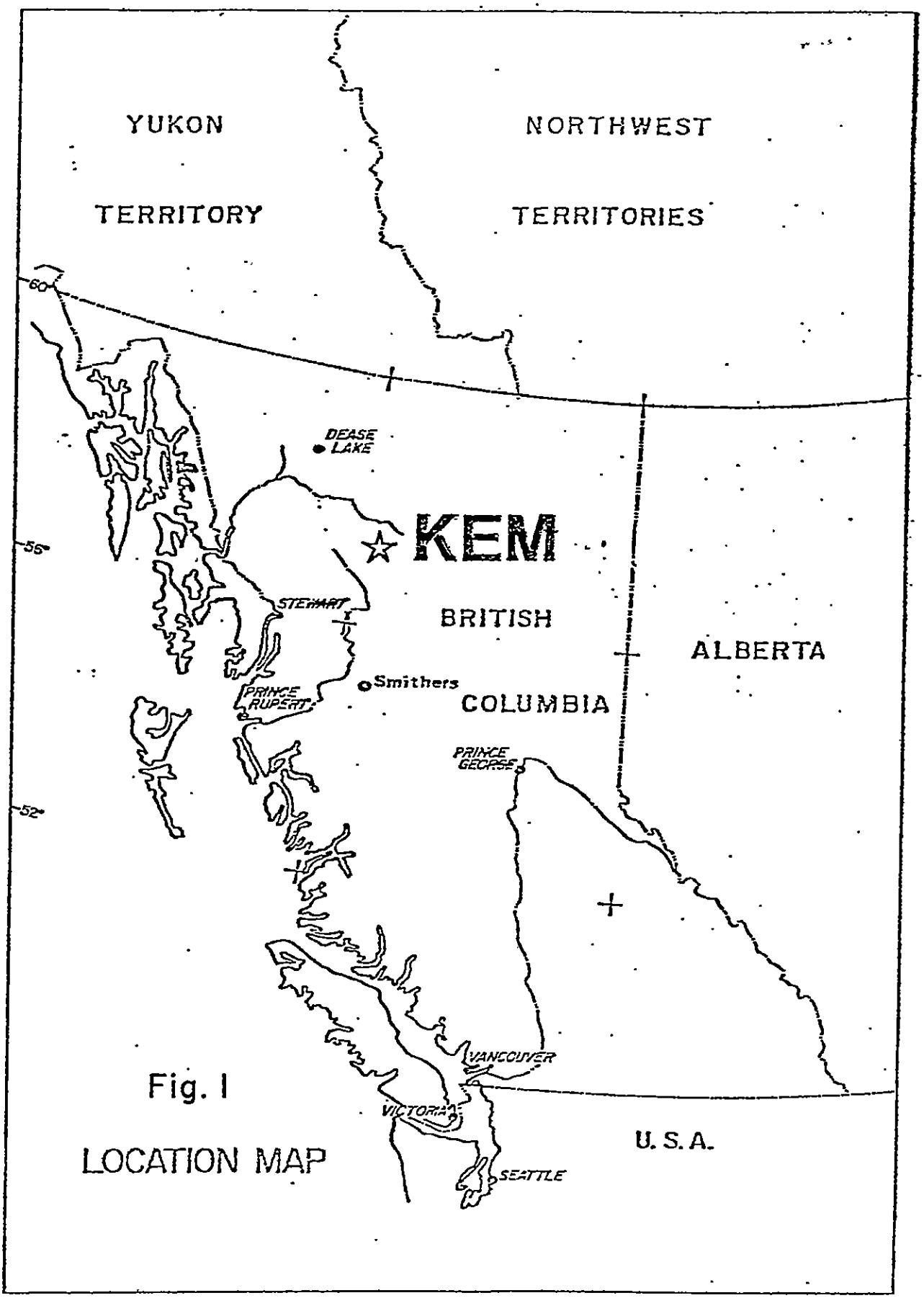
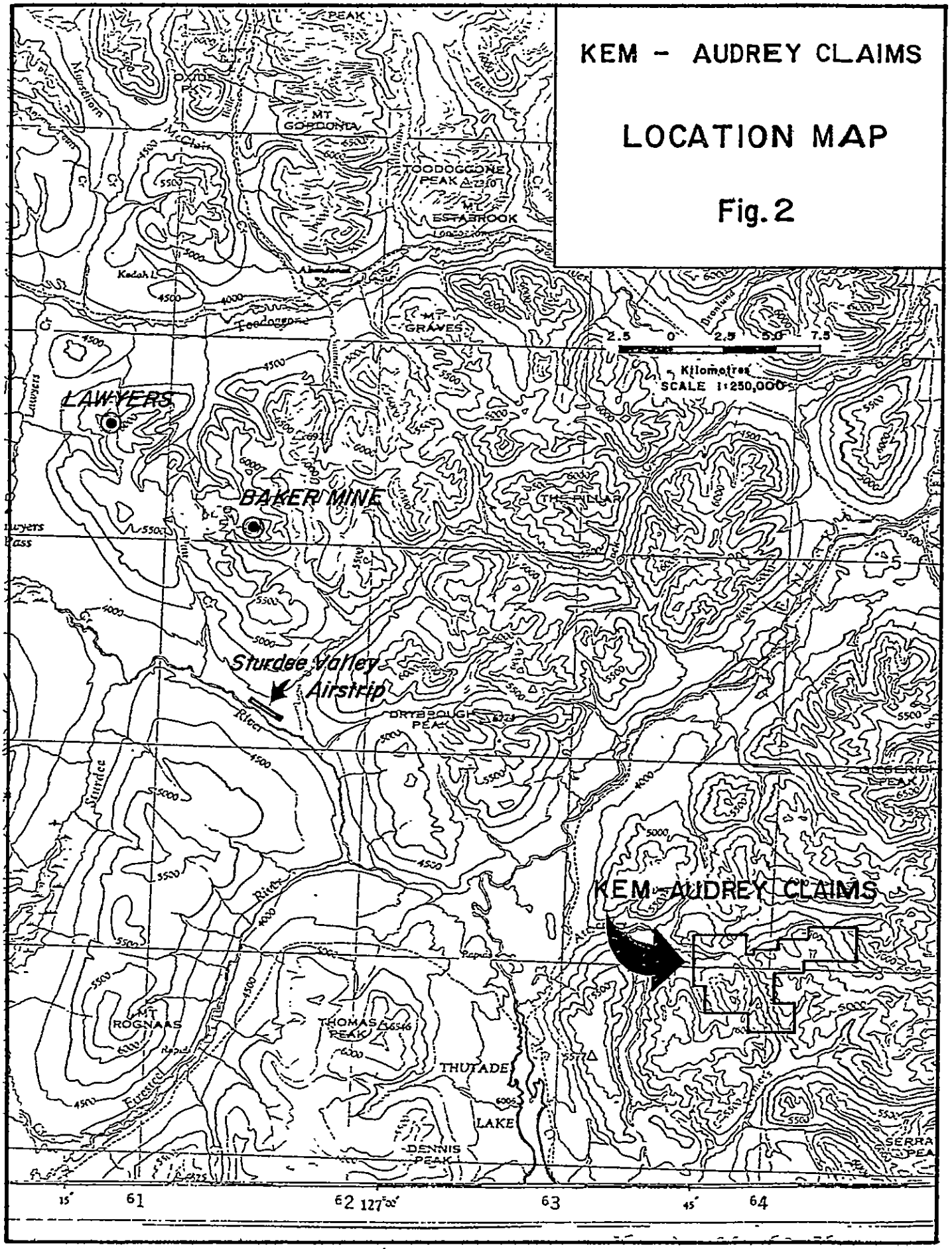


Fig. 1

LOCATION MAP


KEM - AUDREY CLAIMS
LOCATION MAP
Fig. 2
LAWYERS
BAKER MINE
Sturdee Valley Airstrip
KEM - AUDREY CLAIMS
MT GORDONA
TOODOGGONE PEAK
MT ESTABROOK
MT GRAVES
THE PILLAR
DRYBOROUGH PEAK
MT ROGNAAS
THOMAS PEAK
THUTADE LAKE
DENNIS PEAK
SERRA PEAK
SCALE 1:250,000
Kilometres
61
62
63
64

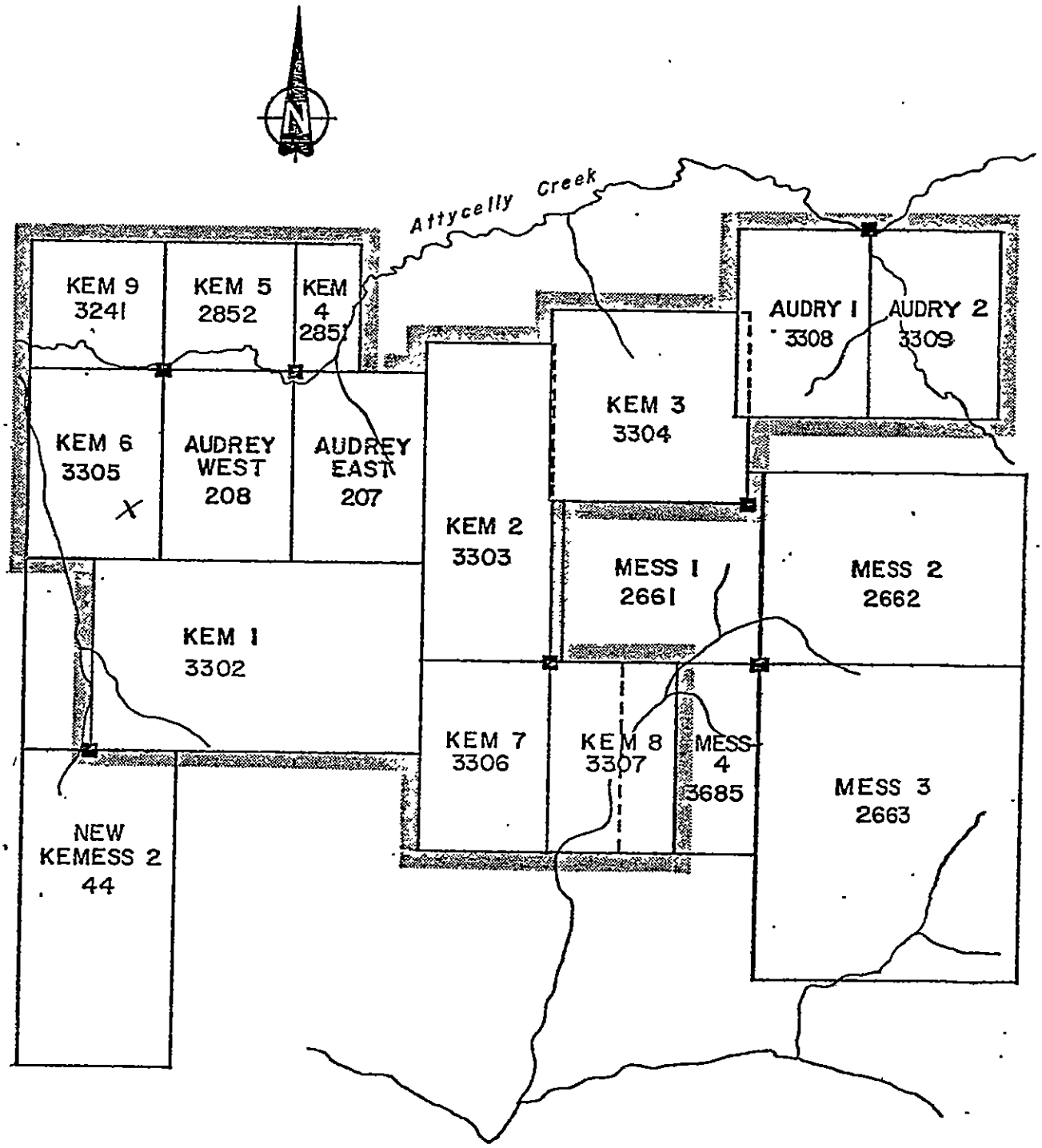


Figure 3

Texasgulf Inc.		
KEM - AUDREY CLAIMS		
CLAIM SKETCH		
WORK BY	DRAWN BY	DATE
D.P.	E.R.	JANUARY 14, 1982
0 1km		
SCALE 1:50,000		

In 1976, the Audrey East and West claims were staked by D. Stelling and were purchased by Bishop Mines Ltd. in March of that year. In October 1977, geochemical rock and soil surveys, magnetometer and VLF surveys were conducted over a 1000 m long sulphide-bearing quartz vein. Geophysical interpretations were inconclusive because survey lines were not properly oriented with respect to the mineralized trend. Geochemical surveys outlined copper, lead, zinc, mercury, silver and gold anomalies over the vein trend for about 400 m. (Smitheringale. 1980).

In 1979, KEM 1, 2 and 3 claims were staked by Colin Harivel, and in March 1980, ABM Mining acquired all interests in the Kem-Audrey claims. ABM then commissioned C.A. Ager and Associates Ltd. to conduct an airborne magnetometer and VLF electromagnetic survey over the claims. The survey outlined the mineralized vein as well as several other anomalies. In July and August of 1980, following geological mapping, ABM Mining Group conducted detailed soil geochemistry surveys over the area of the main showing and a reconnaissance soil geochemical survey over the remainder of the claim group and certain adjacent areas (Smitheringale, 1980)

The Kem 4 and 5 claims were staked for Inca Resources Inc. in June 1980. At that time, it was realized that the location of certain claims shown on the B.C Ministry of Energy, Mines and Petroleum Resources claim map was incorrect. In July 1980, the Audry 1 and 2 claims were located, and in August 1980, the original KEM 1, 2 and 3 claims were abandoned and restaked for Inca Resources Inc. along with the KEM 6, 7 and 8 claims. KEM 9 was added in Setember 1980.

On March 23, 1981, an agreement was reached between Inca Resources Inc. and Texasgulf Canada Ltd., (now Kidd Creek Mines Ltd.) in which Texasgulf acquired an option on the Kem-Audrey property.

Property Status

The Kem-Audrey property consists of 86 claim units aggregating approximately 2150 hectares in 13 MGS claims (Figure 3). All claims are within the Omineca Mining Division.

SUMMARY OF WORK COMPLETED

Geological Surveys

A total of 16 days (32 man-days) of geological mapping was performed on the Kem 1, Kem 6 and Audrey West mineral claims from June 15 to Aug. 4. Mapping was done by D.W. Piroshco with the assistance of various Kidd Creek Mines employees. Rocks sampled during this period (20 in total) were analysed geochemically for Au, Ag, Cu, Pb and Zn by Min-En Laboratories Ltd. of North Vancouver.

Trenching, Sampling and Geochemistry

Three hand trenches totalling 20 square metres of exposure, were cleared in 3 days (6 man-days) from June 26 to June 28. 1982.

Work was supervised by D.W. Piroshco and carried out by M. Cloutier, assisted by A. Losch.

Following this work the trenches were mapped and sampled, by D.W. Piroshco and assistants generally over standard panel areas of 1.0 m by 0.5 m. This accounted for a total of 8 man-days of work and resulted in the collection of 48 trench samples. Of these, 28 were analysed geochemically for Au, Ag, Cu, Pb and Zn and the remainder were assayed for these same elements. Analytical work was done by Min-En Laboratories Ltd. of North Vancouver.

Work Distribution

All work was done on the KEM 1 and KEM 6 mineral claims, part of the "Kem-Audrey-Audry" Group.

GEOLOGY

Regional Setting

The Kem-Audrey property is situated within a Mesozoic volcanic arc assemblage bounded to the east by the Omineca crystalline belt and to the west and southwest by the Sustut and Bowser basins. Five mappable rock groups are found within the region containing the Kem-Audrey claims. These are: 1) the Asitka Group, 2) Takla Group, 3) Hazelton Group, 4) Omineca intrusive and 5) Toodoggone volcanics, (Carter, 1972; Gabrielse, et al., 1977).

Property Geology

The geology of the Kem-Audrey property was originally mapped in 1980 for Inca Resources Inc. at a scale of 1:10,000. Detailed prospecting in 1981, following geochemical and geophysical surveys of the previous year, outlined a broad area of interest in the southwest portion of the property. Further 1:5,000 mapping was performed in this area during the summer of 1981. Recent mapping, completed at a scale of 1:5000, has added further details to the geology and, in particular, the structural aspects of this showing-area.

The property contains Takla and Toodoggone volcanic rocks and Omineca intrusions. Toodoggone volcanics are found in the central, eastern and southern portions of the property and are bounded to the west by Takla Group rocks (Figure 4). Omineca intrusive rocks crop out

on the west and eastern margins of the property. Significant mineralization is found in quartz veins cutting the Takla Group rocks in the vicinity of the main showing; Toodoggone rocks are not exposed in this area.

In the area of recent detailed mapping, Takla Group rocks outcrop along a northwesterly trending zone (Figure 7). The Takla rocks consist mainly of submarine basalts and often augite or augite-feldspar porphyritic basalts; pillows are noted locally. Basaltic crystal tuffs, bedded ash tuffs, lehars and lehar breccias are also observed. Contacts between these units are generally concealed.

Intruding the Takla Volcanics are Omineca intrusive phases which, in the area of immediate interest, are represented by small plugs of porphyritic syenite, offshoots of the more batholithic, medium-crystalline monzonite to the west and southeast.

The lithologic units, as illustrated in Figure 7, are as follows (no time relationships are implied):

Unit 1

These Takla volcanic rocks consist of light grey to grey-green, blocky and flaggy-weathered volcaniclastic tuffs. They are commonly well-bedded and coarser bed units, and often host medium- to coarse-grained augite crystals. Field evidence suggests that these are waterlain tuffs.

Unit 2

Probably contemporaneous, at least in part, with Units 1 & 3, these rocks are predominantly massive, grey, crystal vugs with distinct, medium- to coarse-grained crystal fragments of augite and plagioclase feldspar. They commonly occur as lens-shaped interbeds with Unit 1 or 3, rarely with vague evidence of bedding and may, therefore, also be aquagene in origin.

Unit 3

These debris flow sediments (lahars) are formed following mass flow of material on the steep flanks of a volcanic centre. They are grey, knobby-weathered and typically unsorted and poorly stratified. Their textural characteristics, along with the nature of the fragments (i.e. sugangular; of mixed lithologies). all point towards a debris flow origin to these rocks. The fragments are generally 1 cm or less in size and are composed of augite $\pm$ feldspar porphyritic basalt, pinkish augite-hornblende syenite, or feldspar-augite porphyritic andesite.

The occurrence of lenses of Unit 2-type rocks in this unit and in Unit 1, implies a similar period of deposition

Unit 4

These distinctive rocks are andesite porphyry flows that outcrop in two small, elongate zones. They are grey, blocky-weathering with generally coarse, bladed plagioclase and augite phenocrysts in a fine-grained groundmass. Locally present are minor calcite amygdules. These flows are quite massive with little evidence of flow direction or original horizontality, typical of Takla flow volcanics.

Unit 5

Even less extensive than the rocks of Unit 4, these augite porphyry basalts occur only in one major outcrop-area. They are grey, massive flows that are quickly recognized as distinctive Takla volcanics.

Unit 6

A single outcrop of a syenitic intrusive phase, presumably part of a small plug, occurs in the west-central part of the map-area. The rocks, massive and grey-weathering, appear pink on the fresh surace. The intrusive is hornblende-augite porphyritic with chloritized

phenocrysts of up to 0.5 cm in a K-feldspar rich groundmass. The lack of obvious contact metamorphic effects with the adjacent augite porphyry flows, as well as the absence of an exposed contact, prohibits the determination of time relationships.

Unit 7

Two northeasterly trending dykes of massive, fine-grained basalt occur in the northeastern limits of recent mapping. These dark grey, unaltered dykes are probable feeders to Takla volcanism.

The contact of the Takla Group rocks, with the nearby Toodoggone volcanics to the southeast, is not exposed and likely represents a fault contact. To the southwest, Takla strata were intruded by a monzonite body which contains numerous small roof pendants of Takla basalt.

North of the monzonite intrusive, a change in weathering style occurs in the Takla rocks. The volcanics within 200 m of the contact are generally massive, weaky hornfelsed and, a relatively poor host for quartz veining. Rocks further north are highly fractured, rubbly weathered, and are locally silicified and cut by quartz veins. Further details of these rocks, elsewhere on the property, can be found in a previously submitted assessment report (Piroshco, 1981).

Structure

Two distinct fracture sets are recognized within the area of recent interest. They are north to northwesterly trending, southwesterly dipping fractures and east to east-southeasterly trending, southward-dipping fractures. These fractures may represent tensional features related to similar trending normal faults mapped in the area. Both fracture sets are often represented by podiform or lensoid quartz

veins which may host base and precious metal mineralization. The veins themselves are locally displaced (as much as 30 m) by fault sets oriented normal to them. Shearing and slickensides often are associated with these faults.

Takla Group volcanics in the main area of interest generally strike northeasterly to northwesterly, and dip moderately to the east, as inferred from bedding traces and pillow attitudes in the area. The main zone of mineralization is hosted in the easterly trending fractures and occurs as sharply defined veins. These veins exhibit displacement along later, northwest faults of up to 25 m.

Mineralization and Alteration

Mineralization and associated host rock alteration in the area of interest can be divided into two parts in keeping with the two veins that occur in this area. The two veins are indicated in Figure 7.

Vein 'A' was first sampled in 1981, and one grab sample assayed 0.83 oz/ton Au and 24.70 oz/ton Ag. These results prompted additional sampling, mapping and ultimately, trenching. The vein can be traced along its controlling structure within the host rock tuffs of Unit 1, for approximately 150 m at an azimuth of 110°. The vein dips moderately to steeply (50°-70°) to the southwest and varies in width up to 4.0 m (1.0 m average). Its mineralogy varies in relative amounts of components which include quartz, hematite, magnetite, pyrite and chalcopyrite. Trenching was undertaken near the northwest end of this vein where earlier results were most encouraging. Here the vein is made of quartz (20-80%), specular hematite (trace - 70%), magnetite (trace - 30%), pyrite (trace - 30%) and calcite (trace to 5%) and varies from 0.25 to 1.0 m in width. The northwest end of the vein is sliced off by a later fault represented by a 10 cm wide, limonitic, brecciated and gouged fault zone.

Grab samples of vein material collected along its length prior to trenching, are as follows:

	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Hg (ppb)	As (ppm)
DP-21-82-001	1,900	620.0	19,000	680	75	145	47
DP-21-82-003	3,600	192.0	685	84	129		
DP-21-82-021	1,440	340.0	68	1,100	43		
DP-21-82-028B	50	30.5	147	245	139		
DP-21-82-033A	640	14.6	115	260	331	30	29
DP-21-82-033F	130	132.0	3,600	1,240	10,600	510	30
DP-21-82-033G	10	14.0	440	650	5,200	430	32
DP-21-82-033H	110	154.0	446	860	1,160	70	58
DP-21-82-033J	10	50.0	1,350	670	12,300	1,350	16

Another mineralized vein, known as Vein 'B', occurs just east of the three trenches. The vein ranges from 4 m to 1.5 m in width with a strike of 085° to 090°. With a moderate dip of approximately 65° to the south, the vein occupies an earlier fault structure through the host aquagene tuffs of Unit 3. It is composed of massive to coarsely crystalline, grey quartz with 5-25% fine- to coarse-grained pyrite, traces-5% hematite and local traces of chalcopyrite. Contacts are generally sharp with the adjacent, chloritized wallrocks but minor stringers of quartz $\pm$ carbonate $\pm$ sulphides are present in the wallrock areas. This vein is also badly broken by later cross-faults as evidenced by zones of shearing and and cataclasis of up to 0.1 m wide. Some of the better geochemical values from this vein include:

	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
DP-21-82-32E	5	19.0	3,410	56	102
DP-21-82-32F	10	14.8	4,250	63	185
DP-21-82-32G	5	15.5	1,740	69	83
DP-21-82-32I	15	30.0	3,760	105	309

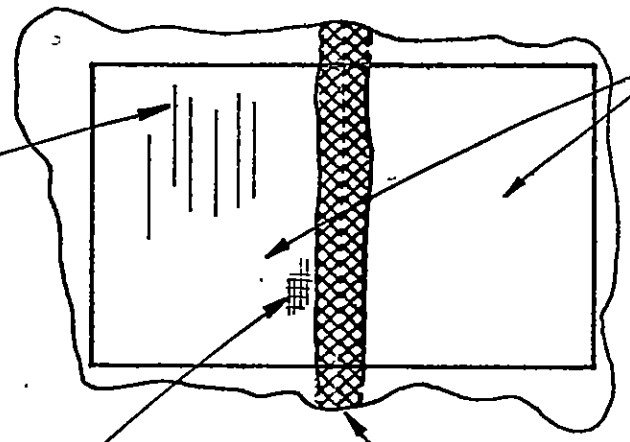
TRENCHING

A total of 3 trenches was completed, accounting for about 20 square metres of work (Figures 3 to 6). Drilling was done with a Pionjar 'plugger' and trenches were cleared by hand, following blasting. Overburden was shallow to non-existent and work proceeded quickly, exposing vein and wallrock material at depths of up to 0.5 m. From the trenches, samples were taken and generally over standard panel areas of 0.5 m x 1.0 m of vein and adjacent lithologies. Trench 3 was resampled to better detail possible geochemical variations along the vein itself.

The trenches exposed from 0.25 to 1.1 m of vein material consisting of structurally controlled quartz-sulphide-oxide mineralization hosted in a massive, dark green volcaniclastic tuff. Vein minerals include quartz (20-80%), specular hematite (<1-30%), magnetite (<1-30%), chalcopyrite (<1-15%), pyrite (<1-10%), and calcite (trace-5%). The vein is generally sharply bounded by only slightly propylitized host rocks though stringers of hematite and/or calcite ($\pm$ py $\pm$ cp) and of quartz-hematite-magnetite-cp-py are not uncommon in poorly defined patches along the contacts with the vein. Between the trenches, the basic mineralogy of the vein appears constant but variations in the relative proportions of various minerals are apparent (as is the case even within the area of each trench exposure).

Panel Samples

201	202	203	204	205	206	207
208	209	210	211	212	213	214



Sample	Au (oz./ton)	Ag (oz./ton)	Cu (%)	Pb (%)	Zn (%)
201	0.001	0.10	0.024	0.01	0.04
202	0.002	0.08	0.009	0.01	0.03
203	0.002	0.10	0.021	0.01	0.04
204	0.162	12.10	1.330	0.04	0.01
205	0.001	0.18	0.019	0.01	0.03
206	0.001	0.10	0.043	0.01	0.02
207	0.001	0.06	0.017	0.01	0.01
208	0.001	0.08	0.008	0.01	0.04
209	0.002	0.10	0.017	0.01	0.05
210	0.002	0.82	0.032	0.01	0.03
211	0.442	29.95	4.340	0.08	0.02
212	0.001	0.28	0.045	0.01	0.02
213	0.001	0.10	0.011	0.01	0.04
214	0.002	0.09	0.006	0.01	0.02

Kidd Creek Mines Ltd.

KEM PROPERTY

TRENCH No. 1

WORK BY	DRAWN BY	DATE: SEPT. 22, 1982
D.P.	E.R.	

0 0.5 1.0
SCALE IN METRES 1 : 50

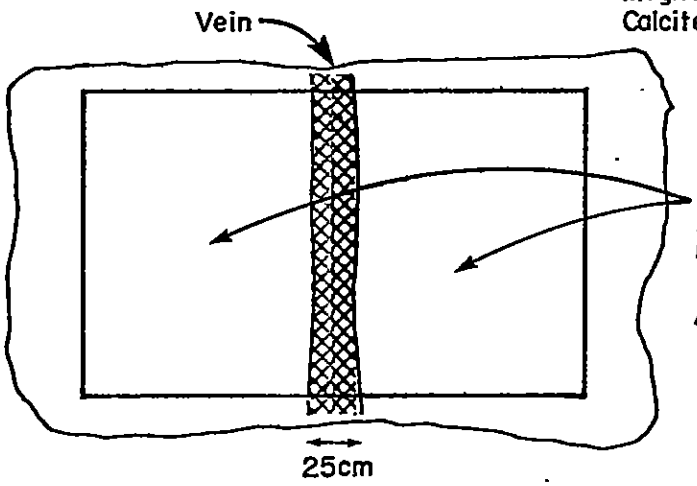
Figure: 4

NCI - 556

Panel Samples

1851	1852	1853	1854	1855	1856	1857
1858	1859	1860	1861	1862	1863	1864

Vuggy Quartz	80 – 85%
Chalcopyrite	5%
Pyrite	5%
Specular Hematite	5 – 10%
Magnetite	2%
Calcite	Trace



Sample	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
1851	10	3.5	23	33	195
1852	5	2.1	14	28	181
1853	5	2.6	25	27	177
1854	260	46.0	2030	71	242
1855	30	2.8	414	48	398
1856	25	2.9	552	42	497
1857	120	9.3	55	46	348
1858	10	2.1	53	104	690
1859	20	2.6	155	43	434
1860	35	4.2	55	32	290
1861	3900	169.0	660	66	38
1862	100	5.3	534	40	561
1863	70	6.0	341	51	339
1864	30	3.2	210	50	373

Kidd Creek Mines Ltd.

KEM PROPERTY

TRENCH No. 2

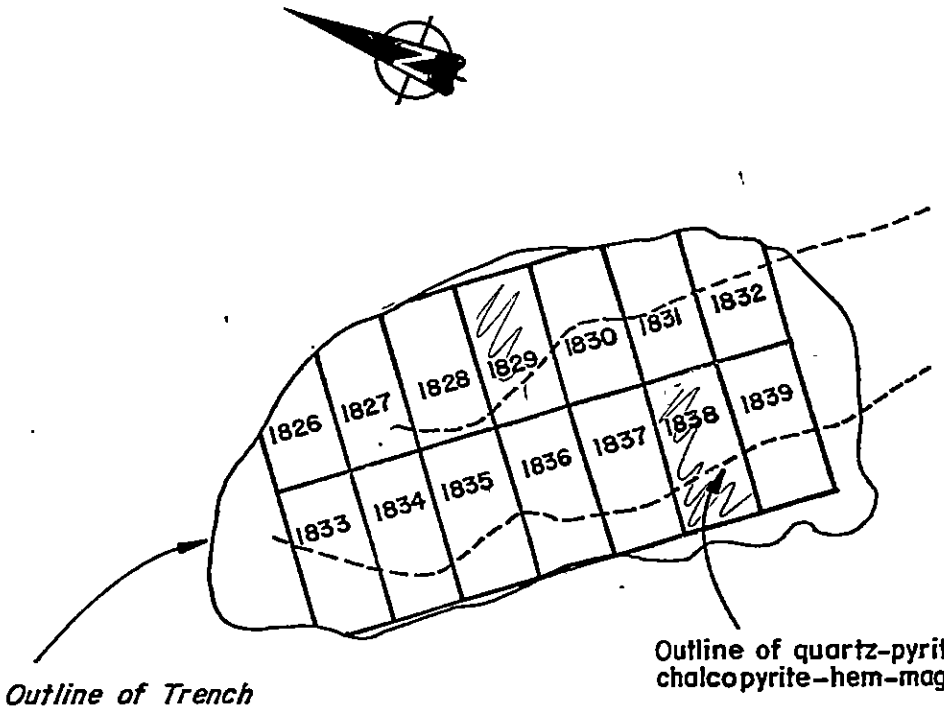
WORK BY	DRAWN BY	DATE: SEPT. 22, 1982
D.P.	E.R.	

0 0.5 1.0

SCALE IN METRES 1 : 50

Figure: 5

NCI-556



1826 Panel Sample

Sample	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
1826	100	8.2	1140	79	489
1827	5	3.5	394	39	438
1828	10	5.3	298	45	580
1829	920	98.5	3620	98	90
1830	430	26.0	2030	75	49
1831	30	10.0	1760	89	108
1832	5	3.0	890	48	369
1833	5	2.5	115	34	345
1834	10	3.1	528	29	209
1835	5	1.5	85	27	189
1836	30	3.2	66	49	404
1837	40	8.5	990	67	354
1838	4950	540.0	4860	550	34
1839	70	5.6	380	17	31

Kidd Creek Mines Ltd.

KEM PROPERTY

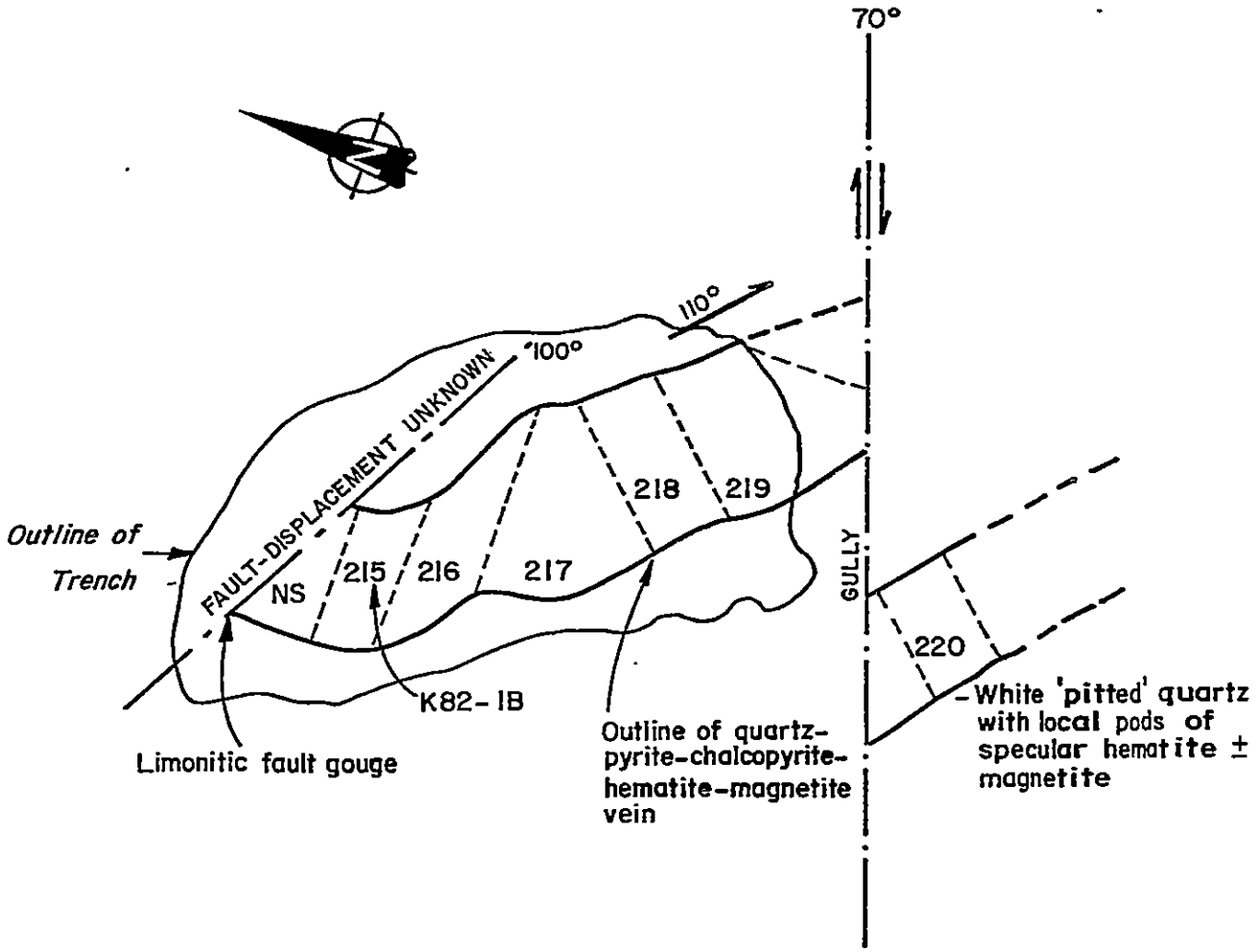
TRENCH No. 3

WORK BY	DRAWN BY	DATE: SEPT. 22, 1982
D.P.	E.R.	

0 0.5 1.0
SCALE IN METRES 1 : 50

Figure: 6

NCI - 556



Panel Sample

Sample	Au (oz./ton)	Ag (oz.ton)	Cu (%)	Pb (%)	Zn (%)
215	0.043	11.60	1.175	0.04	0.01
216	0.030	5.00	0.178	0.02	0.01
217	0.082	8.46	0.468	0.03	0.01
218	0.214	8.95	0.318	0.03	0.01
219	0.180	9.20	0.910	0.03	0.01
220	0.182	2.68	0.038	0.01	0.01

Kidd Creek Mines Ltd.

KEM PROPERTY

TRENCH No. 3

WORK BY	DRAWN BY	DATE: SEPT. 22, 1982
D.P.	E.R.	

0 0.5 1.0

SCALE IN METRES 1 : 50

Figure: 7

NCI-556

GEOCHEMISTRY

Rock samples of favourable looking material were collected during the mapping process and a total of 20 of these were shipped to Min-En Laboratories of North Vancouver where they were analysed geochemically for Au, Ag, Cu, Pb and Zn.

A total of 48 rock samples were also collected from the trenches and similarly shipped to Min-En Laboratories Ltd. of North Vancouver. Of these, 28 were analysed geochemically for Au, Ag, Cu, Pb and Zn. A summary of analytical techniques is as follows:

Element	Extraction	Analysis
Ag, Pb, Zn, Cu	Nitric, perchloric digestion	Atomic Absorption
Au	Hot Aqua Regia	Atomic Absorption

In addition, assays were run on 20 samples also for Au, Ag, Cu, Pb and Zn, all of them coming from Trenches 1 and 3. The results of all analyses are plotted in Figures 4 through 7.

CONCLUSIONS

Geochemical and assay results (Figures 4 through 7) are clearly most significant in samples of vein material in all three trenches and that very little precious metal mineralization is present in the wallrocks. This considered in conjunction with the sharply defined but generally narrow vein makes this showing seem less significant than earlier grab samples may have implied. Future work on this showing is unlikely in the near future.

Ian G. Sutherland

BIBLIOGRAPHY

CANN, R.M. and GODWIN, C.I. 1980. Geology and Age of the Kemess Porphyry Copper-Molybdenum Deposit, North-Central British Columbia, C.I.M. Bulletin. Vol. 73, No. 832, pp. 94-99.

CARTER, N.C. 1972. Toodoggone River Area. in Geology, Exploration and Mining in British Columbia, 1971. British Columbia Department of Mines and Petroleum Resources, Victoria pp. 63-64.

GABRIELSE, H., DOOD, L.J., and MANSY, J.L. 1975. Geology - Toodoggone River (94E), Geological Survey of Canada, Open File 306.

RICHARDS, T.A. 1976. Takla Project (Reports 10-16): McConnell Creek Map Area (94D, East Half), British Columbia. Geological Survey of Canada, Paper 76-1A, pp. 43-50.

SMITHERINGALE, W.G. AND ASSOCIATES, 1980. Geological report on the Kem-Audrey Claim Group, Omineca Mining Division, B.C. prepared for Inca Resources Inc., Vancouver, B.C.

APPENDIX A

Statements of Qualifications

Statements of Qualifications

I.G. Sutherland - Geologist

I.G. Sutherland holds a B.Sc. (Hons) Degree in Geology from the University of Western Ontario, granted in 1976. Since that time he has held several positions in Industry and Government, and has been employed by Kidd Creek Mines Ltd. in Vancouver since March 1981.

D.W. Piroshco - Geologist

Darwin Piroshco obtained his B.Sc. degree in Geology from the University of Calgary in 1981. He joined Kidd Creek Mines Ltd. as a temporary employee in Vancouver, in May 1981, immediately after graduation.

APPENDIX B

Statement of Expenditures

APPENDIX B

Statement of Expenditures

A. PHYSICAL WORK

SALARIES

M. Cloutier - Contract Blaster Period: June 26-28, 1982	3 days @ $300	900.00	
A. Losch - Assistant (Kidd Creek Mines employee) Period: June 26-28	3 days @ $ 65	195.00	
		1,095.00	1,095.00

ROOM AND BOARD

Total 6 man-days @ $ 80.00/day	480.00

HELICOPTER

ALC Hughes 500D 3.9 hrs @ $492/hr (incl. fuel)	1,918.80
	$3,493.80

(Note: Of this total only $2,000.00 was claimed for assessment)

APPENDIX B
Statement of Expenditures - Cont'd.

B. MAPPING AND SAMPLING

SALARIES AND FRINGE BENEFITS - Kidd Creek Mines Ltd.

D.W. Piroshco - Geologist Period: June 15-July 31, 1982	14 days @ $ 85	1,190.00	
P. Maheux - Assistant Period: June 15-July 1	3 days @ $ 70	210.00	
P. Mouldey - Assistant Period: June 18-26	3 days @ $ 70	210.00	
V. Falmagne - Assistant Period: June 21-23	3 days @ $ 75	225.00	
A. Losch - Assistant Period: June 17	1 day @ $ 65	65.00	
R. Van den Brink - Assistant Period: June 16-July 31	3 days @ $ 70	210.00	
L. Louie - Assistant Period: July 30-31	2 days @ $ 65	130.00	
J. Black - Assistant Period: July 30, 1982	1 day @ $ 50	50.00	
		2,290.00	$2,290.00

ROOM AND BOARD

Kidd Creek Mines Ltd. personnel
30 man-days @ $80.00 — $2,400.00

HELICOPTER AND FUEL

ALC Hughes 500D 16.3 hours @ $492 (incl. fuel) — $8,019.60

ANALYTICAL COSTS

48 geochemical analyses @ $12.20 each Au,Ag,Cu,Pb,Zn	585.60	
20 assays @ $37.50 each	750.00	
	$1,335.60	$1,335.60

$14,045.20

(Note: Of this only $12,200 was claimed for assessment)

Total expenditures $17,539.00

Total assessment claimed $14,200.00

APPENDIX C

Analytical Results

COMPANY: Kidd Creek Mines

PROJECT No.: 21

ATTENTION: P. Delancey

GEOCHEMICAL ANALYSIS DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FILE No. 2-228

DATE: July 2 1982.

Sample Number	Mo ppm	Ag ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm
DP-21-82-0		01	680	75			6200		145	47		1900	19000
		02	2200	83			4300					7140	16400
		03	84	129			1920					3600	685
		04	24	915			98					45	730
		05	78	129			96					465	1240
		06	86	428			72					110	620
		07	120	311			196					50	204
		08	116	2160			96					50	650
		09	248	1180			122					60	152
		10	28	465			18					10	98
		11	138	1550			52					10	34
		12	329	5650			84					5	132
		13	74	257			64					15	164
		14	43	196			53					15	680
		16	398	1440			1340					430	30000
		17	174	342			86					30	127
		18A	8	18			12					5	21
		20	36	51			17					10	29
DP-21-82-0		21	1100	43			3400					1440	68
DP-21-82-0		18B	14	31			28		15	2		5	13

*Some of these samples should have been requested for assay.

CERTIFIED BY

COMPANY: Kidd Creek Mines

PROJECT No.: 21

ATTENTION: I. Sutherland

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

FILE No. 2-293

DATE: July 9 1982.

Sample Number	Mo ppm	Ag ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm		
DP 21-8	2-23		2.5	45			1.8					5	740		
	24		9.8	184			5.4					5	476		
	25		2.3	98			12.1					5	1274		
	27		2.5	56			3.2					70	54		
	28	A	2.2	443			1.5					5	13		
	28	B	245	139			30.5					50	147		
	29	A	64	825			9.8					45	387		
	29	B	1.6	108			3.0					15	42		
	30		3.8	518			3.2					5	105		
	31		6.5	93			8.2					10	85		
	32	A	1.5	49			1.6					5	57		
	32	D	1.8	64			1.3					10	345		
	32	E	5.6	102			1.9.0					5	3410		
	32	F	6.3	185			14.8					10	4250		
	32	G	6.9	83			155					5	1740		
	32	H	4.2	613			2.3					5	215		
	32	I	105	309			30.0					15	3760		
	33	A	260	331			14.6		30	29		640	115		
	33	B	210	1160			3.2		95	25		10	189		
	33	C	215	558			6.8		20	44		350	135		
	33	D	590	3670			8.6		15	30		5	232		
	33	E	45	630			2.4		25	16		5	30		
	33	F	1240	10600			132.0		510	30		130	3600		
	33	G	650	5200			14.0		430	32		10	440		
	33	H	860	1160			154.0		70	58		110	446		
	33	I	70	920			5.8		35	52		15	49		
DP 21-8	2-33	J	670	12300			50.0		1350	16		10	1350		

*Some of these samples should have been requested for ass

CERTIFIED BY

KEM 6

AUDREY WEST

KEM I

1 & 2

Sil, py

Gossan

VEIN 'A'

VEIN 'B'

Trench 1

Trench 2

Trench 3

Qtz ±Cp veins

Qtz vein

Mal

Ep

Hm

Sil

Py

Cp

L 20

L 15

L 10

1400

1500

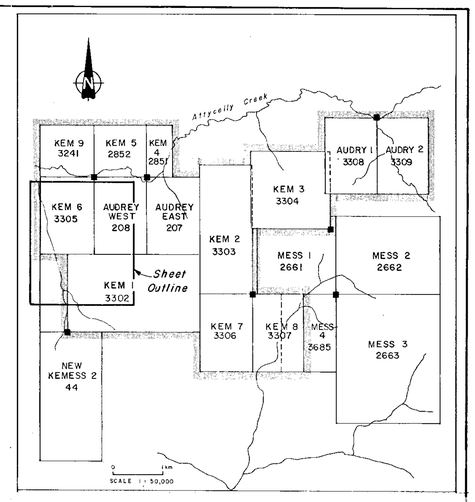
1600

1700

1800

1900

2000



LEGEND

1	Light grey, blocky weathered volcaniclastic tuff; locally well-bedded; augite crystals (≤ 2mm) scattered in coarser grained beds
2	Grey, rubbly weathered augite-plagioclase volcaniclastic crystal tuff; local vague bedding; minor lenses of 1 and 3
3	Grey, knobby weathered lahar and laharic breccia; unsorted, poorly stratified, fragments (≤ 1cm) consist of augite ± feldspar porphyritic basalt (variable epidote alteration) pinkish augite-hornblende syenite and feldspar-augite porphyritic andesite; all generally subangular to subrounded
4	Grey, blocky weathered andesite porphyry flow, bladed plagioclase and augite phenocrysts, minor calcite amygdules
5	Grey, massive augite porphyry basaltic flow
6	Massive grey weathered, pink hornblende-augite porphyritic syenite intrusive
7	Fine-grained, dark grey basaltic dykes

SYMBOLS

	Outcrop
30	Bedding orientation
	Fault
	Geological contact approximate, assumed
	Joint orientation
Qtz vein	Quartz vein
Sil	Silicified zone
Py	Pyrite
Cp	Chalcopyrite
Mal	Malachite
Az	Azunite
Ep	Epidote
Hm	Hematite
	Trench

GEOLOGICAL BRANCH ASSESSMENT REPORT

10,742

Kidd Creek Mines Ltd.

KEM PROPERTY

GEOLOGY

NTS 94E/2E — Proj. 21

WORK BY	DRAWN BY	DATE
D.P.	E.R.	SEPTEMBER 21, 1982

100 0 100 200 300 400

SCALE IN METRES 1 : 5,000 — Contour Interval 100m

Figure: